Midler City Industrial Park

Site No. C734103

Eighth Annual Periodic Review Report

Prepared by

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

June 2016

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)
- *Seventh Annual Periodic Review Report* (May 2015)

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 2015 data indicate that, for the June 2015 sampling event, the groundwater temperatures for the four monitoring wells (9D, 10D, 13D, and 15D) ranged from 54.66 degrees F to 61.89 degrees F, a range of approximately 7.23 degrees F. For the December 2015 sampling event, the range was from 55.13 degrees F to 59.25 degrees F, a range of approximately 4.12 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 2015 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 2015 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 2015.

Other parameters of interest during 2015 include:

- Oxidation-reduction Potential - The ORP measurements ranged from -313 to -358 mV for the warm weather (June) sampling event. For the cold weather (December) event ORP measurements ranged from -295 to -347 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 157 mg/l in MW-13D up to 655 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, MW-10D, MW-13D, and MW15D generally stayed the same from last year. The ranges were 3×10^3 to 2×10^7.

- 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 2,859 day (7.83 years) period extending from February 12, 2008 through December 11, 2015.

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 2015 sampling events, the vinyl chloride concentration was detected at 2.1 µg/l during the June sampling which is just over the 2 ug/l Class GA groundwater standard and detected at 1.6 µg/l during the December sampling event.

MW-10D - The concentration of vinyl chloride has remained steady from the 2014 events to 2015 with a slight decrease to 56 µg/l in December 2015 from 74 µg/l in December 2014. Cis-1,2-DCE data exhibited a slight decrease from 410 µg/l in December 2014 to 330 µg/l in June 2015 and then back down to 320 µg/l in December 2015. The trans-1,2-DCE concentration has remained generally stable throughout the monitoring period.

MW-13D – The vinyl chloride concentration has exhibited considerable variability since February 2008. The concentration declined from 1,600 µg/l in December 2014 to 490 µg/l in June 2015 and then up to 920 µg/l in December 2015.

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 2015 data exhibited a decrease to 240 µg/l for the June sampling, followed by an increase to 620 µg/l for the December 2015 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 2015 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 2013, 2014, and 2015 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 2015, the concentration of cis-1,2-Dichloroethene at MW-15D remained steady from the 2014 data.

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 2015.

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 2015 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 2015.

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 2015.

Recommendations

Relative to the SoMP, no changes to the plan are recommended for 2016.

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 2015 groundwater quality samples are provided in Appendix B-2. Groundwater contour maps for each 2015 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 2015, 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 2015 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 2015 is presented in Appendix D of this PRR.

Conclusion

Based on the information gathered during 2015, it is our opinion that no changes in the Operation and Maintenance Plan should be implemented for calendar year 2016.

SECTION 6 - OVERALL PRR CONCLUSIONS AND RECOMMENDATIONS

Compliance with Site Management Plan

During calendar year 2015, 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.

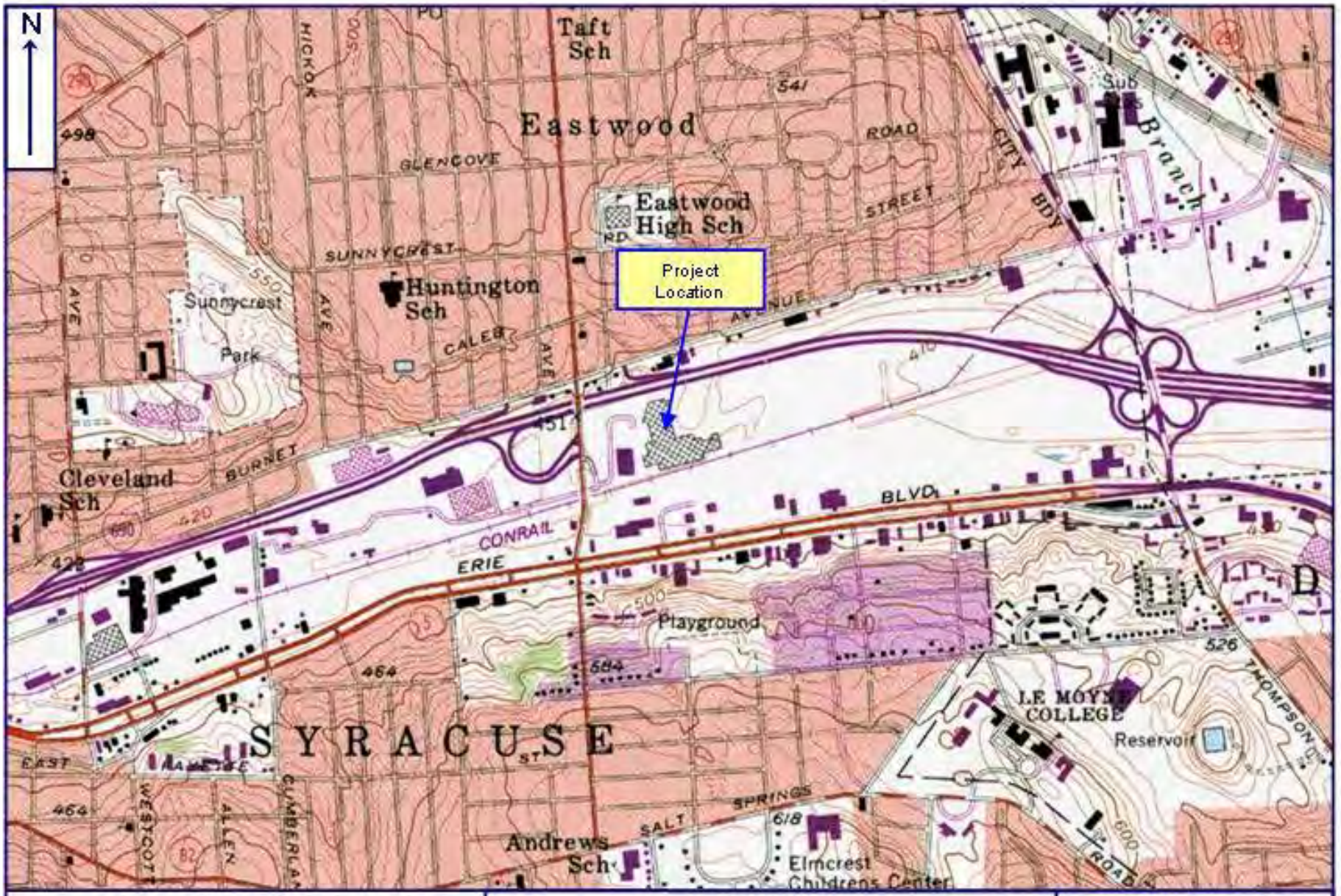
Future PRR Submittals

The PRR for calendar year 2016 will be issued during the second quarter of 2017.

f:\project\c81 - pioneer development\c81006001post irm gw monitoring\2015 groundwater sampling\calendar year 2015 prr final.docx

FIGURE 1

SITE LOCATION MAP
SYRACUSE EAST USGS



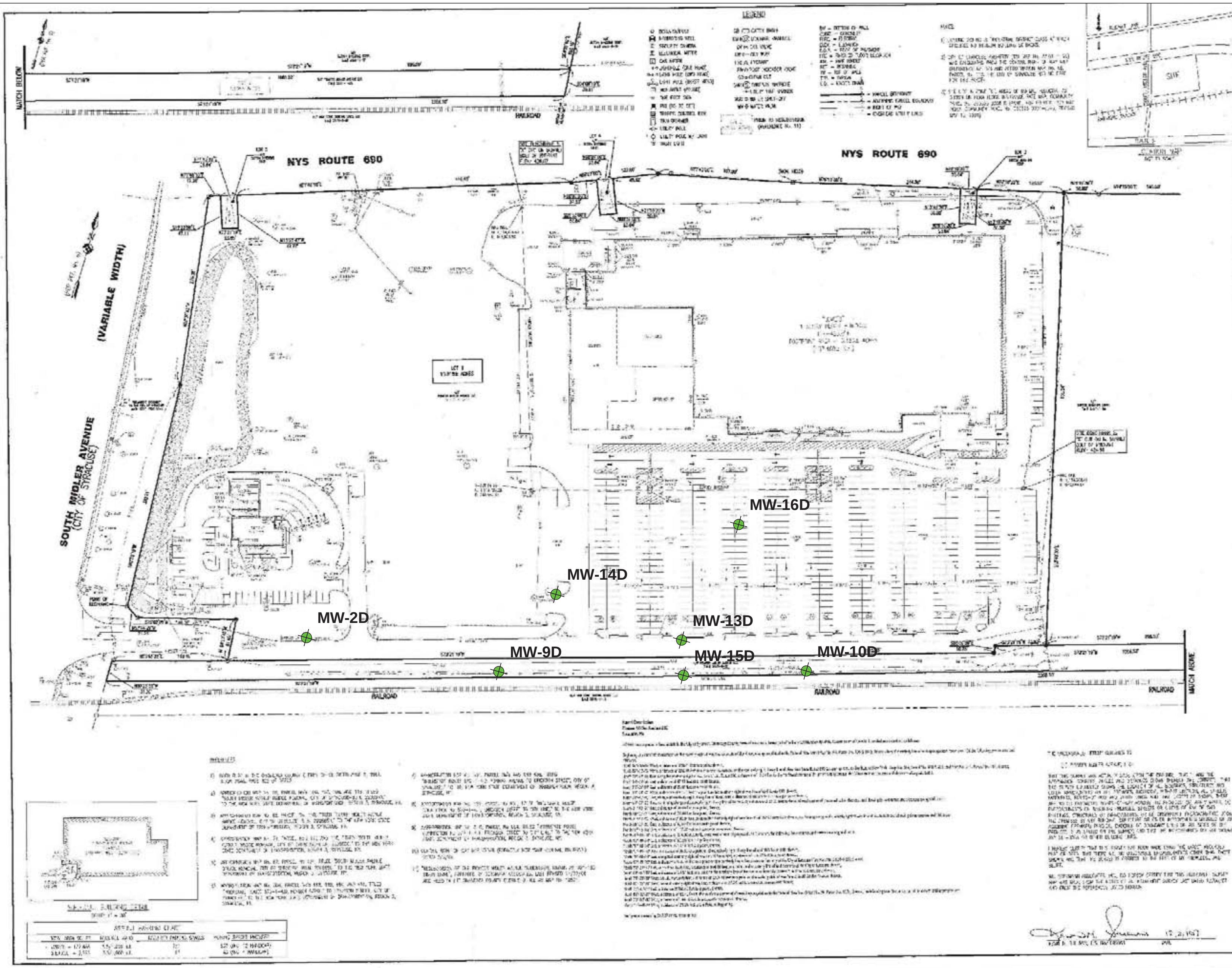
Source: USGS Topographic Maps (Terrain Navigator)
Syracuse East, NY

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:

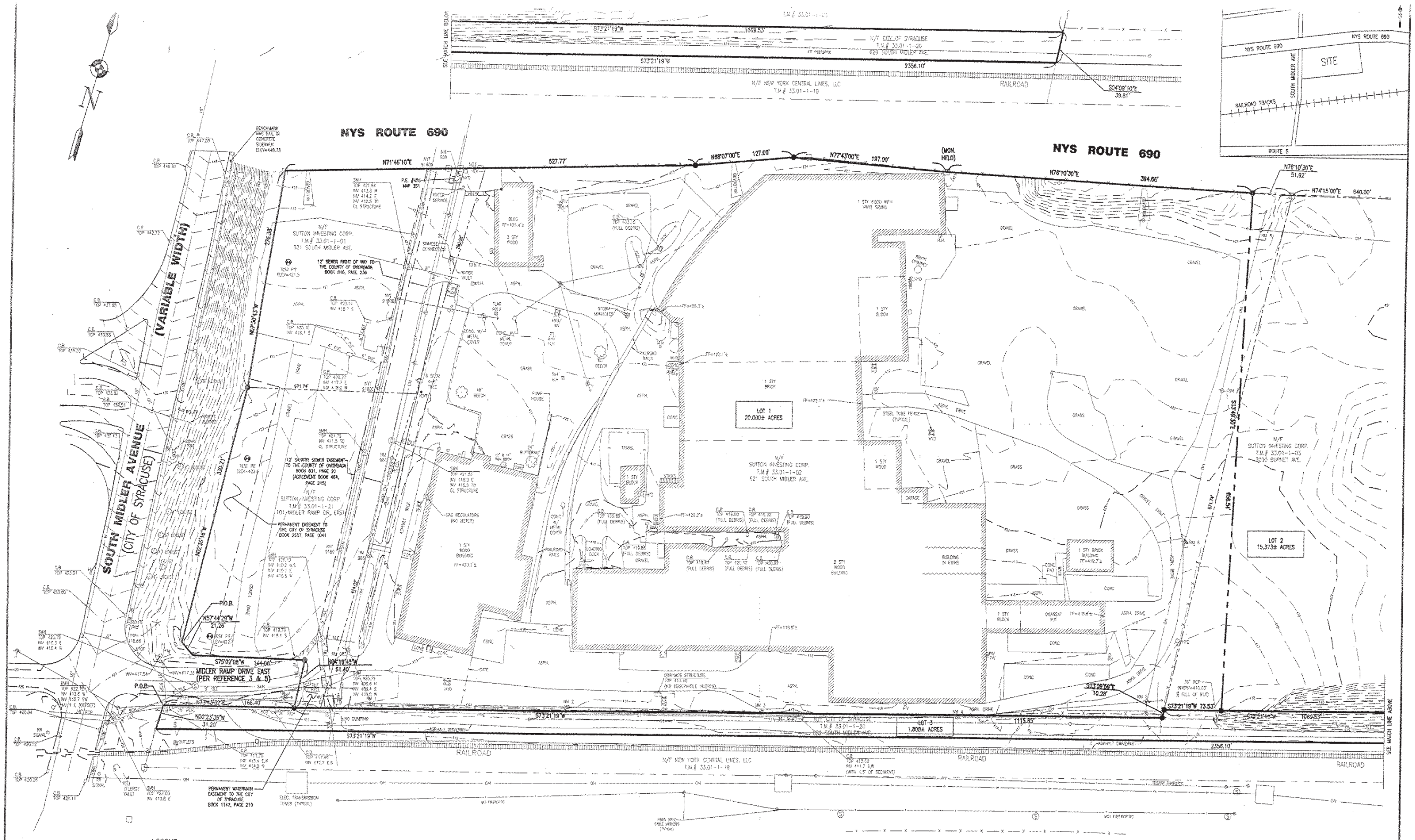
BERGMANN associates
Engineers / Architects / Surveyors

ALTA/ACSM LAND TITLE ASBUILT SURVEY MAP

ASB-01

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 2015 and
2015 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	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		MW09D	
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		06/19/15		12/11/15	
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	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	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	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	U	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	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	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	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	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	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	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	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	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	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	1	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	5	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	5	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	5	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	5	U	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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	1	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		2	U	1.9	J	2.3	J	0.84	J	2.1		2.3	
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	1	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		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	1	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		1	U	1	U
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	1	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		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		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		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		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	2	U	2	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	1	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	1	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	1	U	1	U
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	1	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	1	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	1	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		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	2.1		1.6	
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	1	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	MW-10D	MW-10D DL	MW-10D	MW-10D	MW-10D DL	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D DL
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	06/19/15	12/11/15	12/11/15
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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	100 U	200 U	200 U	25 U	130 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	100 U	200 U	200 U	25 U	130 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	100 U	200 U	200 U	25 U	130 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	100 U	200 U	200 U	25 U	130 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	20 U	40 U	40 U	5 U	25 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	330	390 E	320 E
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	20 U	40	40	5 U	25 U
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	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	20 U	40	40	5 U	25 U
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	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	20 U	40	40	5 U	25 U
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	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	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	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	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	80	10 U	50 U
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	20 U	40	40	5 U	25 U
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	20 U	40	40	5 U	25 U
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	20 U	40	40	5 U	25 U
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	18 J	13	25 U
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	20 U	40	40	5 U	25 U
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	20 U	40	40	5 U	25 U
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	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	45	66	56
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	20 U	40	40	5 U	25 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 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	
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	MW-13D DL	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	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	06/19/15	12/11/15	12/11/15
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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	250 U	25 U	250 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	250 U	25 U	250 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	250 U	25 U	250 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	50 U	25 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	240	590 E	620
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	50 U	5 U	50 U
Cyclohexane	ug/l			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	NA	NA	NA
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	50 U	5 U	50 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	NA	NA	NA	NA	NA	NA	NA	NA
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	50 U	5 U	50 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	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	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	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	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	100 U	10 U	100 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	50 U	5 U	50 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	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	490	600 E	920
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	50 U	5 U	50 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		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	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	06/19/15	12/11/15
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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	20 U	5 U	5 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	20 U	5 U	5 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	20 U	5 U	5 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	5 U	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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	0.1 J	0.87 J	20 U	4 U	1.3 J	4 U	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	3.9	4.5	
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	4 U	1 U	1 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	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	4 U	1 U	1 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	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	4 U	1 U	1 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	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	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	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	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	2 U	2	
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	4 U	1 U	1 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	4 U	1 U	1 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	4 U	1 U	1 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	0.6 J	0.86 J	20 U	4 U	4 U	4 U	1	0.77 J	0.77 J	1 U
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	4 U	1 U	1 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	4 U	1 U	1 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	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	4 U	1 U	1	1.1	
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	4 U	1 U	1 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	######	12/17/12	######	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: 480-82617-1
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:
7/6/2015 1:33:08 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
F1	MS and/or MSD Recovery is outside acceptance limits.
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.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.

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: 480-82617-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-82617-1

Receipt
The samples were received on 6/20/2015 3:05 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.8° C.

Receipt Exceptions
COC lists 1st sample point and MS/MSD as MW-9D. Labels on all containers list as MW-9. Logged in per COC.

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 (480-82617-2) and MW-13D (480-82617-3). 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 reported with elevated reporting limits for all analytes: MW-9D (480-82617-1), MW-10D (480-82617-2), MW-13D (480-82617-3), MW-15D (480-82617-4) and (480-82617-F-2 MS). The sample was analyzed at a dilution based on conductivity screening results.

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: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-9D (480-82617-1), MW-10D (480-82617-2), MW-13D (480-82617-3) and MW-15D (480-82617-4).

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: 480-82617-1

Client Sample ID: MW-9D — Lab Sample ID: 480-82617-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.1		1.0	0.34	ug/L	1		OLC02.1	Total/NA
Vinyl chloride	2.1		1.0	0.27	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	592		40.0	7.0	mg/L	20		300.0	Total/NA
Nitrate as N	0.028	J	0.050	0.020	mg/L	1		Nitrate by calc	Total/NA
Sulfide	29.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	85.6	B	10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	6.0	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-10D — Lab Sample ID: 480-82617-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	330		40	14	ug/L	40		OLC02.1	Total/NA
trans-1,2-Dichloroethene	18	J	40	17	ug/L	40		OLC02.1	Total/NA
Vinyl chloride	45		40	11	ug/L	40		OLC02.1	Total/NA
Iron	0.052		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	566		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	26.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	90.2	B	10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	5.8	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-13D — Lab Sample ID: 480-82617-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	240		50	17	ug/L	50		OLC02.1	Total/NA
Vinyl chloride	490		50	14	ug/L	50		OLC02.1	Total/NA
Iron	0.40		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	245		40.0	7.0	mg/L	20		300.0	Total/NA
Ferrous Iron	0.10	HF	0.10	0.075	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	26.4		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	75.6	B	10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	34.1	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: MW-15D — Lab Sample ID: 480-82617-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	3.9		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
Vinyl chloride	1.0		1.0	0.27	ug/L	1		OLC02.1	Total/NA
Iron	0.11		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	453		40.0	7.0	mg/L	20		300.0	Total/NA
Sulfide	41.6		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	126	B	10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	10.2	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Client Sample ID: trip blank — Lab Sample ID: 480-82617-5

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: MW-9D

Date Collected: 06/19/15 09:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-1

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		1.0	0.28	ug/L			06/29/15 04:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			06/29/15 04:30	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/29/15 04:30	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			06/29/15 04:30	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			06/29/15 04:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 04:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/29/15 04:30	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			06/29/15 04:30	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/15 04:30	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			06/29/15 04:30	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			06/29/15 04:30	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			06/29/15 04:30	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 04:30	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			06/29/15 04:30	1
2-Hexanone	ND		5.0	0.55	ug/L			06/29/15 04:30	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			06/29/15 04:30	1
Acetone	ND		5.0	1.5	ug/L			06/29/15 04:30	1
Benzene	ND		1.0	0.18	ug/L			06/29/15 04:30	1
Bromodichloromethane	ND		1.0	0.26	ug/L			06/29/15 04:30	1
Bromoform	ND		1.0	0.30	ug/L			06/29/15 04:30	1
Bromomethane	ND		1.0	0.20	ug/L			06/29/15 04:30	1
Carbon disulfide	ND	F1	1.0	0.21	ug/L			06/29/15 04:30	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			06/29/15 04:30	1
Chlorobenzene	ND		1.0	0.29	ug/L			06/29/15 04:30	1
Dibromochloromethane	ND		1.0	0.15	ug/L			06/29/15 04:30	1
Chloroethane	ND		1.0	0.17	ug/L			06/29/15 04:30	1
Chloroform	ND		1.0	0.28	ug/L			06/29/15 04:30	1
Chloromethane	ND		1.0	0.22	ug/L			06/29/15 04:30	1
cis-1,2-Dichloroethene	**2.1**		1.0	0.34	ug/L			06/29/15 04:30	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/29/15 04:30	1
Ethylbenzene	ND		1.0	0.32	ug/L			06/29/15 04:30	1
Methylene Chloride	ND		2.0	0.46	ug/L			06/29/15 04:30	1
Styrene	ND		1.0	0.28	ug/L			06/29/15 04:30	1
Tetrachloroethene	ND		1.0	0.35	ug/L			06/29/15 04:30	1
Toluene	ND		1.0	0.30	ug/L			06/29/15 04:30	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			06/29/15 04:30	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			06/29/15 04:30	1
Trichloroethene	ND		1.0	0.27	ug/L			06/29/15 04:30	1
Vinyl chloride	**2.1**		1.0	0.27	ug/L			06/29/15 04:30	1
Xylenes, Total	ND		1.0	0.42	ug/L			06/29/15 04:30	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			06/29/15 04:30	1
o-Xylene	ND		1.0	0.42	ug/L			06/29/15 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*06/29/15 04:30*	*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		06/23/15 07:00	06/23/15 15:40	1

Client Sample Results

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-9D
Date Collected: 06/19/15 09:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	592		40.0	7.0	mg/L			06/22/15 20:29	20
Nitrate as N	0.028	J	0.050	0.020	mg/L			06/20/15 12:40	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			06/20/15 13:50	1
Sulfide	29.8		1.0	0.67	mg/L			06/24/15 05:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	85.6	B	10.0	1.4	mg/L			06/30/15 14:07	10
Dissolved Organic Carbon	6.0	B	1.0	0.43	mg/L			06/27/15 00:20	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-10D
Date Collected: 06/19/15 10:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-2
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		40	11	ug/L			06/29/15 04:58	40
1,1,2,2-Tetrachloroethane	ND		40	16	ug/L			06/29/15 04:58	40
1,1,2-Trichloroethane	ND		40	8.0	ug/L			06/29/15 04:58	40
1,1-Dichloroethane	ND		40	13	ug/L			06/29/15 04:58	40
1,1-Dichloroethene	ND		40	10	ug/L			06/29/15 04:58	40
1,2,4-Trichlorobenzene	ND		40	11	ug/L			06/29/15 04:58	40
1,2-Dibromo-3-Chloropropane	ND		40	20	ug/L			06/29/15 04:58	40
1,2-Dibromoethane	ND		40	9.8	ug/L			06/29/15 04:58	40
1,2-Dichlorobenzene	ND		40	6.0	ug/L			06/29/15 04:58	40
1,2-Dichloroethane	ND		40	6.4	ug/L			06/29/15 04:58	40
1,2-Dichloropropane	ND		40	6.8	ug/L			06/29/15 04:58	40
1,3-Dichlorobenzene	ND		40	12	ug/L			06/29/15 04:58	40
1,4-Dichlorobenzene	ND		40	11	ug/L			06/29/15 04:58	40
2-Butanone (MEK)	ND		200	72	ug/L			06/29/15 04:58	40
2-Hexanone	ND		200	22	ug/L			06/29/15 04:58	40
4-Methyl-2-pentanone (MIBK)	ND		200	46	ug/L			06/29/15 04:58	40
Acetone	ND		200	58	ug/L			06/29/15 04:58	40
Benzene	ND		40	7.2	ug/L			06/29/15 04:58	40
Bromodichloromethane	ND		40	10	ug/L			06/29/15 04:58	40
Bromoform	ND		40	12	ug/L			06/29/15 04:58	40
Bromomethane	ND		40	8.0	ug/L			06/29/15 04:58	40
Carbon disulfide	ND		40	8.4	ug/L			06/29/15 04:58	40
Carbon tetrachloride	ND		40	12	ug/L			06/29/15 04:58	40
Chlorobenzene	ND		40	11	ug/L			06/29/15 04:58	40
Dibromochloromethane	ND		40	6.0	ug/L			06/29/15 04:58	40
Chloroethane	ND		40	6.8	ug/L			06/29/15 04:58	40
Chloroform	ND		40	11	ug/L			06/29/15 04:58	40
Chloromethane	ND		40	8.8	ug/L			06/29/15 04:58	40
cis-1,2-Dichloroethene	**330**		40	14	ug/L			06/29/15 04:58	40
cis-1,3-Dichloropropene	ND		40	8.6	ug/L			06/29/15 04:58	40
Ethylbenzene	ND		40	13	ug/L			06/29/15 04:58	40
Methylene Chloride	ND		80	18	ug/L			06/29/15 04:58	40
Styrene	ND		40	11	ug/L			06/29/15 04:58	40
Tetrachloroethene	ND		40	14	ug/L			06/29/15 04:58	40
Toluene	ND		40	12	ug/L			06/29/15 04:58	40
trans-1,2-Dichloroethene	**18**	**J**	40	17	ug/L			06/29/15 04:58	40
trans-1,3-Dichloropropene	ND		40	12	ug/L			06/29/15 04:58	40
Trichloroethene	ND		40	11	ug/L			06/29/15 04:58	40
Vinyl chloride	**45**		40	11	ug/L			06/29/15 04:58	40
Xylenes, Total	ND		40	17	ug/L			06/29/15 04:58	40
m-Xylene & p-Xylene	ND		40	17	ug/L			06/29/15 04:58	40
o-Xylene	ND		40	17	ug/L			06/29/15 04:58	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/29/15 04:58*	*40*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.052**		0.050	0.019	mg/L		06/23/15 07:00	06/23/15 14:30	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-10D
Date Collected: 06/19/15 10:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**566**		40.0	7.0	mg/L			06/22/15 20:37	20
Nitrate as N	ND		0.050	0.020	mg/L			06/20/15 12:42	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			06/20/15 13:50	1
Sulfide	**26.2**		1.0	0.67	mg/L			06/24/15 05:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**90.2**	**B**	10.0	1.4	mg/L			06/30/15 14:07	10
Dissolved Organic Carbon	**5.8**	**B**	1.0	0.43	mg/L			06/27/15 00:36	1

Client Sample ID: MW-13D

Date Collected: 06/19/15 11:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-3

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		50	14	ug/L			06/29/15 09:11	50
1,1,2,2-Tetrachloroethane	ND		50	20	ug/L			06/29/15 09:11	50
1,1,2-Trichloroethane	ND		50	10	ug/L			06/29/15 09:11	50
1,1-Dichloroethane	ND		50	16	ug/L			06/29/15 09:11	50
1,1-Dichloroethene	ND		50	13	ug/L			06/29/15 09:11	50
1,2,4-Trichlorobenzene	ND		50	14	ug/L			06/29/15 09:11	50
1,2-Dibromo-3-Chloropropane	ND		50	25	ug/L			06/29/15 09:11	50
1,2-Dibromoethane	ND		50	12	ug/L			06/29/15 09:11	50
1,2-Dichlorobenzene	ND		50	7.5	ug/L			06/29/15 09:11	50
1,2-Dichloroethane	ND		50	8.0	ug/L			06/29/15 09:11	50
1,2-Dichloropropane	ND		50	8.5	ug/L			06/29/15 09:11	50
1,3-Dichlorobenzene	ND		50	15	ug/L			06/29/15 09:11	50
1,4-Dichlorobenzene	ND		50	13	ug/L			06/29/15 09:11	50
2-Butanone (MEK)	ND		250	91	ug/L			06/29/15 09:11	50
2-Hexanone	ND		250	28	ug/L			06/29/15 09:11	50
4-Methyl-2-pentanone (MIBK)	ND		250	58	ug/L			06/29/15 09:11	50
Acetone	ND		250	73	ug/L			06/29/15 09:11	50
Benzene	ND		50	9.0	ug/L			06/29/15 09:11	50
Bromodichloromethane	ND		50	13	ug/L			06/29/15 09:11	50
Bromoform	ND		50	15	ug/L			06/29/15 09:11	50
Bromomethane	ND		50	10	ug/L			06/29/15 09:11	50
Carbon disulfide	ND		50	11	ug/L			06/29/15 09:11	50
Carbon tetrachloride	ND		50	15	ug/L			06/29/15 09:11	50
Chlorobenzene	ND		50	14	ug/L			06/29/15 09:11	50
Dibromochloromethane	ND		50	7.5	ug/L			06/29/15 09:11	50
Chloroethane	ND		50	8.5	ug/L			06/29/15 09:11	50
Chloroform	ND		50	14	ug/L			06/29/15 09:11	50
Chloromethane	ND		50	11	ug/L			06/29/15 09:11	50
cis-1,2-Dichloroethene	**240**		50	17	ug/L			06/29/15 09:11	50
cis-1,3-Dichloropropene	ND		50	11	ug/L			06/29/15 09:11	50
Ethylbenzene	ND		50	16	ug/L			06/29/15 09:11	50
Methylene Chloride	ND		100	23	ug/L			06/29/15 09:11	50
Styrene	ND		50	14	ug/L			06/29/15 09:11	50
Tetrachloroethene	ND		50	18	ug/L			06/29/15 09:11	50
Toluene	ND		50	15	ug/L			06/29/15 09:11	50
trans-1,2-Dichloroethene	ND		50	21	ug/L			06/29/15 09:11	50
trans-1,3-Dichloropropene	ND		50	15	ug/L			06/29/15 09:11	50
Trichloroethene	ND		50	13	ug/L			06/29/15 09:11	50
Vinyl chloride	**490**		50	14	ug/L			06/29/15 09:11	50
Xylenes, Total	ND		50	21	ug/L			06/29/15 09:11	50
m-Xylene & p-Xylene	ND		50	21	ug/L			06/29/15 09:11	50
o-Xylene	ND		50	21	ug/L			06/29/15 09:11	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*06/29/15 09:11*	*50*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.40**		0.050	0.019	mg/L		06/23/15 07:00	06/23/15 15:58	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-13D
Date Collected: 06/19/15 11:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	245		40.0	7.0	mg/L			06/22/15 21:26	20
Nitrate as N	ND		0.050	0.020	mg/L			06/20/15 12:43	1
Ferrous Iron	0.10	HF	0.10	0.075	mg/L			06/20/15 13:50	1
Sulfide	26.4		1.0	0.67	mg/L			06/24/15 05:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	75.6	B	10.0	1.4	mg/L			06/30/15 14:07	10
Dissolved Organic Carbon	34.1	B	1.0	0.43	mg/L			06/27/15 00:51	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-15D
Date Collected: 06/19/15 12:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-4
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			06/29/15 05:52	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			06/29/15 05:52	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/29/15 05:52	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			06/29/15 05:52	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			06/29/15 05:52	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 05:52	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/29/15 05:52	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			06/29/15 05:52	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/15 05:52	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			06/29/15 05:52	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			06/29/15 05:52	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			06/29/15 05:52	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 05:52	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			06/29/15 05:52	1
2-Hexanone	ND		5.0	0.55	ug/L			06/29/15 05:52	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			06/29/15 05:52	1
Acetone	ND		5.0	1.5	ug/L			06/29/15 05:52	1
Benzene	ND		1.0	0.18	ug/L			06/29/15 05:52	1
Bromodichloromethane	ND		1.0	0.26	ug/L			06/29/15 05:52	1
Bromoform	ND		1.0	0.30	ug/L			06/29/15 05:52	1
Bromomethane	ND		1.0	0.20	ug/L			06/29/15 05:52	1
Carbon disulfide	ND		1.0	0.21	ug/L			06/29/15 05:52	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			06/29/15 05:52	1
Chlorobenzene	ND		1.0	0.29	ug/L			06/29/15 05:52	1
Dibromochloromethane	ND		1.0	0.15	ug/L			06/29/15 05:52	1
Chloroethane	ND		1.0	0.17	ug/L			06/29/15 05:52	1
Chloroform	ND		1.0	0.28	ug/L			06/29/15 05:52	1
Chloromethane	ND		1.0	0.22	ug/L			06/29/15 05:52	1
cis-1,2-Dichloroethene	**3.9**		1.0	0.34	ug/L			06/29/15 05:52	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/29/15 05:52	1
Ethylbenzene	ND		1.0	0.32	ug/L			06/29/15 05:52	1
Methylene Chloride	ND		2.0	0.46	ug/L			06/29/15 05:52	1
Styrene	ND		1.0	0.28	ug/L			06/29/15 05:52	1
Tetrachloroethene	ND		1.0	0.35	ug/L			06/29/15 05:52	1
Toluene	ND		1.0	0.30	ug/L			06/29/15 05:52	1
trans-1,2-Dichloroethene	**0.77**	**J**	1.0	0.43	ug/L			06/29/15 05:52	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			06/29/15 05:52	1
Trichloroethene	ND		1.0	0.27	ug/L			06/29/15 05:52	1
Vinyl chloride	**1.0**		1.0	0.27	ug/L			06/29/15 05:52	1
Xylenes, Total	ND		1.0	0.42	ug/L			06/29/15 05:52	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			06/29/15 05:52	1
o-Xylene	ND		1.0	0.42	ug/L			06/29/15 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*06/29/15 05:52*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.11**		0.050	0.019	mg/L		06/23/15 07:00	06/23/15 16:01	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-15D
Date Collected: 06/19/15 12:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**453**		40.0	7.0	mg/L			06/22/15 21:34	20
Nitrate as N	ND		0.050	0.020	mg/L			06/20/15 12:44	1
Ferrous Iron	ND	HF F1	0.10	0.075	mg/L			06/20/15 13:50	1
Sulfide	**41.6**		1.0	0.67	mg/L			06/24/15 05:15	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**126**	**B**	10.0	1.4	mg/L			06/30/15 14:07	10
Dissolved Organic Carbon	**10.2**	**B**	1.0	0.43	mg/L			06/27/15 01:07	1

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: trip blank
Date Collected: 06/19/15 00:00
Date Received: 06/20/15 03:05

Lab Sample ID: 480-82617-5
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			06/29/15 06:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			06/29/15 06:20	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/29/15 06:20	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			06/29/15 06:20	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			06/29/15 06:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 06:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/29/15 06:20	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			06/29/15 06:20	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/15 06:20	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			06/29/15 06:20	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			06/29/15 06:20	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			06/29/15 06:20	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 06:20	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			06/29/15 06:20	1
2-Hexanone	ND		5.0	0.55	ug/L			06/29/15 06:20	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			06/29/15 06:20	1
Acetone	ND		5.0	1.5	ug/L			06/29/15 06:20	1
Benzene	ND		1.0	0.18	ug/L			06/29/15 06:20	1
Bromodichloromethane	ND		1.0	0.26	ug/L			06/29/15 06:20	1
Bromoform	ND		1.0	0.30	ug/L			06/29/15 06:20	1
Bromomethane	ND		1.0	0.20	ug/L			06/29/15 06:20	1
Carbon disulfide	ND		1.0	0.21	ug/L			06/29/15 06:20	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			06/29/15 06:20	1
Chlorobenzene	ND		1.0	0.29	ug/L			06/29/15 06:20	1
Dibromochloromethane	ND		1.0	0.15	ug/L			06/29/15 06:20	1
Chloroethane	ND		1.0	0.17	ug/L			06/29/15 06:20	1
Chloroform	ND		1.0	0.28	ug/L			06/29/15 06:20	1
Chloromethane	ND		1.0	0.22	ug/L			06/29/15 06:20	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			06/29/15 06:20	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/29/15 06:20	1
Ethylbenzene	ND		1.0	0.32	ug/L			06/29/15 06:20	1
Methylene Chloride	ND		2.0	0.46	ug/L			06/29/15 06:20	1
Styrene	ND		1.0	0.28	ug/L			06/29/15 06:20	1
Tetrachloroethene	ND		1.0	0.35	ug/L			06/29/15 06:20	1
Toluene	ND		1.0	0.30	ug/L			06/29/15 06:20	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			06/29/15 06:20	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			06/29/15 06:20	1
Trichloroethene	ND		1.0	0.27	ug/L			06/29/15 06:20	1
Vinyl chloride	ND		1.0	0.27	ug/L			06/29/15 06:20	1
Xylenes, Total	ND		1.0	0.42	ug/L			06/29/15 06:20	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			06/29/15 06:20	1
o-Xylene	ND		1.0	0.42	ug/L			06/29/15 06:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/29/15 06:20*	*1*

Surrogate Summary

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

TestAmerica Job ID: 480-82617-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (80-120)								
480-82617-1	MW-9D	93								
480-82617-1 MS	MW-9D	99								
480-82617-1 MSD	MW-9D	98								
480-82617-2	MW-10D	94								
480-82617-3	MW-13D	92								
480-82617-4	MW-15D	93								
480-82617-5	trip blank	94								
LCS 480-250622/20	Lab Control Sample	97								
MB 480-250622/12	Method Blank	94								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

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

TestAmerica Job ID: 480-82617-1

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

Lab Sample ID: MB 480-250622/12
Matrix: Water
Analysis Batch: 250622

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			06/29/15 03:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.39	ug/L			06/29/15 03:49	1
1,1,2-Trichloroethane	ND		1.0	0.20	ug/L			06/29/15 03:49	1
1,1-Dichloroethane	ND		1.0	0.32	ug/L			06/29/15 03:49	1
1,1-Dichloroethene	ND		1.0	0.26	ug/L			06/29/15 03:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 03:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.50	ug/L			06/29/15 03:49	1
1,2-Dibromoethane	ND		1.0	0.25	ug/L			06/29/15 03:49	1
1,2-Dichlorobenzene	ND		1.0	0.15	ug/L			06/29/15 03:49	1
1,2-Dichloroethane	ND		1.0	0.16	ug/L			06/29/15 03:49	1
1,2-Dichloropropane	ND		1.0	0.17	ug/L			06/29/15 03:49	1
1,3-Dichlorobenzene	ND		1.0	0.29	ug/L			06/29/15 03:49	1
1,4-Dichlorobenzene	ND		1.0	0.27	ug/L			06/29/15 03:49	1
2-Butanone (MEK)	ND		5.0	1.8	ug/L			06/29/15 03:49	1
2-Hexanone	ND		5.0	0.55	ug/L			06/29/15 03:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	1.2	ug/L			06/29/15 03:49	1
Acetone	ND		5.0	1.5	ug/L			06/29/15 03:49	1
Benzene	ND		1.0	0.18	ug/L			06/29/15 03:49	1
Bromodichloromethane	ND		1.0	0.26	ug/L			06/29/15 03:49	1
Bromoform	ND		1.0	0.30	ug/L			06/29/15 03:49	1
Bromomethane	ND		1.0	0.20	ug/L			06/29/15 03:49	1
Carbon disulfide	ND		1.0	0.21	ug/L			06/29/15 03:49	1
Carbon tetrachloride	ND		1.0	0.30	ug/L			06/29/15 03:49	1
Chlorobenzene	ND		1.0	0.29	ug/L			06/29/15 03:49	1
Dibromochloromethane	ND		1.0	0.15	ug/L			06/29/15 03:49	1
Chloroethane	ND		1.0	0.17	ug/L			06/29/15 03:49	1
Chloroform	ND		1.0	0.28	ug/L			06/29/15 03:49	1
Chloromethane	ND		1.0	0.22	ug/L			06/29/15 03:49	1
cis-1,2-Dichloroethene	ND		1.0	0.34	ug/L			06/29/15 03:49	1
cis-1,3-Dichloropropene	ND		1.0	0.22	ug/L			06/29/15 03:49	1
Ethylbenzene	ND		1.0	0.32	ug/L			06/29/15 03:49	1
Methylene Chloride	ND		2.0	0.46	ug/L			06/29/15 03:49	1
Styrene	ND		1.0	0.28	ug/L			06/29/15 03:49	1
Tetrachloroethene	ND		1.0	0.35	ug/L			06/29/15 03:49	1
Toluene	ND		1.0	0.30	ug/L			06/29/15 03:49	1
trans-1,2-Dichloroethene	ND		1.0	0.43	ug/L			06/29/15 03:49	1
trans-1,3-Dichloropropene	ND		1.0	0.29	ug/L			06/29/15 03:49	1
Trichloroethene	ND		1.0	0.27	ug/L			06/29/15 03:49	1
Vinyl chloride	ND		1.0	0.27	ug/L			06/29/15 03:49	1
Xylenes, Total	ND		1.0	0.42	ug/L			06/29/15 03:49	1
m-Xylene & p-Xylene	ND		1.0	0.42	ug/L			06/29/15 03:49	1
o-Xylene	ND		1.0	0.42	ug/L			06/29/15 03:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*06/29/15 03:49*	*1*

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

Lab Sample ID: LCS 480-250622/20
Matrix: Water
Analysis Batch: 250622

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	4.72		ug/L		94	60 - 140
Benzene	5.00	4.81		ug/L		96	60 - 140
Chlorobenzene	5.00	5.00		ug/L		100	60 - 140
Toluene	5.00	4.81		ug/L		96	60 - 140
Trichloroethene	5.00	4.69		ug/L		94	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*

Lab Sample ID: 480-82617-1 MS
Matrix: Water
Analysis Batch: 250622

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	5.35		ug/L		107	60 - 140
Benzene	ND		5.00	5.54		ug/L		111	60 - 140
Chlorobenzene	ND		5.00	5.51		ug/L		110	60 - 140
Toluene	ND		5.00	5.36		ug/L		107	60 - 140
Trichloroethene	ND		5.00	5.48		ug/L		110	60 - 140

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

Lab Sample ID: 480-82617-1 MSD
Matrix: Water
Analysis Batch: 250622

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	5.34		ug/L		107	60 - 140	0	20
Benzene	ND		5.00	5.27		ug/L		105	60 - 140	5	20
Chlorobenzene	ND		5.00	5.47		ug/L		109	60 - 140	1	20
Toluene	ND		5.00	5.31		ug/L		106	60 - 140	1	20
Trichloroethene	ND		5.00	5.29		ug/L		106	60 - 140	4	20

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

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-249434/1-A
Matrix: Water
Analysis Batch: 249890

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 249434

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		06/23/15 07:00	06/23/15 14:24	1

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

Lab Sample ID: LCS 480-249434/2-A
Matrix: Water
Analysis Batch: 249890

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 249434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.58		mg/L		96	85 - 115

Lab Sample ID: 480-82617-1 MS
Matrix: Water
Analysis Batch: 249890

Client Sample ID: MW-9D
Prep Type: Total/NA
Prep Batch: 249434

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.19		10.0	9.56		mg/L		94	70 - 130

Lab Sample ID: 480-82617-1 MSD
Matrix: Water
Analysis Batch: 249890

Client Sample ID: MW-9D
Prep Type: Total/NA
Prep Batch: 249434

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.19		10.0	9.60		mg/L		94	70 - 130	0	20

Lab Sample ID: 480-82617-2 MS
Matrix: Water
Analysis Batch: 249890

Client Sample ID: MW-10D
Prep Type: Total/NA
Prep Batch: 249434

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.052		10.0	9.39		mg/L		93	70 - 130

Lab Sample ID: 480-82617-2 MSD
Matrix: Water
Analysis Batch: 249890

Client Sample ID: MW-10D
Prep Type: Total/NA
Prep Batch: 249434

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.052		10.0	9.44		mg/L		94	70 - 130	0	20

Method: 300.0 - Sulfate

Lab Sample ID: MB 480-249413/28
Matrix: Water
Analysis Batch: 249413

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			06/22/15 18:02	1

Lab Sample ID: MB 480-249413/52
Matrix: Water
Analysis Batch: 249413

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			06/22/15 21:18	1

Method: 300.0 - Sulfate (Continued)

Lab Sample ID: LCS 480-249413/27
Matrix: Water
Analysis Batch: 249413

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	19.86		mg/L		99	80 - 129

Lab Sample ID: LCS 480-249413/51
Matrix: Water
Analysis Batch: 249413

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	19.84		mg/L		99	80 - 129

Lab Sample ID: 480-82617-2 MS
Matrix: Water
Analysis Batch: 249413

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	566		500	1035		mg/L		94	80 - 129

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

Lab Sample ID: MB 480-249254/3
Matrix: Water
Analysis Batch: 249254

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			06/20/15 13:50	1

Lab Sample ID: LCS 480-249254/4
Matrix: Water
Analysis Batch: 249254

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	1.98		mg/L		99	90 - 110

Lab Sample ID: 480-82617-4 MS
Matrix: Water
Analysis Batch: 249254

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 F1	1.00	2.66	F1	mg/L		266	70 - 130

Lab Sample ID: 480-82617-3 DU
Matrix: Water
Analysis Batch: 249254

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ferrous Iron	0.10	HF	0.0956	J	mg/L		8	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 480-249901/27
Matrix: Water
Analysis Batch: 249901

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			06/24/15 05:15	1

Lab Sample ID: MB 480-249901/3
Matrix: Water
Analysis Batch: 249901

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			06/24/15 05:15	1

Lab Sample ID: MB 480-249901/51
Matrix: Water
Analysis Batch: 249901

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			06/24/15 05:15	1

Lab Sample ID: LCS 480-249901/28
Matrix: Water
Analysis Batch: 249901

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	9.00		mg/L		90	90 - 110

Lab Sample ID: LCS 480-249901/4
Matrix: Water
Analysis Batch: 249901

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	9.00		mg/L		90	90 - 110

Lab Sample ID: LCS 480-249901/52
Matrix: Water
Analysis Batch: 249901

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	9.00		mg/L		90	90 - 110

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

Lab Sample ID: MB 490-261590/1-A
Matrix: Water
Analysis Batch: 261586

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	0.546	J	1.0	0.14	mg/L			06/30/15 14:07	1

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

Lab Sample ID: LCS 490-261590/2-A
Matrix: Water
Analysis Batch: 261586

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	10.28		mg/L		102	90 - 110

Method: SM5310_D - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 480-250562/3
Matrix: Water
Analysis Batch: 250562

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	0.853	J	1.0	0.43	mg/L			06/26/15 23:50	1

Lab Sample ID: LCS 480-250562/4
Matrix: Water
Analysis Batch: 250562

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	61.42		mg/L		102	90 - 110

GC/MS VOA

Analysis Batch: 250622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	OLC02.1	
480-82617-1 MS	MW-9D	Total/NA	Water	OLC02.1	
480-82617-1 MSD	MW-9D	Total/NA	Water	OLC02.1	
480-82617-2	MW-10D	Total/NA	Water	OLC02.1	
480-82617-3	MW-13D	Total/NA	Water	OLC02.1	
480-82617-4	MW-15D	Total/NA	Water	OLC02.1	
480-82617-5	trip blank	Total/NA	Water	OLC02.1	
LCS 480-250622/20	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 480-250622/12	Method Blank	Total/NA	Water	OLC02.1	

Metals

Prep Batch: 249434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	200.7	
480-82617-1 MS	MW-9D	Total/NA	Water	200.7	
480-82617-1 MSD	MW-9D	Total/NA	Water	200.7	
480-82617-2	MW-10D	Total/NA	Water	200.7	
480-82617-2 MS	MW-10D	Total/NA	Water	200.7	
480-82617-2 MSD	MW-10D	Total/NA	Water	200.7	
480-82617-3	MW-13D	Total/NA	Water	200.7	
480-82617-4	MW-15D	Total/NA	Water	200.7	
LCS 480-249434/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-249434/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 249890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-1 MS	MW-9D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-1 MSD	MW-9D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-2	MW-10D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-2 MS	MW-10D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-2 MSD	MW-10D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-3	MW-13D	Total/NA	Water	200.7 Rev 4.4	249434
480-82617-4	MW-15D	Total/NA	Water	200.7 Rev 4.4	249434
LCS 480-249434/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	249434
MB 480-249434/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	249434

General Chemistry

Analysis Batch: 249254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	SM 3500 FE D	
480-82617-2	MW-10D	Total/NA	Water	SM 3500 FE D	
480-82617-3	MW-13D	Total/NA	Water	SM 3500 FE D	
480-82617-3 DU	MW-13D	Total/NA	Water	SM 3500 FE D	
480-82617-4	MW-15D	Total/NA	Water	SM 3500 FE D	
480-82617-4 MS	MW-15D	Total/NA	Water	SM 3500 FE D	
LCS 480-249254/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 480-249254/3	Method Blank	Total/NA	Water	SM 3500 FE D	

General Chemistry (Continued)

Analysis Batch: 249274

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	Nitrate by calc	
480-82617-2	MW-10D	Total/NA	Water	Nitrate by calc	
480-82617-3	MW-13D	Total/NA	Water	Nitrate by calc	
480-82617-4	MW-15D	Total/NA	Water	Nitrate by calc	

Analysis Batch: 249413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	300.0	
480-82617-2	MW-10D	Total/NA	Water	300.0	
480-82617-2 MS	MW-10D	Total/NA	Water	300.0	
480-82617-3	MW-13D	Total/NA	Water	300.0	
480-82617-4	MW-15D	Total/NA	Water	300.0	
LCS 480-249413/27	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-249413/51	Lab Control Sample	Total/NA	Water	300.0	
MB 480-249413/28	Method Blank	Total/NA	Water	300.0	
MB 480-249413/52	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 249901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Total/NA	Water	SM 4500 S2 F	
480-82617-2	MW-10D	Total/NA	Water	SM 4500 S2 F	
480-82617-3	MW-13D	Total/NA	Water	SM 4500 S2 F	
480-82617-4	MW-15D	Total/NA	Water	SM 4500 S2 F	
LCS 480-249901/28	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCS 480-249901/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
LCS 480-249901/52	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 480-249901/27	Method Blank	Total/NA	Water	SM 4500 S2 F	
MB 480-249901/3	Method Blank	Total/NA	Water	SM 4500 S2 F	
MB 480-249901/51	Method Blank	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 250562

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Dissolved	Water	SM5310_D	
480-82617-2	MW-10D	Dissolved	Water	SM5310_D	
480-82617-3	MW-13D	Dissolved	Water	SM5310_D	
480-82617-4	MW-15D	Dissolved	Water	SM5310_D	
LCS 480-250562/4	Lab Control Sample	Dissolved	Water	SM5310_D	
MB 480-250562/3	Method Blank	Dissolved	Water	SM5310_D	

Analysis Batch: 261586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Dissolved	Water	SM 5310C	261590
480-82617-2	MW-10D	Dissolved	Water	SM 5310C	261590
480-82617-3	MW-13D	Dissolved	Water	SM 5310C	261590
480-82617-4	MW-15D	Dissolved	Water	SM 5310C	261590
LCS 490-261590/2-A	Lab Control Sample	Dissolved	Water	SM 5310C	261590
MB 490-261590/1-A	Method Blank	Dissolved	Water	SM 5310C	261590

Filtration Batch: 261590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-1	MW-9D	Dissolved	Water	Filtration	

General Chemistry (Continued)

Filtration Batch: 261590 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-82617-2	MW-10D	Dissolved	Water	Filtration	
480-82617-3	MW-13D	Dissolved	Water	Filtration	
480-82617-4	MW-15D	Dissolved	Water	Filtration	
LCS 490-261590/2-A	Lab Control Sample	Dissolved	Water	Filtration	
MB 490-261590/1-A	Method Blank	Dissolved	Water	Filtration	

Lab Chronicle

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-9D

Lab Sample ID: 480-82617-1

Date Collected: 06/19/15 09:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	250622	06/29/15 04:30	CDC	TAL BUF
Total/NA	Prep	200.7			249434	06/23/15 07:00	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249890	06/23/15 15:40	AMH	TAL BUF
Total/NA	Analysis	300.0		20	249413	06/22/15 20:29	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	249274	06/20/15 12:40	EGS	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	249254	06/20/15 13:50	NCH	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	249901	06/24/15 05:15	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	261586	06/30/15 14:07	JAB	TAL NSH
Dissolved	Filtration	Filtration			261590	07/02/15 14:43	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	250562	06/27/15 00:20	NCH	TAL BUF

Client Sample ID: MW-10D

Lab Sample ID: 480-82617-2

Date Collected: 06/19/15 10:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		40	250622	06/29/15 04:58	CDC	TAL BUF
Total/NA	Prep	200.7			249434	06/23/15 07:00	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249890	06/23/15 14:30	AMH	TAL BUF
Total/NA	Analysis	300.0		20	249413	06/22/15 20:37	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	249274	06/20/15 12:42	EGS	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	249254	06/20/15 13:50	NCH	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	249901	06/24/15 05:15	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	261586	06/30/15 14:07	JAB	TAL NSH
Dissolved	Filtration	Filtration			261590	07/02/15 14:43	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	250562	06/27/15 00:36	NCH	TAL BUF

Client Sample ID: MW-13D

Lab Sample ID: 480-82617-3

Date Collected: 06/19/15 11:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		50	250622	06/29/15 09:11	CDC	TAL BUF
Total/NA	Prep	200.7			249434	06/23/15 07:00	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249890	06/23/15 15:58	AMH	TAL BUF
Total/NA	Analysis	300.0		20	249413	06/22/15 21:26	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	249274	06/20/15 12:43	EGS	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	249254	06/20/15 13:50	NCH	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	249901	06/24/15 05:15	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	261586	06/30/15 14:07	JAB	TAL NSH
Dissolved	Filtration	Filtration			261590	07/02/15 14:43	JAB	TAL NSH

Lab Chronicle

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

TestAmerica Job ID: 480-82617-1

Client Sample ID: MW-13D

Lab Sample ID: 480-82617-3

Date Collected: 06/19/15 11:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	SM5310_D		1	250562	06/27/15 00:51	NCH	TAL BUF

Client Sample ID: MW-15D

Lab Sample ID: 480-82617-4

Date Collected: 06/19/15 12:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	250622	06/29/15 05:52	CDC	TAL BUF
Total/NA	Prep	200.7			249434	06/23/15 07:00	TAS	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	249890	06/23/15 16:01	AMH	TAL BUF
Total/NA	Analysis	300.0		20	249413	06/22/15 21:34	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	249274	06/20/15 12:44	EGS	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	249254	06/20/15 13:50	NCH	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	249901	06/24/15 05:15	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	261586	06/30/15 14:07	JAB	TAL NSH
Dissolved	Filtration	Filtration			261590	07/02/15 14:43	JAB	TAL NSH
Dissolved	Analysis	SM5310_D		1	250562	06/27/15 01:07	NCH	TAL BUF

Client Sample ID: trip blank

Lab Sample ID: 480-82617-5

Date Collected: 06/19/15 00:00

Matrix: Water

Date Received: 06/20/15 03:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	250622	06/29/15 06:20	CDC	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: 480-82617-1

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	03-31-16

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
SM 3500 FE D		Water	Ferrous Iron

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Certification Summary

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

TestAmerica Job ID: 480-82617-1

Laboratory: TestAmerica Nashville (Continued)

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11342	03-31-16

Method Summary

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

TestAmerica Job ID: 480-82617-1

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: 480-82617-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-82617-1	MW-9D	Water	06/19/15 09:00	06/20/15 03:05
480-82617-2	MW-10D	Water	06/19/15 10:00	06/20/15 03:05
480-82617-3	MW-13D	Water	06/19/15 11:00	06/20/15 03:05
480-82617-4	MW-15D	Water	06/19/15 12:00	06/20/15 03:05
480-82617-5	trip blank	Water	06/19/15 00:00	06/20/15 03:05

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

Client Information	Sampler: Wayne Randall	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-68979-15518.1
Client Contact: Mr. Wayne Randall	Phone: 315 703 4110	E-Mail: judy.stone@testamericainc.com		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): Standard			
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: Midler	SSOW#:			

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:

Analysis Requested

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:		X	X	N	D	A	A	CB	N	N	S	X	
MW-9D	6/19/15	900	C	Water			1	1	3	2	1	2	1	2		MS/MSD for
MW-10D	6/19/15	1000	C	Water			1	1	3	2	1	2	1	2		VOAS only
MW-13D	6/19/15	1100	C	Water			1	1	3	2	1	2	1	2		
MW 15D	6/19/15	1200	C	Water			1	1	3	2	1	2	1	2		
MW-9D MS	6/19/15	900	C	Water					3							DIC/DOC field
MW-9D-MSD	6/19/15	900	C	Water					3							filtered

480-82617 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 Deliverables

Special Instructions/QC Requirements:

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

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Wayne Randall	6/19/15 1257	C&S	[illegible]	6/19/15 1257	S&R
REngelin	6-19-15, 1900	TGA	[illegible]	20 Jun 15 0305	TAB

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

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

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

7/6/2015

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-24714.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Analysis Requested		Job #: 480-82617-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 7/1/2015			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-9D (480-82617-1)	6/19/15	09:00 Eastern		Water			X	2	
MW-10D (480-82617-2)	6/19/15	10:00 Eastern		Water			X	2	
MW-13D (480-82617-3)	6/19/15	11:00 Eastern		Water			X	2	
MW-15D (480-82617-4)	6/19/15	12:00 Eastern		Water			X	2	

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
[signature]	6/24/15 1900	TAN	[signature]	6-26-15 0845	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: 0.5

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

Loc: 480
82617

Cooler Received/Opened On 6/26/2015 @ 0845

1. Tracking # 6406 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 94660220

2. Temperature of rep. sample or temp blank when opened: 0.5 *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) MDM

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) _____

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) DA

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) DA

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

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

BIS = Broken in shipment

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

7/6/2015

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-24803.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc				Job #: 480-82617-1
Address: 2960 Foster Creighton Drive,	Due Date Requested: 7/1/2015			
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)	SM5310_DOC_C/Filtration_WC (MOD) Dissolved Inorganic Carbon (Averag	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-9D (480-82617-1)	6/19/15	09:00 Eastern		Water			X	1	
MW-10D (480-82617-2)	6/19/15	10:00 Eastern		Water			X	1	
MW-13D (480-82617-3)	6/19/15	11:00 Eastern		Water			X	1	
MW-15D (480-82617-4)	6/19/15	12:00 Eastern		Water			X	1	

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
	6/19/15 1700			6-20-15 0940	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: 4.8

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

Loc: 480
82617

COOLER RECEIPT FORM

Cooler Received/Opened On 6/30/2015 @ 0940

1. Tracking # 6634 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 96210146

2. Temperature of rep. sample or temp blank when opened: 4.8 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? 1 Front YES...NO...NA

If yes, how many and where:

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) IV

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) DA

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) DA

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) DA

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

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

BIS = Broken in shipment

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-82617-1

Login Number: 82617
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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.	False	No: Received Trip Blank(s) not listed on COC.
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 AND S
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-82617-1

Login Number: 82617
List Number: 2
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 06/26/15 01:59 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	0.5C
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.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-82617-1

Login Number: 82617
List Number: 3
Creator: Armstrong, Daniel

List Source: TestAmerica Nashville
List Creation: 06/30/15 11:57 AM

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	4.8C
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.	N/A	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine 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: 480-92617-1
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:
12/29/2015 11:02:49 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

Definitions/Glossary

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

TestAmerica Job ID: 480-92617-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.

General Chemistry

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

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: 480-92617-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-92617-1

Receipt
The samples were received on 12/12/2015 1:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

GC/MS VOA
Method(s) OLC02.1: The initial calibration response for Bromomethane associated with batch 460-341312 was below the minimum required. This analyte was not detected in the associated samples.

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, 9056A: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-13D (480-92617-1) and MW-9D (480-92617-2). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-10D (480-92617-3) and MW-15 (480-92617-4). 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.

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

General Chemistry
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 samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-13D (480-92617-1), MW-9D (480-92617-2), MW-10D (480-92617-3) and MW-15 (480-92617-4).

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: 480-92617-1

Client Sample ID: MW-13D — Lab Sample ID: 480-92617-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.29		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	157		10.0	1.7	mg/L	5		300.0	Total/NA
Sulfide	12.0		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	64.9		10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	54.0	B	4.0	1.7	mg/L	4		SM5310_D	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	590	E	5.0	5.0	ug/L	5		OLC02.1	Total/NA
Vinyl chloride	600	E	5.0	5.0	ug/L	5		OLC02.1	Total/NA
cis-1,2-Dichloroethene - DL	620		50	50	ug/L	50		OLC02.1	Total/NA
Vinyl chloride - DL	920		50	50	ug/L	50		OLC02.1	Total/NA

Client Sample ID: MW-9D — Lab Sample ID: 480-92617-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.21		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	431		10.0	1.7	mg/L	5		300.0	Total/NA
Sulfide	25.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	75.5		10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	5.8	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.3		1.0	1.0	ug/L	1		OLC02.1	Total/NA
Vinyl chloride	1.6		1.0	1.0	ug/L	1		OLC02.1	Total/NA

Client Sample ID: MW-10D — Lab Sample ID: 480-92617-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.11		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	655	B	20.0	3.5	mg/L	10		300.0	Total/NA
Sulfide	23.6		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	86.8		10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	7.1	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	390	E	5.0	5.0	ug/L	5		OLC02.1	Total/NA
trans-1,2-Dichloroethene	13		5.0	5.0	ug/L	5		OLC02.1	Total/NA
Vinyl chloride	66		5.0	5.0	ug/L	5		OLC02.1	Total/NA
cis-1,2-Dichloroethene - DL	320		25	25	ug/L	25		OLC02.1	Total/NA
Vinyl chloride - DL	56		25	25	ug/L	25		OLC02.1	Total/NA

Client Sample ID: MW-15 — Lab Sample ID: 480-92617-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.12		0.050	0.019	mg/L	1		200.7 Rev 4.4	Total/NA
Sulfate	577	B	20.0	3.5	mg/L	10		300.0	Total/NA
Sulfide	37.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA
Dissolved Inorganic Carbon	132		10.0	1.4	mg/L	10		SM 5310C	Dissolved
Dissolved Organic Carbon	8.2	B	1.0	0.43	mg/L	1		SM5310_D	Dissolved

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	4.5		1.0	1.0	ug/L	1		OLC02.1	Total/NA
Vinyl chloride	1.1		1.0	1.0	ug/L	1		OLC02.1	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample ID: MW-13D

Date Collected: 12/11/15 09:00
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,1,2,2-Tetrachloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,1,2-Trichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,1-Dichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,1-Dichloroethene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2,4-Trichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2-Dibromoethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2-Dichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,2-Dichloropropane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,3-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
1,4-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
2-Butanone (MEK)	ND		25	25	ug/L			12/17/15 05:33	5
2-Hexanone	ND		25	25	ug/L			12/17/15 05:33	5
4-Methyl-2-pentanone (MIBK)	ND		25	25	ug/L			12/17/15 05:33	5
Acetone	ND		25	25	ug/L			12/17/15 05:33	5
Benzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Bromodichloromethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Bromoform	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Bromomethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Carbon disulfide	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Carbon tetrachloride	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Chlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Chloroethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Chloroform	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Chloromethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
cis-1,2-Dichloroethene	**590**	**E**	5.0	5.0	ug/L			12/17/15 05:33	5
cis-1,3-Dichloropropene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Dibromochloromethane	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Ethylbenzene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Methylene Chloride	ND		10	10	ug/L			12/17/15 05:33	5
m-Xylene & p-Xylene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
o-Xylene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Styrene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Tetrachloroethene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Toluene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
trans-1,2-Dichloroethene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
trans-1,3-Dichloropropene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Trichloroethene	ND		5.0	5.0	ug/L			12/17/15 05:33	5
Vinyl chloride	**600**	**E**	5.0	5.0	ug/L			12/17/15 05:33	5
Xylenes, Total	ND		5.0	5.0	ug/L			12/17/15 05:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*80 - 120*		*12/17/15 05:33*	*5*

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	50	ug/L			12/18/15 00:58	50
1,1,2,2-Tetrachloroethane	ND		50	50	ug/L			12/18/15 00:58	50

Client Sample ID: MW-13D
Date Collected: 12/11/15 09:00
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		50	50	ug/L			12/18/15 00:58	50
1,1-Dichloroethane	ND		50	50	ug/L			12/18/15 00:58	50
1,1-Dichloroethene	ND		50	50	ug/L			12/18/15 00:58	50
1,2,4-Trichlorobenzene	ND		50	50	ug/L			12/18/15 00:58	50
1,2-Dibromo-3-Chloropropane	ND		50	50	ug/L			12/18/15 00:58	50
1,2-Dibromoethane	ND		50	50	ug/L			12/18/15 00:58	50
1,2-Dichlorobenzene	ND		50	50	ug/L			12/18/15 00:58	50
1,2-Dichloroethane	ND		50	50	ug/L			12/18/15 00:58	50
1,2-Dichloropropane	ND		50	50	ug/L			12/18/15 00:58	50
1,3-Dichlorobenzene	ND		50	50	ug/L			12/18/15 00:58	50
1,4-Dichlorobenzene	ND		50	50	ug/L			12/18/15 00:58	50
2-Butanone (MEK)	ND		250	250	ug/L			12/18/15 00:58	50
2-Hexanone	ND		250	250	ug/L			12/18/15 00:58	50
4-Methyl-2-pentanone (MIBK)	ND		250	250	ug/L			12/18/15 00:58	50
Acetone	ND		250	250	ug/L			12/18/15 00:58	50
Benzene	ND		50	50	ug/L			12/18/15 00:58	50
Bromodichloromethane	ND		50	50	ug/L			12/18/15 00:58	50
Bromoform	ND		50	50	ug/L			12/18/15 00:58	50
Bromomethane	ND		50	50	ug/L			12/18/15 00:58	50
Carbon disulfide	ND		50	50	ug/L			12/18/15 00:58	50
Carbon tetrachloride	ND		50	50	ug/L			12/18/15 00:58	50
Chlorobenzene	ND		50	50	ug/L			12/18/15 00:58	50
Chloroethane	ND		50	50	ug/L			12/18/15 00:58	50
Chloroform	ND		50	50	ug/L			12/18/15 00:58	50
Chloromethane	ND		50	50	ug/L			12/18/15 00:58	50
cis-1,2-Dichloroethene	**620**		50	50	ug/L			12/18/15 00:58	50
cis-1,3-Dichloropropene	ND		50	50	ug/L			12/18/15 00:58	50
Dibromochloromethane	ND		50	50	ug/L			12/18/15 00:58	50
Ethylbenzene	ND		50	50	ug/L			12/18/15 00:58	50
Methylene Chloride	ND		100	100	ug/L			12/18/15 00:58	50
m-Xylene & p-Xylene	ND		50	50	ug/L			12/18/15 00:58	50
o-Xylene	ND		50	50	ug/L			12/18/15 00:58	50
Styrene	ND		50	50	ug/L			12/18/15 00:58	50
Tetrachloroethene	ND		50	50	ug/L			12/18/15 00:58	50
Toluene	ND		50	50	ug/L			12/18/15 00:58	50
trans-1,2-Dichloroethene	ND		50	50	ug/L			12/18/15 00:58	50
trans-1,3-Dichloropropene	ND		50	50	ug/L			12/18/15 00:58	50
Trichloroethene	ND		50	50	ug/L			12/18/15 00:58	50
Vinyl chloride	**920**		50	50	ug/L			12/18/15 00:58	50
Xylenes, Total	ND		50	50	ug/L			12/18/15 00:58	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*95*		*80 - 120*		*12/18/15 00:58*	*50*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.29**		0.050	0.019	mg/L		12/14/15 11:00	12/14/15 22:28	1

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-13D
Date Collected: 12/11/15 09:00
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-1
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**157**		10.0	1.7	mg/L			12/14/15 22:27	5
Nitrate as N	ND		0.050	0.020	mg/L			12/12/15 09:06	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/12/15 15:00	1
Sulfide	**12.0**		1.0	0.67	mg/L			12/15/15 06:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**64.9**		10.0	1.4	mg/L			12/22/15 15:16	10
Dissolved Organic Carbon	**54.0**	**B**	4.0	1.7	mg/L			12/16/15 17:10	4

Client Sample ID: MW-9D

Date Collected: 12/11/15 10:00
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,1,2-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,1-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,1-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2,4-Trichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2-Dibromoethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,2-Dichloropropane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
2-Butanone (MEK)	ND		5.0	5.0	ug/L			12/17/15 04:45	1
2-Hexanone	ND		5.0	5.0	ug/L			12/17/15 04:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	5.0	ug/L			12/17/15 04:45	1
Acetone	ND		5.0	5.0	ug/L			12/17/15 04:45	1
Benzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Bromodichloromethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Bromoform	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Bromomethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Carbon disulfide	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Carbon tetrachloride	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Chlorobenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Chloroethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Chloroform	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Chloromethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
cis-1,2-Dichloroethene	**2.3**		1.0	1.0	ug/L			12/17/15 04:45	1
cis-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Dibromochloromethane	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Ethylbenzene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Methylene Chloride	ND		2.0	2.0	ug/L			12/17/15 04:45	1
m-Xylene & p-Xylene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
o-Xylene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Styrene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Tetrachloroethene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Toluene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
trans-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
trans-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Trichloroethene	ND		1.0	1.0	ug/L			12/17/15 04:45	1
Vinyl chloride	**1.6**		1.0	1.0	ug/L			12/17/15 04:45	1
Xylenes, Total	ND		1.0	1.0	ug/L			12/17/15 04:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*111*		*80 - 120*		*12/17/15 04:45*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.21**		0.050	0.019	mg/L		12/14/15 11:00	12/14/15 22:41	1

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-9D
Date Collected: 12/11/15 10:00
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**431**		10.0	1.7	mg/L			12/14/15 22:35	5
Nitrate as N	ND		0.050	0.020	mg/L			12/12/15 09:07	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/12/15 15:00	1
Sulfide	**25.8**		1.0	0.67	mg/L			12/15/15 06:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**75.5**		10.0	1.4	mg/L			12/22/15 15:16	10
Dissolved Organic Carbon	**5.8**	**B**	1.0	0.43	mg/L			12/16/15 17:10	1

Client Sample ID: MW-10D

Date Collected: 12/11/15 10:30
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,1,2,2-Tetrachloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,1,2-Trichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,1-Dichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,1-Dichloroethene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2,4-Trichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2-Dibromo-3-Chloropropane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2-Dibromoethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2-Dichloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,2-Dichloropropane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,3-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
1,4-Dichlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
2-Butanone (MEK)	ND		25	25	ug/L			12/17/15 05:56	5
2-Hexanone	ND		25	25	ug/L			12/17/15 05:56	5
4-Methyl-2-pentanone (MIBK)	ND		25	25	ug/L			12/17/15 05:56	5
Acetone	ND		25	25	ug/L			12/17/15 05:56	5
Benzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Bromodichloromethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Bromoform	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Bromomethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Carbon disulfide	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Carbon tetrachloride	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Chlorobenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Chloroethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Chloroform	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Chloromethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
cis-1,2-Dichloroethene	**390**	**E**	5.0	5.0	ug/L			12/17/15 05:56	5
cis-1,3-Dichloropropene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Dibromochloromethane	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Ethylbenzene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Methylene Chloride	ND		10	10	ug/L			12/17/15 05:56	5
m-Xylene & p-Xylene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
o-Xylene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Styrene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Tetrachloroethene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Toluene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
trans-1,2-Dichloroethene	**13**		5.0	5.0	ug/L			12/17/15 05:56	5
trans-1,3-Dichloropropene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Trichloroethene	ND		5.0	5.0	ug/L			12/17/15 05:56	5
Vinyl chloride	**66**		5.0	5.0	ug/L			12/17/15 05:56	5
Xylenes, Total	ND		5.0	5.0	ug/L			12/17/15 05:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*103*		*80 - 120*		*12/17/15 05:56*	*5*

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		25	25	ug/L			12/18/15 00:35	25
1,1,2,2-Tetrachloroethane	ND		25	25	ug/L			12/18/15 00:35	25

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-10D
Date Collected: 12/11/15 10:30
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		25	25	ug/L			12/18/15 00:35	25
1,1-Dichloroethane	ND		25	25	ug/L			12/18/15 00:35	25
1,1-Dichloroethene	ND		25	25	ug/L			12/18/15 00:35	25
1,2,4-Trichlorobenzene	ND		25	25	ug/L			12/18/15 00:35	25
1,2-Dibromo-3-Chloropropane	ND		25	25	ug/L			12/18/15 00:35	25
1,2-Dibromoethane	ND		25	25	ug/L			12/18/15 00:35	25
1,2-Dichlorobenzene	ND		25	25	ug/L			12/18/15 00:35	25
1,2-Dichloroethane	ND		25	25	ug/L			12/18/15 00:35	25
1,2-Dichloropropane	ND		25	25	ug/L			12/18/15 00:35	25
1,3-Dichlorobenzene	ND		25	25	ug/L			12/18/15 00:35	25
1,4-Dichlorobenzene	ND		25	25	ug/L			12/18/15 00:35	25
2-Butanone (MEK)	ND		130	130	ug/L			12/18/15 00:35	25
2-Hexanone	ND		130	130	ug/L			12/18/15 00:35	25
4-Methyl-2-pentanone (MIBK)	ND		130	130	ug/L			12/18/15 00:35	25
Acetone	ND		130	130	ug/L			12/18/15 00:35	25
Benzene	ND		25	25	ug/L			12/18/15 00:35	25
Bromodichloromethane	ND		25	25	ug/L			12/18/15 00:35	25
Bromoform	ND		25	25	ug/L			12/18/15 00:35	25
Bromomethane	ND		25	25	ug/L			12/18/15 00:35	25
Carbon disulfide	ND		25	25	ug/L			12/18/15 00:35	25
Carbon tetrachloride	ND		25	25	ug/L			12/18/15 00:35	25
Chlorobenzene	ND		25	25	ug/L			12/18/15 00:35	25
Chloroethane	ND		25	25	ug/L			12/18/15 00:35	25
Chloroform	ND		25	25	ug/L			12/18/15 00:35	25
Chloromethane	ND		25	25	ug/L			12/18/15 00:35	25
cis-1,2-Dichloroethene	**320**		25	25	ug/L			12/18/15 00:35	25
cis-1,3-Dichloropropene	ND		25	25	ug/L			12/18/15 00:35	25
Dibromochloromethane	ND		25	25	ug/L			12/18/15 00:35	25
Ethylbenzene	ND		25	25	ug/L			12/18/15 00:35	25
Methylene Chloride	ND		50	50	ug/L			12/18/15 00:35	25
m-Xylene & p-Xylene	ND		25	25	ug/L			12/18/15 00:35	25
o-Xylene	ND		25	25	ug/L			12/18/15 00:35	25
Styrene	ND		25	25	ug/L			12/18/15 00:35	25
Tetrachloroethene	ND		25	25	ug/L			12/18/15 00:35	25
Toluene	ND		25	25	ug/L			12/18/15 00:35	25
trans-1,2-Dichloroethene	ND		25	25	ug/L			12/18/15 00:35	25
trans-1,3-Dichloropropene	ND		25	25	ug/L			12/18/15 00:35	25
Trichloroethene	ND		25	25	ug/L			12/18/15 00:35	25
Vinyl chloride	**56**		25	25	ug/L			12/18/15 00:35	25
Xylenes, Total	ND		25	25	ug/L			12/18/15 00:35	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*90*		*80 - 120*		*12/18/15 00:35*	*25*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.11**		0.050	0.019	mg/L		12/14/15 11:00	12/14/15 22:58	1

Client Sample ID: MW-10D

Date Collected: 12/11/15 10:30
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**655**	**B**	20.0	3.5	mg/L			12/16/15 01:06	10
Nitrate as N	ND		0.050	0.020	mg/L			12/12/15 09:08	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/12/15 15:00	1
Sulfide	**23.6**		1.0	0.67	mg/L			12/15/15 06:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**86.8**		10.0	1.4	mg/L			12/22/15 15:16	10
Dissolved Organic Carbon	**7.1**	**B**	1.0	0.43	mg/L			12/16/15 17:10	1

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-15
Date Collected: 12/11/15 11:30
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,1,2-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,1-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,1-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2,4-Trichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2-Dibromoethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,2-Dichloropropane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
2-Butanone (MEK)	ND		5.0	5.0	ug/L			12/17/15 05:09	1
2-Hexanone	ND		5.0	5.0	ug/L			12/17/15 05:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	5.0	ug/L			12/17/15 05:09	1
Acetone	ND		5.0	5.0	ug/L			12/17/15 05:09	1
Benzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Bromodichloromethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Bromoform	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Bromomethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Carbon disulfide	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Carbon tetrachloride	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Chlorobenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Chloroethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Chloroform	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Chloromethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
cis-1,2-Dichloroethene	**4.5**		1.0	1.0	ug/L			12/17/15 05:09	1
cis-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Dibromochloromethane	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Ethylbenzene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Methylene Chloride	ND		2.0	2.0	ug/L			12/17/15 05:09	1
m-Xylene & p-Xylene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
o-Xylene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Styrene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Tetrachloroethene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Toluene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
trans-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
trans-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Trichloroethene	ND		1.0	1.0	ug/L			12/17/15 05:09	1
Vinyl chloride	**1.1**		1.0	1.0	ug/L			12/17/15 05:09	1
Xylenes, Total	ND		1.0	1.0	ug/L			12/17/15 05:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*119*		*80 - 120*		*12/17/15 05:09*	*1*

Method: 200.7 Rev 4.4 - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.12**		0.050	0.019	mg/L		12/14/15 11:00	12/14/15 23:01	1

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-15
Date Collected: 12/11/15 11:30
Date Received: 12/12/15 01:30

Lab Sample ID: 480-92617-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**577**	**B**	20.0	3.5	mg/L			12/16/15 01:21	10
Nitrate as N	ND		0.050	0.020	mg/L			12/12/15 11:31	1
Ferrous Iron	ND	HF	0.10	0.075	mg/L			12/12/15 15:00	1
Sulfide	**37.8**		1.0	0.67	mg/L			12/15/15 06:50	1

General Chemistry - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Inorganic Carbon	**132**		10.0	1.4	mg/L			12/22/15 15:16	10
Dissolved Organic Carbon	**8.2**	**B**	1.0	0.43	mg/L			12/16/15 17:10	1

Surrogate Summary

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

TestAmerica Job ID: 480-92617-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	BFB (80-120)								
480-92617-1	MW-13D	103								
480-92617-1 - DL	MW-13D	95								
480-92617-2	MW-9D	111								
480-92617-3	MW-10D	103								
480-92617-3 - DL	MW-10D	90								
480-92617-3 MS	MW-10D	87								
480-92617-3 MSD	MW-10D	99								
480-92617-4	MW-15	119								
LCS 460-341312/3	Lab Control Sample	111								
LCS 460-341569/4	Lab Control Sample	96								
MB 460-341312/5	Method Blank	112								
MB 460-341569/6	Method Blank	104								
STOBLK 460-341569/14	Method Blank	97								

Surrogate Legend

BFB = 4-Bromofluorobenzene

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

Lab Sample ID: MB 460-341312/5
Matrix: Water
Analysis Batch: 341312

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,1,2,2-Tetrachloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,1,2-Trichloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,1-Dichloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,1-Dichloroethene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2,4-Trichlorobenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2-Dibromoethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2-Dichloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,2-Dichloropropane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
2-Butanone (MEK)	ND		5.0	5.0	ug/L			12/16/15 20:57	1
2-Hexanone	ND		5.0	5.0	ug/L			12/16/15 20:57	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	5.0	ug/L			12/16/15 20:57	1
Acetone	ND		5.0	5.0	ug/L			12/16/15 20:57	1
Benzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Bromodichloromethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Bromoform	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Bromomethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Carbon disulfide	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Carbon tetrachloride	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Chlorobenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Chloroethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Chloroform	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Chloromethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
cis-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
cis-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Dibromochloromethane	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Ethylbenzene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Methylene Chloride	ND		2.0	2.0	ug/L			12/16/15 20:57	1
m-Xylene & p-Xylene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
o-Xylene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Styrene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Tetrachloroethene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Toluene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
trans-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
trans-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Trichloroethene	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Vinyl chloride	ND		1.0	1.0	ug/L			12/16/15 20:57	1
Xylenes, Total	ND		1.0	1.0	ug/L			12/16/15 20:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*112*		*80 - 120*		*12/16/15 20:57*	*1*

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

Lab Sample ID: LCS 460-341312/3
Matrix: Water
Analysis Batch: 341312

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	5.00	4.07		ug/L		81	60 - 140
1,2-Dibromoethane	5.00	3.87		ug/L		77	60 - 140
1,2-Dichloroethane	5.00	4.14		ug/L		83	60 - 140
1,2-Dichloropropane	5.00	3.89		ug/L		78	60 - 140
1,4-Dichlorobenzene	5.00	4.08		ug/L		82	60 - 140
Benzene	5.00	3.89		ug/L		78	60 - 140
Bromoform	5.00	3.81		ug/L		76	60 - 140
Carbon tetrachloride	5.00	3.93		ug/L		79	60 - 140
cis-1,3-Dichloropropene	5.00	3.98		ug/L		80	60 - 140
Tetrachloroethene	5.00	3.98		ug/L		80	60 - 140
Trichloroethene	5.00	4.04		ug/L		81	60 - 140
Vinyl chloride	5.00	4.02		ug/L		80	60 - 140

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene	*111*		*80 - 120*

Lab Sample ID: MB 460-341569/6
Matrix: Water
Analysis Batch: 341569

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,1,2-Trichloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,1-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,1-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2,4-Trichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2-Dibromoethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2-Dichloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,2-Dichloropropane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
2-Butanone (MEK)	ND		5.0	5.0	ug/L			12/17/15 23:38	1
2-Hexanone	ND		5.0	5.0	ug/L			12/17/15 23:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	5.0	ug/L			12/17/15 23:38	1
Acetone	ND		5.0	5.0	ug/L			12/17/15 23:38	1
Benzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Bromodichloromethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Bromoform	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Bromomethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Carbon disulfide	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Carbon tetrachloride	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Chlorobenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Chloroethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Chloroform	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Chloromethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1

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

Lab Sample ID: MB 460-341569/6
Matrix: Water
Analysis Batch: 341569

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
cis-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Dibromochloromethane	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Ethylbenzene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Methylene Chloride	ND		2.0	2.0	ug/L			12/17/15 23:38	1
m-Xylene & p-Xylene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
o-Xylene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Styrene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Tetrachloroethene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Toluene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
trans-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
trans-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Trichloroethene	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Vinyl chloride	ND		1.0	1.0	ug/L			12/17/15 23:38	1
Xylenes, Total	ND		1.0	1.0	ug/L			12/17/15 23:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*104*		*80 - 120*		*12/17/15 23:38*	*1*

Lab Sample ID: STOBLK 460-341569/14
Matrix: Water
Analysis Batch: 341569

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

Analyte	STOBLK Result	STOBLK Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,1,2,2-Tetrachloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,1,2-Trichloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,1-Dichloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,1-Dichloroethene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2,4-Trichlorobenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2-Dibromo-3-Chloropropane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2-Dibromoethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2-Dichlorobenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2-Dichloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,2-Dichloropropane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,3-Dichlorobenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
1,4-Dichlorobenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
2-Butanone (MEK)	ND		5.0	5.0	ug/L			12/18/15 03:21	1
2-Hexanone	ND		5.0	5.0	ug/L			12/18/15 03:21	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	5.0	ug/L			12/18/15 03:21	1
Acetone	ND		5.0	5.0	ug/L			12/18/15 03:21	1
Benzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Bromodichloromethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Bromoform	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Bromomethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Carbon disulfide	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Carbon tetrachloride	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Chlorobenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1

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

Lab Sample ID: STOBLK 460-341569/14
Matrix: Water
Analysis Batch: 341569

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

Analyte	STOBLK Result	STOBLK Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Chloroform	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Chloromethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
cis-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
cis-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Dibromochloromethane	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Ethylbenzene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Methylene Chloride	ND		2.0	2.0	ug/L			12/18/15 03:21	1
m-Xylene & p-Xylene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
o-Xylene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Styrene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Tetrachloroethene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Toluene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
trans-1,2-Dichloroethene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
trans-1,3-Dichloropropene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Trichloroethene	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Vinyl chloride	ND		1.0	1.0	ug/L			12/18/15 03:21	1
Xylenes, Total	ND		1.0	1.0	ug/L			12/18/15 03:21	1

Surrogate	*STOBLK %Recovery*	*STOBLK Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene	*97*		*80 - 120*		*12/18/15 03:21*	*1*

Lab Sample ID: LCS 460-341569/4
Matrix: Water
Analysis Batch: 341569

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	5.00	5.48		ug/L		110	60 - 140
1,2-Dibromoethane	5.00	5.16		ug/L		103	60 - 140
1,2-Dichloroethane	5.00	5.45		ug/L		109	60 - 140
1,2-Dichloropropane	5.00	5.49		ug/L		110	60 - 140
1,4-Dichlorobenzene	5.00	5.30		ug/L		106	60 - 140
Benzene	5.00	5.30		ug/L		106	60 - 140
Bromoform	5.00	6.16		ug/L		123	60 - 140
Carbon tetrachloride	5.00	5.01		ug/L		100	60 - 140
cis-1,3-Dichloropropene	5.00	5.05		ug/L		101	60 - 140
Tetrachloroethene	5.00	4.88		ug/L		98	60 - 140
Trichloroethene	5.00	5.12		ug/L		102	60 - 140
Vinyl chloride	5.00	3.91		ug/L		78	60 - 140

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

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

Lab Sample ID: 480-92617-3 MS
Matrix: Water
Analysis Batch: 341569

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
1,1,2-Trichloroethane	ND		125	139		ug/L		111	60 - 140
1,2-Dibromoethane	ND		125	127		ug/L		101	60 - 140
1,2-Dichloroethane	ND		125	135		ug/L		108	60 - 140
1,2-Dichloropropane	ND		125	135		ug/L		108	60 - 140
1,4-Dichlorobenzene	ND		125	137		ug/L		110	60 - 140
Benzene	ND		125	133		ug/L		107	60 - 140
Bromoform	ND		125	162		ug/L		130	60 - 140
Carbon tetrachloride	ND		125	126		ug/L		101	60 - 140
cis-1,3-Dichloropropene	ND		125	121		ug/L		97	60 - 140
Tetrachloroethene	ND		125	121		ug/L		97	60 - 140
Trichloroethene	ND		125	127		ug/L		102	60 - 140
Vinyl chloride	56		125	155		ug/L		79	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene	*87*		*80 - 120*

Lab Sample ID: 480-92617-3 MSD
Matrix: Water
Analysis Batch: 341569

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
1,1,2-Trichloroethane	ND		125	136		ug/L		109	60 - 140	2	20
1,2-Dibromoethane	ND		125	126		ug/L		100	60 - 140	1	20
1,2-Dichloroethane	ND		125	131		ug/L		105	60 - 140	3	20
1,2-Dichloropropane	ND		125	137		ug/L		110	60 - 140	2	20
1,4-Dichlorobenzene	ND		125	132		ug/L		106	60 - 140	4	20
Benzene	ND		125	134		ug/L		107	60 - 140	0	20
Bromoform	ND		125	151		ug/L		121	60 - 140	7	20
Carbon tetrachloride	ND		125	129		ug/L		104	60 - 140	2	20
cis-1,3-Dichloropropene	ND		125	121		ug/L		97	60 - 140	0	20
Tetrachloroethene	ND		125	124		ug/L		99	60 - 140	3	20
Trichloroethene	ND		125	132		ug/L		105	60 - 140	3	20
Vinyl chloride	56		125	159		ug/L		82	60 - 140	2	20

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

Method: 200.7 Rev 4.4 - Metals (ICP)

Lab Sample ID: MB 480-279468/1-A
Matrix: Water
Analysis Batch: 279721

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		0.050	0.019	mg/L		12/14/15 11:00	12/14/15 22:02	1

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

Lab Sample ID: LCS 480-279468/2-A
Matrix: Water
Analysis Batch: 279721

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279468

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			10.0	9.76		mg/L		98	85 - 115		

Lab Sample ID: 480-92617-2 MS
Matrix: Water
Analysis Batch: 279721

Client Sample ID: MW-9D
Prep Type: Total/NA
Prep Batch: 279468

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	0.21		10.0	9.78		mg/L		96	70 - 130		

Lab Sample ID: 480-92617-2 MSD
Matrix: Water
Analysis Batch: 279721

Client Sample ID: MW-9D
Prep Type: Total/NA
Prep Batch: 279468

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Iron	0.21		10.0	9.84		mg/L		96	70 - 130	1	20

Method: 300.0 - Sulfate

Lab Sample ID: MB 480-279452/32
Matrix: Water
Analysis Batch: 279452

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			12/14/15 18:23	1

Lab Sample ID: MB 480-279452/58
Matrix: Water
Analysis Batch: 279452

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			12/14/15 21:54	1

Lab Sample ID: LCS 480-279452/31
Matrix: Water
Analysis Batch: 279452

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	21.21		mg/L		106	90 - 110		

Lab Sample ID: LCS 480-279452/57
Matrix: Water
Analysis Batch: 279452

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	20.55		mg/L		103	90 - 110		

Method: 300.0 - Sulfate (Continued)

Lab Sample ID: MB 480-279827/32
Matrix: Water
Analysis Batch: 279827

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.456	J	2.0	0.35	mg/L			12/15/15 21:42	1

Lab Sample ID: LCS 480-279827/31
Matrix: Water
Analysis Batch: 279827

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	21.22		mg/L		106	90 - 110

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

Lab Sample ID: MB 480-279494/3
Matrix: Water
Analysis Batch: 279494

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			12/12/15 15:00	1

Lab Sample ID: LCS 480-279494/4
Matrix: Water
Analysis Batch: 279494

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	2.05		mg/L		102	90 - 110

Lab Sample ID: 480-92617-2 MS
Matrix: Water
Analysis Batch: 279494

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
Ferrous Iron	ND	HF	1.00	0.703		mg/L		70	70 - 130

Lab Sample ID: 480-92617-2 DU
Matrix: Water
Analysis Batch: 279494

Client Sample ID: MW-9D
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 480-279797/3
Matrix: Water
Analysis Batch: 279797

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			12/15/15 06:50	1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: LCS 480-279797/4
Matrix: Water
Analysis Batch: 279797

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

Lab Sample ID: MB 490-308784/1
Matrix: Water
Analysis Batch: 308784

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			12/22/15 15:16	1

Lab Sample ID: LCS 490-308784/4
Matrix: Water
Analysis Batch: 308784

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	10.04		mg/L		100	90 - 110

Method: SM5310_D - Organic Carbon, Dissolved (DOC)

Lab Sample ID: MB 480-280377/3
Matrix: Water
Analysis Batch: 280377

Client Sample ID: Method Blank
Prep Type: Dissolved

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dissolved Organic Carbon	0.596	J	1.0	0.43	mg/L			12/16/15 17:10	1

Lab Sample ID: LCS 480-280377/4
Matrix: Water
Analysis Batch: 280377

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	60.13		mg/L		100	90 - 110

QC Association Summary

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

TestAmerica Job ID: 480-92617-1

GC/MS VOA

Analysis Batch: 341312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	OLC02.1	
480-92617-2	MW-9D	Total/NA	Water	OLC02.1	
480-92617-3	MW-10D	Total/NA	Water	OLC02.1	
480-92617-4	MW-15	Total/NA	Water	OLC02.1	
LCS 460-341312/3	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 460-341312/5	Method Blank	Total/NA	Water	OLC02.1	

Analysis Batch: 341569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1 - DL	MW-13D	Total/NA	Water	OLC02.1	
480-92617-3 - DL	MW-10D	Total/NA	Water	OLC02.1	
480-92617-3 MS	MW-10D	Total/NA	Water	OLC02.1	
480-92617-3 MSD	MW-10D	Total/NA	Water	OLC02.1	
LCS 460-341569/4	Lab Control Sample	Total/NA	Water	OLC02.1	
MB 460-341569/6	Method Blank	Total/NA	Water	OLC02.1	
STOBLK 460-341569/14	Method Blank	Total/NA	Water	OLC02.1	

Metals

Prep Batch: 279468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	200.7	
480-92617-2	MW-9D	Total/NA	Water	200.7	
480-92617-2 MS	MW-9D	Total/NA	Water	200.7	
480-92617-2 MSD	MW-9D	Total/NA	Water	200.7	
480-92617-3	MW-10D	Total/NA	Water	200.7	
480-92617-4	MW-15	Total/NA	Water	200.7	
LCS 480-279468/2-A	Lab Control Sample	Total/NA	Water	200.7	
MB 480-279468/1-A	Method Blank	Total/NA	Water	200.7	

Analysis Batch: 279721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	200.7 Rev 4.4	279468
480-92617-2	MW-9D	Total/NA	Water	200.7 Rev 4.4	279468
480-92617-2 MS	MW-9D	Total/NA	Water	200.7 Rev 4.4	279468
480-92617-2 MSD	MW-9D	Total/NA	Water	200.7 Rev 4.4	279468
480-92617-3	MW-10D	Total/NA	Water	200.7 Rev 4.4	279468
480-92617-4	MW-15	Total/NA	Water	200.7 Rev 4.4	279468
LCS 480-279468/2-A	Lab Control Sample	Total/NA	Water	200.7 Rev 4.4	279468
MB 480-279468/1-A	Method Blank	Total/NA	Water	200.7 Rev 4.4	279468

General Chemistry

Analysis Batch: 279452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	300.0	
480-92617-2	MW-9D	Total/NA	Water	300.0	
LCS 480-279452/31	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-279452/57	Lab Control Sample	Total/NA	Water	300.0	
MB 480-279452/32	Method Blank	Total/NA	Water	300.0	

General Chemistry (Continued)

Analysis Batch: 279452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-279452/58	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 279490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	Nitrate by calc	
480-92617-2	MW-9D	Total/NA	Water	Nitrate by calc	
480-92617-3	MW-10D	Total/NA	Water	Nitrate by calc	
480-92617-4	MW-15	Total/NA	Water	Nitrate by calc	

Analysis Batch: 279494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	SM 3500 FE D	
480-92617-2	MW-9D	Total/NA	Water	SM 3500 FE D	
480-92617-2 DU	MW-9D	Total/NA	Water	SM 3500 FE D	
480-92617-2 MS	MW-9D	Total/NA	Water	SM 3500 FE D	
480-92617-3	MW-10D	Total/NA	Water	SM 3500 FE D	
480-92617-4	MW-15	Total/NA	Water	SM 3500 FE D	
LCS 480-279494/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
MB 480-279494/3	Method Blank	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 279797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Total/NA	Water	SM 4500 S2 F	
480-92617-2	MW-9D	Total/NA	Water	SM 4500 S2 F	
480-92617-3	MW-10D	Total/NA	Water	SM 4500 S2 F	
480-92617-4	MW-15	Total/NA	Water	SM 4500 S2 F	
LCS 480-279797/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
MB 480-279797/3	Method Blank	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 279827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-3	MW-10D	Total/NA	Water	300.0	
480-92617-4	MW-15	Total/NA	Water	300.0	
LCS 480-279827/31	Lab Control Sample	Total/NA	Water	300.0	
MB 480-279827/32	Method Blank	Total/NA	Water	300.0	

Analysis Batch: 280377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Dissolved	Water	SM5310_D	
480-92617-2	MW-9D	Dissolved	Water	SM5310_D	
480-92617-3	MW-10D	Dissolved	Water	SM5310_D	
480-92617-4	MW-15	Dissolved	Water	SM5310_D	
LCS 480-280377/4	Lab Control Sample	Dissolved	Water	SM5310_D	
MB 480-280377/3	Method Blank	Dissolved	Water	SM5310_D	

Analysis Batch: 308784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92617-1	MW-13D	Dissolved	Water	SM 5310C	
480-92617-2	MW-9D	Dissolved	Water	SM 5310C	
480-92617-3	MW-10D	Dissolved	Water	SM 5310C	
480-92617-4	MW-15	Dissolved	Water	SM 5310C	

General Chemistry (Continued)

Analysis Batch: 308784 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 490-308784/4	Lab Control Sample	Dissolved	Water	SM 5310C	
MB 490-308784/1	Method Blank	Dissolved	Water	SM 5310C	

Lab Chronicle

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-13D

Lab Sample ID: 480-92617-1

Date Collected: 12/11/15 09:00

Matrix: Water

Date Received: 12/12/15 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		5	341312	12/17/15 05:33	KLB	TAL EDI
Total/NA	Analysis	OLC02.1	DL	50	341569	12/18/15 00:58	KLB	TAL EDI
Total/NA	Prep	200.7			279468	12/14/15 11:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	279721	12/14/15 22:28	AMH	TAL BUF
Total/NA	Analysis	300.0		5	279452	12/14/15 22:27	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	279490	12/12/15 09:06	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	279494	12/12/15 15:00	LED	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	279797	12/15/15 06:50	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	308784	12/22/15 15:16	RN	TAL NSH
Dissolved	Analysis	SM5310_D		4	280377	12/16/15 17:10	DCB	TAL BUF

Client Sample ID: MW-9D

Lab Sample ID: 480-92617-2

Date Collected: 12/11/15 10:00

Matrix: Water

Date Received: 12/12/15 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	341312	12/17/15 04:45	KLB	TAL EDI
Total/NA	Prep	200.7			279468	12/14/15 11:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	279721	12/14/15 22:41	AMH	TAL BUF
Total/NA	Analysis	300.0		5	279452	12/14/15 22:35	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	279490	12/12/15 09:07	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	279494	12/12/15 15:00	LED	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	279797	12/15/15 06:50	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	308784	12/22/15 15:16	RN	TAL NSH
Dissolved	Analysis	SM5310_D		1	280377	12/16/15 17:10	DCB	TAL BUF

Client Sample ID: MW-10D

Lab Sample ID: 480-92617-3

Date Collected: 12/11/15 10:30

Matrix: Water

Date Received: 12/12/15 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		5	341312	12/17/15 05:56	KLB	TAL EDI
Total/NA	Analysis	OLC02.1	DL	25	341569	12/18/15 00:35	KLB	TAL EDI
Total/NA	Prep	200.7			279468	12/14/15 11:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	279721	12/14/15 22:58	AMH	TAL BUF
Total/NA	Analysis	300.0		10	279827	12/16/15 01:06	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	279490	12/12/15 09:08	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	279494	12/12/15 15:00	LED	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	279797	12/15/15 06:50	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	308784	12/22/15 15:16	RN	TAL NSH
Dissolved	Analysis	SM5310_D		1	280377	12/16/15 17:10	DCB	TAL BUF

Lab Chronicle

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

TestAmerica Job ID: 480-92617-1

Client Sample ID: MW-15

Lab Sample ID: 480-92617-4

Date Collected: 12/11/15 11:30

Matrix: Water

Date Received: 12/12/15 01:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	OLC02.1		1	341312	12/17/15 05:09	KLB	TAL EDI
Total/NA	Prep	200.7			279468	12/14/15 11:00	KJ1	TAL BUF
Total/NA	Analysis	200.7 Rev 4.4		1	279721	12/14/15 23:01	AMH	TAL BUF
Total/NA	Analysis	300.0		10	279827	12/16/15 01:21	CAS	TAL BUF
Total/NA	Analysis	Nitrate by calc		1	279490	12/12/15 11:31	ELR	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	279494	12/12/15 15:00	LED	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	279797	12/15/15 06:50	LAW	TAL BUF
Dissolved	Analysis	SM 5310C		10	308784	12/22/15 15:16	RN	TAL NSH
Dissolved	Analysis	SM5310_D		1	280377	12/16/15 17:10	DCB	TAL BUF

Laboratory References:

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

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

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: 480-92617-1

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	03-31-16

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 Edison

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11452	03-31-16

Laboratory: TestAmerica Nashville

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	11342	03-31-16

Method Summary

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

TestAmerica Job ID: 480-92617-1

Method	Method Description	Protocol	Laboratory
OLC02.1	Volatile Organic Compounds, Low Concetration (GC/MS)	OCLP	TAL EDI
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 EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900
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: 480-92617-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-92617-1	MW-13D	Water	12/11/15 09:00	12/12/15 01:30
480-92617-2	MW-9D	Water	12/11/15 10:00	12/12/15 01:30
480-92617-3	MW-10D	Water	12/11/15 10:30	12/12/15 01:30
480-92617-4	MW-15	Water	12/11/15 11:30	12/12/15 01:30

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

Client Information	Sampler: Wayne Randall	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-74882-15518.1
Client Contact: Mr. Wayne Randall	Phone: 315 455 2000	E-Mail: judy.stone@testamericainc.com		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): Standard			
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#:			

Analysis Requested

480-92617 Chain of Custody

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 Num	Special Instructions/Note:
			Preservation Code:				N	D	A	A	CB	N	N	N		
MW-13D	12/11/15	900	C	Water			1	1	3	2	1	2	1	2		MS/MSD for VOAs only
MW-9D		1000	C	Water			1	1	3	2	1	2	1	2		
MW 10D		1030	C	Water			1	1	3	2	1	2	1	2		
MW 10D MS		1030	C	Water					3							
MW-10D MSD		1030	C	Water					3							
MW-15		1130	C	Water			1	1	3	2	1	2	1	2		field filtered DIC/DOC
			RE													
			12-11-15													

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) IV	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] C&S	12/11/15 1400	C&S	[signature]	12/11/15 1400	SVL
2	[signature]	12-11-15, 19:00	SVR	[signature]	12-12-15 0130	TAB
3	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:	0.4	#1

Chain of Custody Record

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

TestAmerica — THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-27307.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		**Analysis Requested**		Job #: 480-92617-1
Address: 777 New Durham Road, ,	Due Date Requested: 12/23/2015			Preservation Codes:
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Midler Semi-Annual Groundwater	Project #: 48002877			
Site:	SSOW#:			

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 - 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)	OLC02.1_Vol/ (MOD) Standard OLC02.1 - Low Level CLP	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-13D (480-92617-1)	12/11/15	09:00 Eastern		Water			X	3	
MW-9D (480-92617-2)	12/11/15	10:00 Eastern		Water			X	3	
MW-10D (480-92617-3)	12/11/15	10:30 Eastern		Water			X	3	
MW-10D (480-92617-3MS)	12/11/15	10:30 Eastern	MS	Water			X	3	
MW-10D (480-92617-3MSD)	12/11/15	10:30 Eastern	MSD	Water			X	3	
MW-15 (480-92617-4)	12/11/15	11:30 Eastern		Water			X	3	

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
[signature]	12/14/15 1700	TABur			
[signature]	12/15/15 915		[signature]	12/15/15 915	TA Edison

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 411712	Cooler Temperature(s) °C and Other Remarks: 3.5/5.5° a IR#5

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
Nashville, TN

COOLER RECEIPT FORM

480-92617 Chain of Custody

Cooler Received/Opened On 12/15/2015 @ 0945

1. Tracking # 5525 (last 4 digits, FedEx)

Courier: FedEx IR Gun ID 17960353

2. Temperature of rep. sample or temp blank when opened: 1.1 *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) SEW

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 # 1 of 1

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

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) SEW

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) SEW

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

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

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

12/29/2015

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Stone, Judy L	Carrier Tracking No(s):	COC No: 480-27308.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: judy.stone@testamericainc.com		Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc				Job #: 480-92617-1
Address: 2960 Foster Creighton Drive, ,	Due Date Requested: 12/23/2015			
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)	SM5310_DOC_C/FIELD_FLTRD (MOD) Dissolved Inorganic Carbon (Averag	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-13D (480-92617-1)	12/11/15	09:00 Eastern		Water			X	2	
MW-9D (480-92617-2)	12/11/15	10:00 Eastern		Water			X	2	
MW-10D (480-92617-3)	12/11/15	10:30 Eastern		Water			X	2	
MW-15 (480-92617-4)	12/11/15	11:30 Eastern		Water			X	2	

Loc: 480
92617

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:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	12/14/15 1700	FA BUR.		12/15/15 @ 0945	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: 1.1

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-92617-1

Login Number: 92617
List Number: 1
Creator: Williams, Christopher S

List Source: TestAmerica Buffalo

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 AND S
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-92617-1

Login Number: 92617
List Number: 2
Creator: Villadarez, Gerson Timothy S

List Source: TestAmerica Edison
List Creation: 12/15/15 02:14 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	411712
Sample custody seals, if present, are 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	5.5°C IR #5
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.	N/A	
Samples do not require splitting or compositing.	False	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: C&S Engineers, Inc.

Job Number: 480-92617-1

Login Number: 92617
List Number: 3
Creator: Vest, Laura E

List Source: TestAmerica Nashville
List Creation: 12/15/15 03:07 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	1.1
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.	N/A	
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
2015 Groundwater Quality Samples

ALPHA
GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

May 6, 2016

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
June & December 2015 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 480-82617-1 and 480-92617-1 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\2016\midler-161.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. 480-82617-1

4 Ground Water Samples and 1 Trip Blank
Collected June 19, 2015

Prepared by: Donald Anné
May 6, 2016

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. There were no data flagged as either estimated (J) or rejected, unusable (R); therefore, all data are considered usable. Detailed information on data quality is included in the data validation review.

Z:\projects\2007\07600 - 07620\07618-midler ave\2016\480-82617-1.dus.wpd

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method OLC02.1 Volatiles Data
for TestAmerica Buffalo, Job No: 480-82617-1

4 Ground Water Samples and 1 Trip Blank
Collected June 19, 2015

Prepared by: Donald Anné
May 6, 2016

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 sample MW-9D.

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 sample LCS 480-2506220/20.

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.

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

Data Usability Summary Report for
TestAmerica Buffalo, Job No. 480-92617-1

4 Ground Water Samples
Collected December 12, 2015

Prepared by: Donald Anné
May 6, 2016

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 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).

- 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 was 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\2016\480-92617-1.dus.wpd

ALPHA GEOSCIENCE
Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method OLC02.1 Volatiles Data
for TestAmerica Buffalo, Job No: 480-92617-1

4 Ground Water Samples
Collected December 12, 2015

Prepared by: Donald Anné
May 6, 2016

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 maximum %RSDs met those requirements. The average RRF for bromomethane was below the method minimum, but not below 0.010 for CVOAMS7 on 12-19-15. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration provided the RRF is not less than 0.010.

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 RRF for bromomethane was below the method minimum, but not below 0.010 and the %D for bromomethane was above the method maximum on 12-17-15 (V43678.D). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration provided the RRF is not less than 0.010.

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

The %D for bromomethane was above the allowable maximum (25%) on 12-16-15 (V43646.D). The %D for bromomethane was above the allowable maximum (25%) on 12-17-15 (V43678.D). Positive results for bromomethane should be considered estimated (J) in associated samples.

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.

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 and the percent recoveries were within QC limits for aqueous MS/MSD sample MW-10D.

Laboratory Control Sample: The percent recoveries for spiked compounds were within QC limits for aqueous samples LCS 480-341312/3 and LCS 480-341569/4.

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 in samples MW-10D and MW-13D 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 samples were diluted by the laboratory and re-analyzed; therefore, the results that are flagged as 'E' in the undiluted samples should be considered estimated (J). The use of the diluted results for vinyl chloride and cis-1,2-dichloroethene are recommended for the samples. It is recommended that the undiluted results be used for all other compounds.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 480-92617-1 Analy Batch No.: 341074

SDG No.:

Instrument ID: CVOAMS7 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2015 01:16 Calibration End Date: 12/16/2015 03:54 Calibration ID: 53584

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-341074/7	V43613.D
Level 2	STD2 460-341074/6	V43612.D
Level 3	STD5 460-341074/3	V43609.D
Level 4	STD10 460-341074/8	V43614.D
Level 5	STD25 460-341074/9	V43615.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chloromethane	0.3224	0.3409	0.3371	0.3205	0.3272	Ave		0.3296			0.0100	2.7		100.0			
Vinyl chloride	0.4091	0.3969	0.3982	0.3911	0.3926	Ave		0.3976			0.1000	1.8		30.0			
Bromomethane	0.0857	0.0755	0.0822	0.0876	0.1083	Ave		0.0879		*	0.1000	14.0		30.0			
Chloroethane	0.2602	0.2801	0.2567	0.2438	0.2399	Ave		0.2561			0.0100	6.2		100.0			
1,1-Dichloroethene	0.3112	0.3100	0.3132	0.3013	0.2992	Ave		0.3070			0.1000	2.1		30.0			
Acetone	0.0296	0.0279	0.0244	0.0254	0.0267	Ave		0.0268				7.7		100.0			
Carbon disulfide	1.1024	1.0857	1.1176	1.0667	1.0537	Ave		1.0852			0.0100	2.4		100.0			
Methylene Chloride	0.2999	0.2787	0.2774	0.2719	0.2739	Ave		0.2804			0.0100	4.0		100.0			
trans-1,2-Dichloroethene	0.3615	0.3260	0.3279	0.3179	0.3422	Ave		0.3351			0.0100	5.1		100.0			
1,1-Dichloroethane	0.5613	0.5482	0.5435	0.5328	0.5362	Ave		0.5444			0.2000	2.1		30.0			
cis-1,2-Dichloroethene	0.2968	0.2818	0.3006	0.3028	0.3143	Ave		0.2993			0.0100	3.9		100.0			
2-Butanone (MEK)	0.0315	0.0301	0.0313	0.0340	0.0378	Ave		0.0329				9.3		100.0			
Chlorobromomethane	0.1175	0.1121	0.1108	0.1081	0.1088	Ave		0.1115			0.0500	3.3		30.0			
Chloroform	0.5083	0.5107	0.4967	0.5017	0.5021	Ave		0.5039			0.2000	1.1		30.0			
1,1,1-Trichloroethane	0.6079	0.5890	0.6144	0.5856	0.5656	Ave		0.5925			0.1000	3.3		30.0			
Carbon tetrachloride	0.5245	0.5123	0.5449	0.5196	0.4987	Ave		0.5200			0.1000	3.3		30.0			
Benzene	1.4187	1.4149	1.4971	1.4758	1.4437	Ave		1.4500			0.4000	2.5		30.0			
1,2-Dichloroethane	0.2248	0.2249	0.2161	0.2222	0.2242	Ave		0.2225			0.1000	1.7		30.0			
Trichloroethene	0.4078	0.3841	0.3990	0.3911	0.3809	Ave		0.3926			0.3000	2.8		30.0			
1,2-Dichloropropane	0.3012	0.2853	0.3003	0.2943	0.2977	Ave		0.2958			0.0100	2.2		100.0			
Bromodichloromethane	0.3700	0.3626	0.3569	0.3541	0.3592	Ave		0.3606			0.2000	1.7		30.0			
cis-1,3-Dichloropropene	0.3641	0.3551	0.3798	0.3891	0.4245	Ave		0.3825			0.2000	7.0		30.0			
4-Methyl-2-pentanone (MIBK)	0.0768	0.0757	0.0819	0.0912	0.0983	Ave		0.0848				11.5		100.0			
Toluene	1.4165	1.4787	1.6290	1.6119	1.5932	Ave		1.5459			0.4000	6.0		30.0			
trans-1,3-Dichloropropene	0.2547	0.2525	0.2625	0.2707	0.2934	Ave		0.2668			0.1000	6.2		30.0			
1,1,2-Trichloroethane	0.1611	0.1634	0.1580	0.1571	0.1613	Ave		0.1602			0.1000	1.6		30.0			
Tetrachloroethene	0.4879	0.4495	0.4725	0.4496	0.4415	Ave		0.4602			0.1000	4.2		30.0			
2-Hexanone	0.0505	0.0473	0.0514	0.0596	0.0675	Ave		0.0553				14.8		100.0			
Dibromochloromethane	0.2063	0.2095	0.2086	0.2114	0.2208	Ave		0.2113			0.1000	2.7		30.0			
1,2-Dibromoethane	0.1413	0.1412	0.1421	0.1426	0.1486	Ave		0.1432			0.1000	2.2		30.0			
Chlorobenzene	0.9810	0.9501	0.9874	0.9572	0.9854	Ave		0.9722			0.5000	1.8		30.0			
Ethylbenzene	1.6126	1.6435	1.8382	1.8340	1.6053	Ave		1.7067			0.1000	7.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Edison Job No.: 480-92617-1 Analy Batch No.: 341074

SDG No.:

Instrument ID: CVOAMS7 GC Column: Rtx-624 ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 12/16/2015 01:16 Calibration End Date: 12/16/2015 03:54 Calibration ID: 53584

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 460-341074/7	V43613.D
Level 2	STD2 460-341074/6	V43612.D
Level 3	STD5 460-341074/3	V43609.D
Level 4	STD10 460-341074/8	V43614.D
Level 5	STD25 460-341074/9	V43615.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chloromethane	0.3224	0.3409	0.3371	0.3205	0.3272	Ave		0.3296			0.0100	2.7		100.0			
Vinyl chloride	0.4091	0.3969	0.3982	0.3911	0.3926	Ave		0.3976			0.1000	1.8		30.0			
Bromomethane	0.0857	0.0755	0.0822	0.0876	0.1083	Ave		0.0879		*	0.1000	14.0		30.0			
Chloroethane	0.2602	0.2801	0.2567	0.2438	0.2399	Ave		0.2561			0.0100	6.2		100.0			
1,1-Dichloroethene	0.3112	0.3100	0.3132	0.3013	0.2992	Ave		0.3070			0.1000	2.1		30.0			
Acetone	0.0296	0.0279	0.0244	0.0254	0.0267	Ave		0.0268				7.7		100.0			
Carbon disulfide	1.1024	1.0857	1.1176	1.0667	1.0537	Ave		1.0852			0.0100	2.4		100.0			
Methylene Chloride	0.2999	0.2787	0.2774	0.2719	0.2739	Ave		0.2804			0.0100	4.0		100.0			
trans-1,2-Dichloroethene	0.3615	0.3260	0.3279	0.3179	0.3422	Ave		0.3351			0.0100	5.1		100.0			
1,1-Dichloroethane	0.5613	0.5482	0.5435	0.5328	0.5362	Ave		0.5444			0.2000	2.1		30.0			
cis-1,2-Dichloroethene	0.2968	0.2818	0.3006	0.3028	0.3143	Ave		0.2993			0.0100	3.9		100.0			
2-Butanone (MEK)	0.0315	0.0301	0.0313	0.0340	0.0378	Ave		0.0329				9.3		100.0			
Chlorobromomethane	0.1175	0.1121	0.1108	0.1081	0.1088	Ave		0.1115			0.0500	3.3		30.0			
Chloroform	0.5083	0.5107	0.4967	0.5017	0.5021	Ave		0.5039			0.2000	1.1		30.0			
1,1,1-Trichloroethane	0.6079	0.5890	0.6144	0.5856	0.5656	Ave		0.5925			0.1000	3.3		30.0			
Carbon tetrachloride	0.5245	0.5123	0.5449	0.5196	0.4987	Ave		0.5200			0.1000	3.3		30.0			
Benzene	1.4187	1.4149	1.4971	1.4758	1.4437	Ave		1.4500			0.4000	2.5		30.0			
1,2-Dichloroethane	0.2248	0.2249	0.2161	0.2222	0.2242	Ave		0.2225			0.1000	1.7		30.0			
Trichloroethene	0.4078	0.3841	0.3990	0.3911	0.3809	Ave		0.3926			0.3000	2.8		30.0			
1,2-Dichloropropane	0.3012	0.2853	0.3003	0.2943	0.2977	Ave		0.2958			0.0100	2.2		100.0			
Bromodichloromethane	0.3700	0.3626	0.3569	0.3541	0.3592	Ave		0.3606			0.2000	1.7		30.0			
cis-1,3-Dichloropropene	0.3641	0.3551	0.3798	0.3891	0.4245	Ave		0.3825			0.2000	7.0		30.0			
4-Methyl-2-pentanone (MIBK)	0.0768	0.0757	0.0819	0.0912	0.0983	Ave		0.0848				11.5		100.0			
Toluene	1.4165	1.4787	1.6290	1.6119	1.5932	Ave		1.5459			0.4000	6.0		30.0			
trans-1,3-Dichloropropene	0.2547	0.2525	0.2625	0.2707	0.2934	Ave		0.2668			0.1000	6.2		30.0			
1,1,2-Trichloroethane	0.1611	0.1634	0.1580	0.1571	0.1613	Ave		0.1602			0.1000	1.6		30.0			
Tetrachloroethene	0.4879	0.4495	0.4725	0.4496	0.4415	Ave		0.4602			0.1000	4.2		30.0			
2-Hexanone	0.0505	0.0473	0.0514	0.0596	0.0675	Ave		0.0553				14.8		100.0			
Dibromochloromethane	0.2063	0.2095	0.2086	0.2114	0.2208	Ave		0.2113			0.1000	2.7		30.0			
1,2-Dibromoethane	0.1413	0.1412	0.1421	0.1426	0.1486	Ave		0.1432			0.1000	2.2		30.0			
Chlorobenzene	0.9810	0.9501	0.9874	0.9572	0.9854	Ave		0.9722			0.5000	1.8		30.0			
Ethylbenzene	1.6126	1.6435	1.8382	1.8340	1.6053	Ave		1.7067			0.1000	7.0		30.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 480-92617-1

SDG No.:

Lab Sample ID: CCVIS 460-341312/2 Calibration Date: 12/16/2015 19:37

Instrument ID: CVOAMS7 Calib Start Date: 12/16/2015 01:16

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/16/2015 03:54

Lab File ID: V43646.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloromethane	Ave	0.3296	0.3517	0.0100	5.33	5.00	6.7	
Vinyl chloride	Ave	0.3976	0.4355	0.1000	5.48	5.00	9.5	30.0
Bromomethane	Ave	0.0879	0.1135	0.1000	6.46	5.00	29.2	30.0
Chloroethane	Ave	0.2561	0.2753	0.0100	5.37	5.00	7.5	
1,1-Dichloroethene	Ave	0.3070	0.3255	0.1000	5.30	5.00	6.0	30.0
Acetone	Ave	0.0268	0.0223		20.8	25.0	-16.6	
Carbon disulfide	Ave	1.085	1.191	0.0100	5.49	5.00	9.8	
Methylene Chloride	Ave	0.2804	0.2872	0.0100	5.12	5.00	2.4	
trans-1,2-Dichloroethene	Ave	0.3351	0.3464	0.0100	5.17	5.00	3.4	
1,1-Dichloroethane	Ave	0.5444	0.5699	0.2000	5.23	5.00	4.7	30.0
2-Butanone (MEK)	Ave	0.0329	0.0283		21.5	25.0	-14.1	
cis-1,2-Dichloroethene	Ave	0.2993	0.3024	0.0100	5.05	5.00	1.1	
Chlorobromomethane	Ave	0.1115	0.1113	0.0500	4.99	5.00	-0.1	30.0
Chloroform	Ave	0.5039	0.5193	0.2000	5.15	5.00	3.1	30.0
1,1,1-Trichloroethane	Ave	0.5925	0.6541	0.1000	5.52	5.00	10.4	30.0
Carbon tetrachloride	Ave	0.5200	0.5866	0.1000	5.64	5.00	12.8	30.0
Benzene	Ave	1.450	1.553	0.4000	5.35	5.00	7.1	30.0
1,2-Dichloroethane	Ave	0.2225	0.2166	0.1000	4.87	5.00	-2.6	30.0
Trichloroethene	Ave	0.3926	0.4216	0.3000	5.37	5.00	7.4	30.0
1,2-Dichloropropane	Ave	0.2958	0.3044	0.0100	5.15	5.00	2.9	
Bromodichloromethane	Ave	0.3606	0.3703	0.2000	5.13	5.00	2.7	30.0
cis-1,3-Dichloropropene	Ave	0.3825	0.3649	0.2000	4.77	5.00	-4.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0848	0.0748		22.1	25.0	-11.8	
Toluene	Ave	1.546	1.678	0.4000	5.43	5.00	8.5	30.0
trans-1,3-Dichloropropene	Ave	0.2668	0.2492	0.1000	4.67	5.00	-6.6	30.0
1,1,2-Trichloroethane	Ave	0.1602	0.1494	0.1000	4.66	5.00	-6.7	30.0
Tetrachloroethene	Ave	0.4602	0.5018	0.1000	5.45	5.00	9.0	30.0
2-Hexanone	Ave	0.0553	0.0459		20.8	25.0	-17.0	
Dibromochloromethane	Ave	0.2113	0.2093	0.1000	4.95	5.00	-0.9	30.0
1,2-Dibromoethane	Ave	0.1432	0.1401	0.1000	4.89	5.00	-2.1	30.0
Chlorobenzene	Ave	0.9722	0.9834	0.5000	5.06	5.00	1.1	30.0
Ethylbenzene	Ave	1.707	1.912	0.1000	5.60	5.00	12.1	30.0
m-Xylene & p-Xylene	Ave	1.457	1.624		13.5	5.00	11.5	
o-Xylene	Ave	0.6026	0.6347		5.27	5.00	5.3	
Styrene	Ave	0.9555	0.9840	0.3000	5.15	5.00	3.0	30.0
Bromoform	Ave	0.2172	0.2235	0.0500	5.14	5.00	2.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.1356	0.1270	0.1000	4.68	5.00	-6.4	30.0
1,2,4-Trimethylbenzene	Ave	2.662	2.901		5.45	5.00	9.0	
1,3-Dichlorobenzene	Ave	1.570	1.591	0.4000	5.07	5.00	1.4	30.0
1,4-Dichlorobenzene	Ave	1.591	1.597	0.4000	5.02	5.00	0.4	30.0
1,2-Dichlorobenzene	Ave	1.214	1.173	0.4000	4.83	5.00	-3.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 480-92617-1

SDG No.:

Lab Sample ID: CCVIS 460-341312/2 Calibration Date: 12/16/2015 19:37

Instrument ID: CVOAMS7 Calib Start Date: 12/16/2015 01:16

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/16/2015 03:54

Lab File ID: V43646.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0485	0.0464		4.78	5.00	-4.3	
1,2,4-Trichlorobenzene	Ave	0.5534	0.4666		4.22	5.00	-15.7	
4-Bromofluorobenzene	Ave	0.3343	0.2899	0.2000	4.34	5.00	-13.3	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 480-92617-1

SDG No.:

Lab Sample ID: CCVIS 460-341569/3 Calibration Date: 12/17/2015 22:26

Instrument ID: CVOAMS7 Calib Start Date: 12/16/2015 01:16

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/16/2015 03:54

Lab File ID: V43678.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chloromethane	Ave	0.3296	0.3438	0.0100	5.22	5.00	4.3	
Vinyl chloride	Ave	0.3976	0.4343	0.1000	5.46	5.00	9.2	30.0
Bromomethane	Ave	0.0879	0.0534*	0.1000	3.04	5.00	-39.2*	30.0
Chloroethane	Ave	0.2561	0.2655	0.0100	5.18	5.00	3.7	
1,1-Dichloroethene	Ave	0.3070	0.3211	0.1000	5.23	5.00	4.6	30.0
Acetone	Ave	0.0268	0.0289		27.0	25.0	8.0	
Carbon disulfide	Ave	1.085	1.171	0.0100	5.40	5.00	7.9	
Methylene Chloride	Ave	0.2804	0.2901	0.0100	5.17	5.00	3.5	
trans-1,2-Dichloroethene	Ave	0.3351	0.3654	0.0100	5.45	5.00	9.0	
1,1-Dichloroethane	Ave	0.5444	0.5556	0.2000	5.10	5.00	2.1	30.0
cis-1,2-Dichloroethene	Ave	0.2993	0.3007	0.0100	5.02	5.00	0.5	
2-Butanone (MEK)	Ave	0.0329	0.0340		25.8	25.0	3.3	
Chlorobromomethane	Ave	0.1115	0.1152	0.0500	5.17	5.00	3.4	30.0
Chloroform	Ave	0.5039	0.5278	0.2000	5.24	5.00	4.7	30.0
1,1,1-Trichloroethane	Ave	0.5925	0.6103	0.1000	5.15	5.00	3.0	30.0
Carbon tetrachloride	Ave	0.5200	0.5431	0.1000	5.22	5.00	4.4	30.0
Benzene	Ave	1.450	1.460	0.4000	5.03	5.00	0.7	30.0
1,2-Dichloroethane	Ave	0.2225	0.2282	0.1000	5.13	5.00	2.6	30.0
Trichloroethene	Ave	0.3926	0.3942	0.3000	5.02	5.00	0.4	30.0
1,2-Dichloropropane	Ave	0.2958	0.2998	0.0100	5.07	5.00	1.4	
Bromodichloromethane	Ave	0.3606	0.3673	0.2000	5.09	5.00	1.9	30.0
cis-1,3-Dichloropropene	Ave	0.3825	0.3726	0.2000	4.87	5.00	-2.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.0848	0.0880		26.0	25.0	3.8	
Toluene	Ave	1.546	1.596	0.4000	5.16	5.00	3.2	30.0
trans-1,3-Dichloropropene	Ave	0.2668	0.2640	0.1000	4.95	5.00	-1.0	30.0
1,1,2-Trichloroethane	Ave	0.1602	0.1610	0.1000	5.02	5.00	0.5	30.0
Tetrachloroethene	Ave	0.4602	0.4732	0.1000	5.14	5.00	2.8	30.0
2-Hexanone	Ave	0.0553	0.0572		25.9	25.0	3.5	
Dibromochloromethane	Ave	0.2113	0.2169	0.1000	5.13	5.00	2.6	30.0
1,2-Dibromoethane	Ave	0.1432	0.1479	0.1000	5.17	5.00	3.3	30.0
Chlorobenzene	Ave	0.9722	0.9727	0.5000	5.00	5.00	0.0	30.0
Ethylbenzene	Ave	1.707	1.787	0.1000	5.24	5.00	4.7	30.0
m-Xylene & p-Xylene	Ave	1.457	1.529		12.7	5.00	5.0	
o-Xylene	Ave	0.6026	0.6166		5.12	5.00	2.3	
Styrene	Ave	0.9555	1.000	0.3000	5.23	5.00	4.7	30.0
Bromoform	Ave	0.2172	0.2191	0.0500	5.04	5.00	0.9	30.0
1,1,2,2-Tetrachloroethane	Ave	0.1356	0.1468	0.1000	5.41	5.00	8.2	30.0
1,2,4-Trimethylbenzene	Ave	2.662	2.854		5.36	5.00	7.2	
1,3-Dichlorobenzene	Ave	1.570	1.588	0.4000	5.06	5.00	1.2	30.0
1,4-Dichlorobenzene	Ave	1.591	1.569	0.4000	4.93	5.00	-1.4	30.0
1,2-Dichlorobenzene	Ave	1.214	1.201	0.4000	4.94	5.00	-1.1	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Edison Job No.: 480-92617-1

SDG No.:

Lab Sample ID: CCVIS 460-341569/3 Calibration Date: 12/17/2015 22:26

Instrument ID: CVOAMS7 Calib Start Date: 12/16/2015 01:16

GC Column: Rtx-624 ID: 0.25(mm) Calib End Date: 12/16/2015 03:54

Lab File ID: V43678.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0485	0.0520		5.36	5.00	7.2	
1,2,4-Trichlorobenzene	Ave	0.5534	0.5455		4.93	5.00	-1.4	
4-Bromofluorobenzene	Ave	0.3343	0.3098	0.2000	4.63	5.00	-7.3	30.0

Appendix B-3

Monitored Natural Attenuation Parameters
Through December 2015
And
2015 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	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	06/19/15	12/11/15
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	6.98	7.01
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	1.63	2.56
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	58.3	58.57
Oxidation/Reduction Potential (ORP)	mV	-356	-325	-352	-338	-349	-327	-377	-380	-350	-346	-343	-374	-340	-291	-250	-302	-309	-377	-358	-341
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	0.6	5.7
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	85.6	75.5
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	6	5.8
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	0.19	0.21
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	NS	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	<0.1	<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	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	0.028	<0.05
Sulfate	mg/L	368	340	549	391	430	380	425	377	328	320	461	380	466	590	411	470	389	609	592	431
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	29.8	25.8
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	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	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	NS	NS
Dehalococcoides (Dhc) Enumeration	per liter	ND[2]	Inconclusive	ND[2]	9 x 10^{2}[1,3]	ND[1,3]	4 x 10^{3}	NA	3 x 10^{4}	1 x 10^{3}	7 x 10^{3}	7 x 10^{2}	4 x 10^{4}	3 x 10^{3}[1]	3 x 10^{3}	6 x 10^{3} [4]	6 x 10^{3}	2 X 10^{7}	3 X 10^{3}	3 X 10^{3}	3 X 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	NA	NA
Vinyl Chloride Reductase (vcrA)	per liter	NA	Inconclusive	NA	4 x 10^{3}[1]	NA	NA	NA	4 x 10^{4}	5 x 10^{3}	3 x 10^{4}	ND	NA	NA	NS	NS	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 x 10^{3} U	NA	NS	NS	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.

ND [4]= Not Detected. The quantitation limit is 6 x 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 x 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	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	06/19/15	12/11/15
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	6.96	7.14
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	1.4	2.27
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	54.66	55.13
Oxidation/Reduction Potential (ORP)	mV	-297	-338	-342	-329	-341	-309	-346	-374	-349	-350	-313	-347	-324	-280	-260	-294	-300	-347	-336	-295
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	1.0	6.8
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	90.2	86.8
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	5.8	7.1
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	0.052	0.11
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	NS	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	<0.1	<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	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	<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	566	655
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	26.2	23.6
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	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	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	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	5×10^4	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	0.001 - 0.004	0.02 - 0.05
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	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	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 10^5/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	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	06/19/15	12/11/15
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	7.02	7.05
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	1.53	2.3
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	59.14	59.25
Oxidation/Reduction Potential (ORP)	mV	-324	-400	-334	-369	-350	-408	-377	-403	-409	-371	-347	-364	-374	-335	-301	-255	-328	-294	-282	-332	-347
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	0.8	9.5
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	75.6	64.9
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	34.1	54
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	0.4	0.29
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	NS	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	0.1	<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	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	<0.050	<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	245	157
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	26.4	12
Methane	mg/L	13	13	9.90	14	12	18	16	11	11	19	13	16	12	8.2	NS	NS	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	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	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	6×10^6	2×10^7
% 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	0.1 - .4	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	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	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	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	06/19/15	12/11/15
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	7.04	6.87
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	1.44	2.13
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	61.89	57.8
Oxidation/Reduction Potential (ORP)	mV	-218	-319	-347	-323	-340	-324	-373	-380	-344	-350	-291	-375	-301	-292	-292	-271	-286	-375	-313	-310
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	0.2	6.0
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	126	132
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	10.2	8.2
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	0.11	0.12
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	NS	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	<0.1	<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	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	<0.050	<0.050
Sulfate	mg/L	126	309	637	623	420	380	479	441	440	559	786	519	612	569	612	494	609	556	453	577
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	41.6	37.8
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	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	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	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	3×10^3	3×10^3
% 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	NA	NA
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	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	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 Engineers, Inc.

Project: Midler Ave

Customer Reference:

SiREM Reference: S-3616

Report Date: 6-Jul-15

Data Files: iQ5-DHC-QPCR-1243
iQ5-DB-DHC-QPCR-0597
iQ5-TBA-QPCR-0126

Table 1: Test Results

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent Dhc *	*Dehalococcoides* Enumeration/Liter **
MW-9D	DHC-11884	19-Jun-15	Groundwater	NA	3×10^3 U
MW-10D	DHC-11885	19-Jun-15	Groundwater	0.001 - 0.004 %	5×10^4
MW-13D	DHC-11886	19-Jun-15	Groundwater	0.1 - 0.4 %	6×10^6
MW-15D	DHC-11887	19-Jun-15	Groundwater	NA	3×10^3 U

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-3616

Customer Sample ID	MW-9D	MW-10D	MW-13D	MW-15D
SiREM Dhc Sample ID	DHC-11884	DHC-11885	DHC-11886	DHC-11887
Date Received *	22-Jun-15	22-Jun-15	22-Jun-15	22-Jun-15
Sample Temperature	22.6 ºC	22.6 ºC	22.6 ºC	22.6 ºC
Filtration Date *	23-Jun-15	23-Jun-15	23-Jun-15	23-Jun-15
Volume Used for DNA Extraction	500 mL	175 mL	500 mL	500 mL
DNA Extraction Date	26-Jun-15	26-Jun-15	26-Jun-15	26-Jun-15
DNA Concentration in Sample (extractable)	4839 ng/L	8614 ng/L	8463 ng/L	3837 ng/L
PCR Amplifiable DNA	Detected	Detected	Detected	Detected
Dhc qPCR Date Analyzed	2-Jul-15	2-Jul-15	2-Jul-15	2-Jul-15
Laboratory Controls (see Table 3)	Passed	Passed	Passed	Passed
Comments	--	--	--	--

Notes:

Refer to Table 3 for detailed results of controls.
°C = degrees Celsius
Dhc = *Dehalococcoides*
DNA = Deoxyribonucleic acid
mL = milliliters
ng/L = nanograms per liter
NA = Not Applicable
ND = Not Detected
PCR = polymerase chain reaction
qPCR = quantitative PCR
*Samples are stabilized by freezing at -80 °C upon sample reception (field filters) or in-lab filtration (groundwater). Hold time not exceeded if sampling date is within 14 days of date received.

Table 3: Gene-Trac Dhc Control Results, Test Reference S-3616

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	2-Jul-15	qPCR with KB1 genomic DNA (CSLD-0881)	4.2×10^{6}	1.9×10^{6}	See Note 1
Positive Control High Concentration	2-Jul-15	qPCR with KB1 genomic DNA (CSHD-0881)	1.0×10^{10}	7.0×10^{9}	--
DNA Extraction Blank	2-Jul-15	DNA extraction sterile water (FB-2434)	0	2.6×10^{3} U	--
Negative Control	2-Jul-15	Tris Reagent Blank (TBD-0840)	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.

[1]Outside recovery limit guideline of +/- 50%.

SiREM

Chain-of-Custody Form

siremlab.com

SiREM 2240 Sutherland Avenue
Suite 107
Knoxville, TN 37919
865.330.0037

ID 3054 S-3616

Lab # SK-0093

*Project Name	Middle Ave	*Project #	
*Project Manager	Wayne Randall	*Company	
*Email Address	wrandall@cscos.com		
Address (Street)	499 Col. Eileen Collins Blvd, Syracuse		
City	Syracuse	State/Province NY	Country USA
*Phone #	315 703 9110		
*Sampler's Signature		*Sampler's Printed Name	Wayne Randall

Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac DHC	Gene-Trac VC	Gene-Trac DHB	Gene-Trac DHG	Treatability Study	Other Information
MW-9D	6/19/15	900	Water	1	X					B-1705
MW-10D	6/19/15	1000	Water	1	X					B-1706
MW-13D	6/19/15	1100	Water	1	X					B-1707
MW-15D	6/19/15	1200	Water	1	X					B-1704

Analysis

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Billing Information

P.O. # C81.006.001

*Bill To: Wayne Randall / CES
499 Col Eileen Coll. Blvd.
Syracuse, NY 13212

Turnaround Time Requested

Normal [X]
Rush [ ]

For Lab Use Only

Cooler Condition: good
Cooler Temperature: dry ice present
Custody Seals: Yes [ ] No [X]

For Lab Use Only

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: Nathan Kenner	Printed Name: Nathan Kenner	Printed Name: Melanie Montarras	Printed Name:	Printed Name:
Firm: CES	Firm: SiREM	Firm: SiREM	Firm: SiREM	Firm:	Firm:
Date/Time: 6/19/15 1407	Date/Time: 06/22/15 1000	Date/Time: 06/24/15 1600	Date/Time: 06/25/15 2pm	Date/Time:	Date/Time:

Distribution: White - return to Originator; Yellow - Lab Copy; Pink - Retained by Client

* Mandatory Fields

SiREM
Leading Science · Lasting Solutions

130 Stone Rd. W
Guelph, ON N1G 3Z2
(519) 822-2265

Certificate of Analysis: Gene-Trac® *Dehalococcoides* Assay

Customer: Wayne Randall, C & S Engineers

Project: Midler Ave.

Customer Reference: C81.006.001

SiREM Reference: S-3775

Report Date: 24-Dec-15

Data Files: iQ5-DHC-QPCR-1305
iQ5-DB-DHC-QPCR-0659
iQ5-TBA-QPCR-0163

Table 1: Test Results

Customer Sample ID	SiREM Sample ID	Sample Collection Date	Sample Matrix	Percent Dhc *	*Dehalococcoides* Enumeration/Liter **
MW-9D	DHC-12525	11-Dec-15	Groundwater	NA	3×10^3 U
MW-10D	DHC-12526	11-Dec-15	Groundwater	0.02 - 0.05 %	3×10^5
MW-13D	DHC-12527	11-Dec-15	Groundwater	0.9 - 3 %	2×10^7
MW-15D	DHC-12528	11-Dec-15	Groundwater	NA	3×10^3 U

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: **Milana Madzarac, B.Sc.**
Laboratory Technician

Approved: **Ximena Druar, B.Sc.**
Genetic Testing Coordinator

Table 2: Detailed Test Parameters, Gene-Trac Test Reference S-3775

Customer Sample ID	MW-9D	MW-10D	MW-13D	MW-15D
SiREM Dhc Sample ID	DHC-12525	DHC-12526	DHC-12527	DHC-12528
Date Received *	14-Dec-15	14-Dec-15	14-Dec-15	14-Dec-15
Sample Temperature	15.3 ºC	15.3 ºC	15.3 ºC	15.3 ºC
Filtration Date *	15-Dec-15	15-Dec-15	15-Dec-15	15-Dec-15
Volume Used for DNA Extraction	500 mL	500 mL	500 mL	400 mL
DNA Extraction Date	17-Dec-15	17-Dec-15	17-Dec-15	17-Dec-15
DNA Concentration in Sample (extractable)	4374 ng/L	3337 ng/L	4839 ng/L	3600 ng/L
PCR Amplifiable DNA	Detected	Detected	Detected	Detected
Dhc qPCR Date Analyzed	18-Dec-15	18-Dec-15	18-Dec-15	18-Dec-15
Laboratory Controls (see Table 3)	Passed	Passed	Passed	Passed
Comments	--	--	--	--

Notes:

Refer to Table 3 for detailed results of controls.
°C = degrees Celsius
Dhc = *Dehalococcoides*
DNA = Deoxyribonucleic acid
mL = milliliters
ng/L = nanograms per liter
PCR = polymerase chain reaction
qPCR = quantitative PCR

*Samples are stabilized by freezing at -80 °C upon sample reception (field filters) or in-lab filtration (groundwater). Hold time not exceeded if sampling date is within 14 days of date received or filtration date.

Table 3: Gene-Trac Dhc Control Results, Test Reference S-3775

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	18-Dec-15	qPCR with KB1 genomic DNA (CSLD-0943)	4.4×10^{6}	2.4×10^{6}	Passed
Positive Control High Concentration	18-Dec-15	qPCR with KB1 genomic DNA (CSHD-0943)	5.0×10^{8}	6.3×10^{8}	Passed
Extraction Control	18-Dec-15	Extraction Control (KB-0386)	8.8×10^{10}	3.8×10^{10}	Passed
DNA Extraction Blank	18-Dec-15	DNA extraction sterile water (FB-2559)	0	2.6×10^{3} U	Passed
Negative Control	18-Dec-15	Tris Reagent Blank (TBD-0902)	0	2.6×10^{3} U	Passed

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

Chain-of-Custody Form

siremlab.com

SiREM Knoxville
180A Market Place Boulevard
Knoxville, Tennessee 37922
865.330.0037

Lab # SK-081

S-3775

*Project Name	Midler Ave
*Project #	
*Project Manager	Wayne Randall
*Company	
*Email Address	wrandall@cyesos.com
Address (Street)	499 Col. Eileen Collins Blvd, Syracuse, 13212
City	Syracuse
State/Province	NY
Country	US
*Phone #	315 455 2000
*Sampler's Signature	
*Sampler's Printed Name	Wayne Randall

Analysis

Preservative Key
0. None
1. HCL
2. Other
3. Other
4. Other
5. Other
6. Other

Client Sample ID	Sampling Date	Sampling Time	Matrix	# of Containers	Gene-Trac DHC	Gene-Trac VC	Gene-Trac DHB	Gene-Trac DHG	Gene-Trac tceA	Volatile Fatty Acids	Dissolved hydrocarbon gases	Treatability Study	Other Information
MW-90	12/1/15	[illegible]	GW	1	X								B-02005
MW-100	12/1/15	1030	GW	1	X								B-02006
MW-130	12/1/15	900	GW	1	X								B-02004
MW150	12/1/15	1130	GW	1	X								B-02007

Billing Information
P.O. # CSI.006.001
*Bill To: Wayne Randall

Turnaround Time Requested
Normal ☒
Rush ☐

For Lab Use Only
Cooler Condition: good
Cooler Temperature: dry ice
Custody Seals: Yes ☐ No ☒

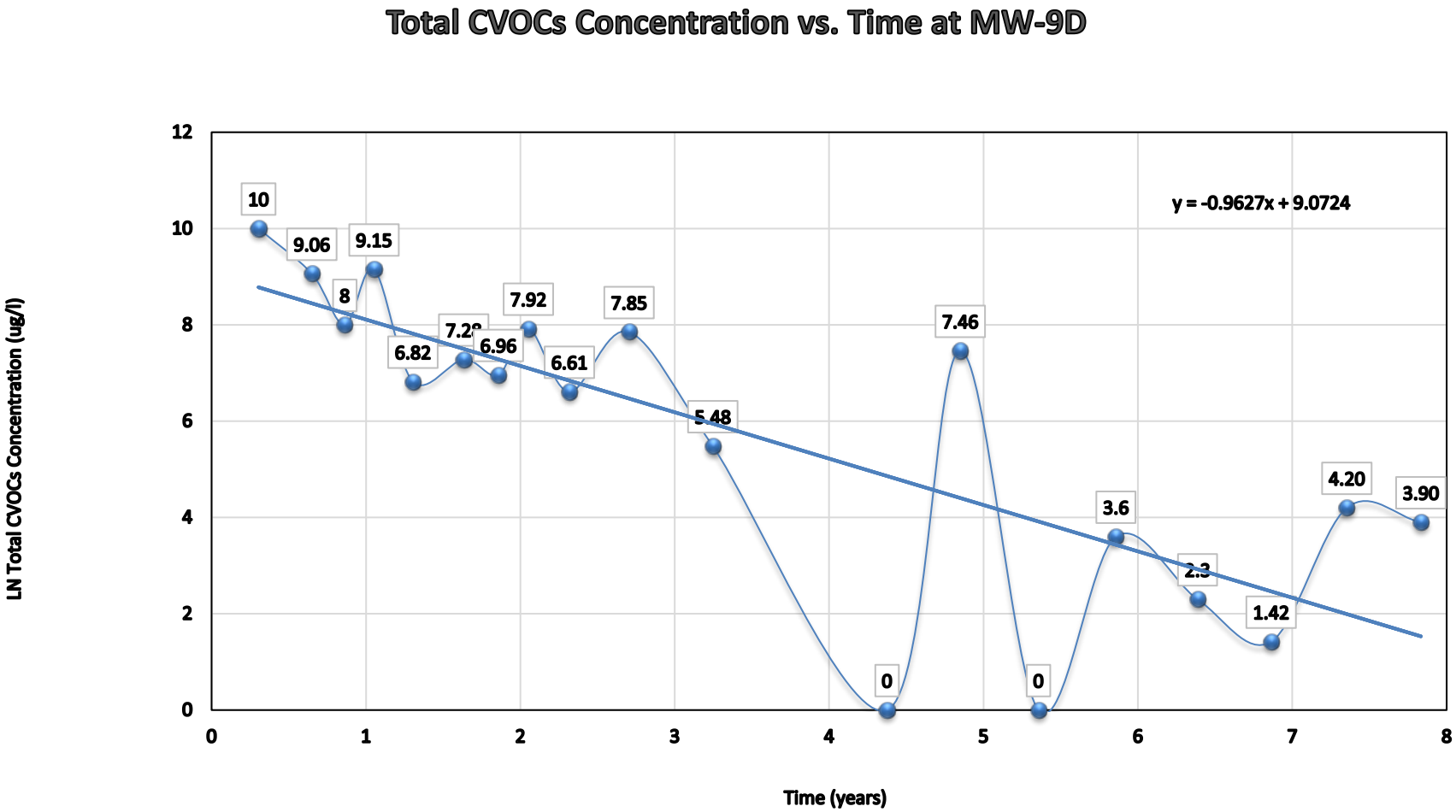
Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name Wayne Randall	Printed Name LINXI CHEN	Printed Name Nathan Kenner	Printed Name Milad Mostavan	Printed Name	Printed Name
Firm CSI	Firm SiREM	Firm SiREM	Firm SiREM	Firm	Firm
Date/Time 12/1/15 1500	Date/Time 12/14/15 0900	Date/Time 12/15/15 1700	Date/Time 12/16/15 2pm	Date/Time	Date/Time

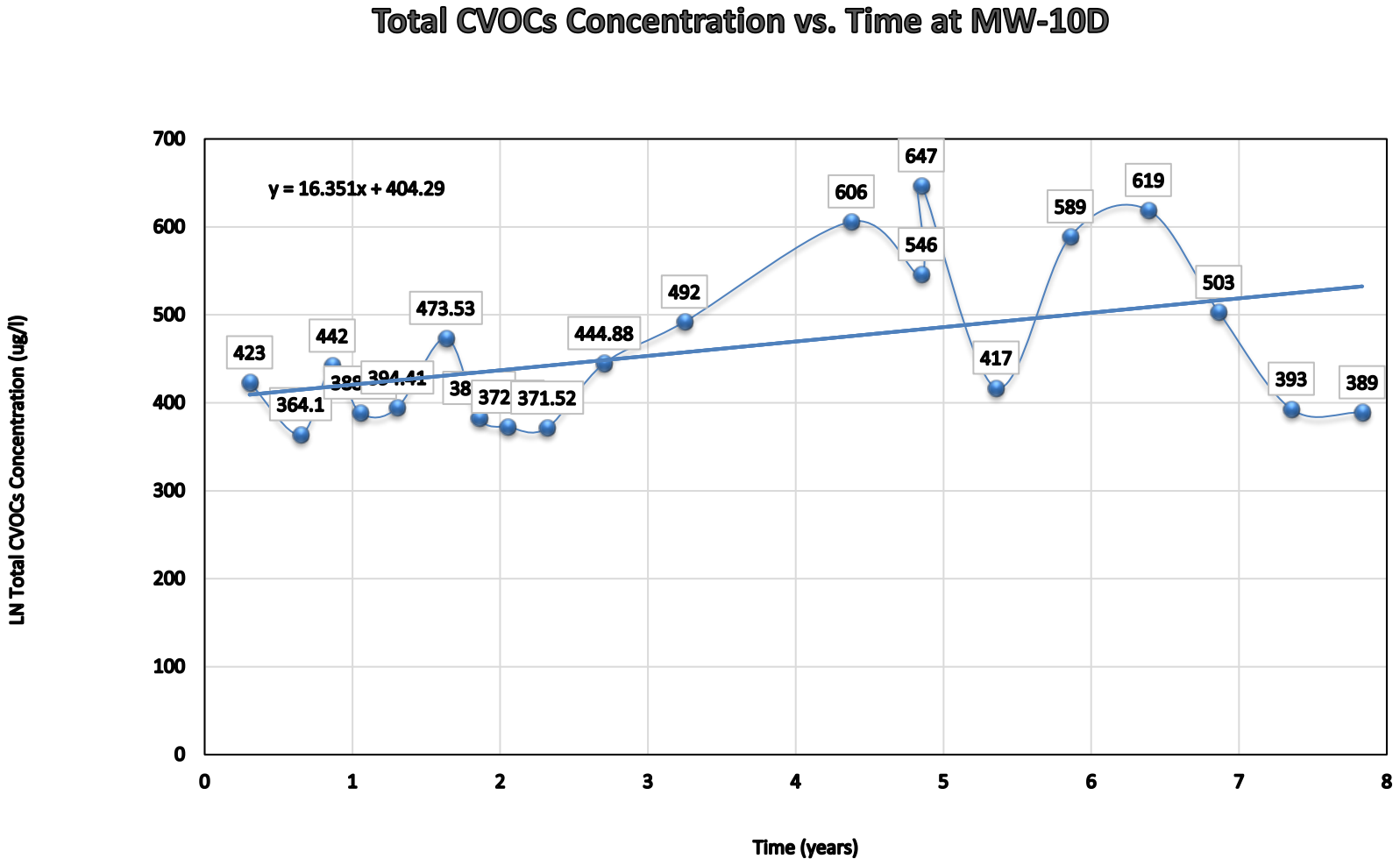
Distribution: White - return to Originator; Yellow - Lab Copy; Pink - Retained by Client

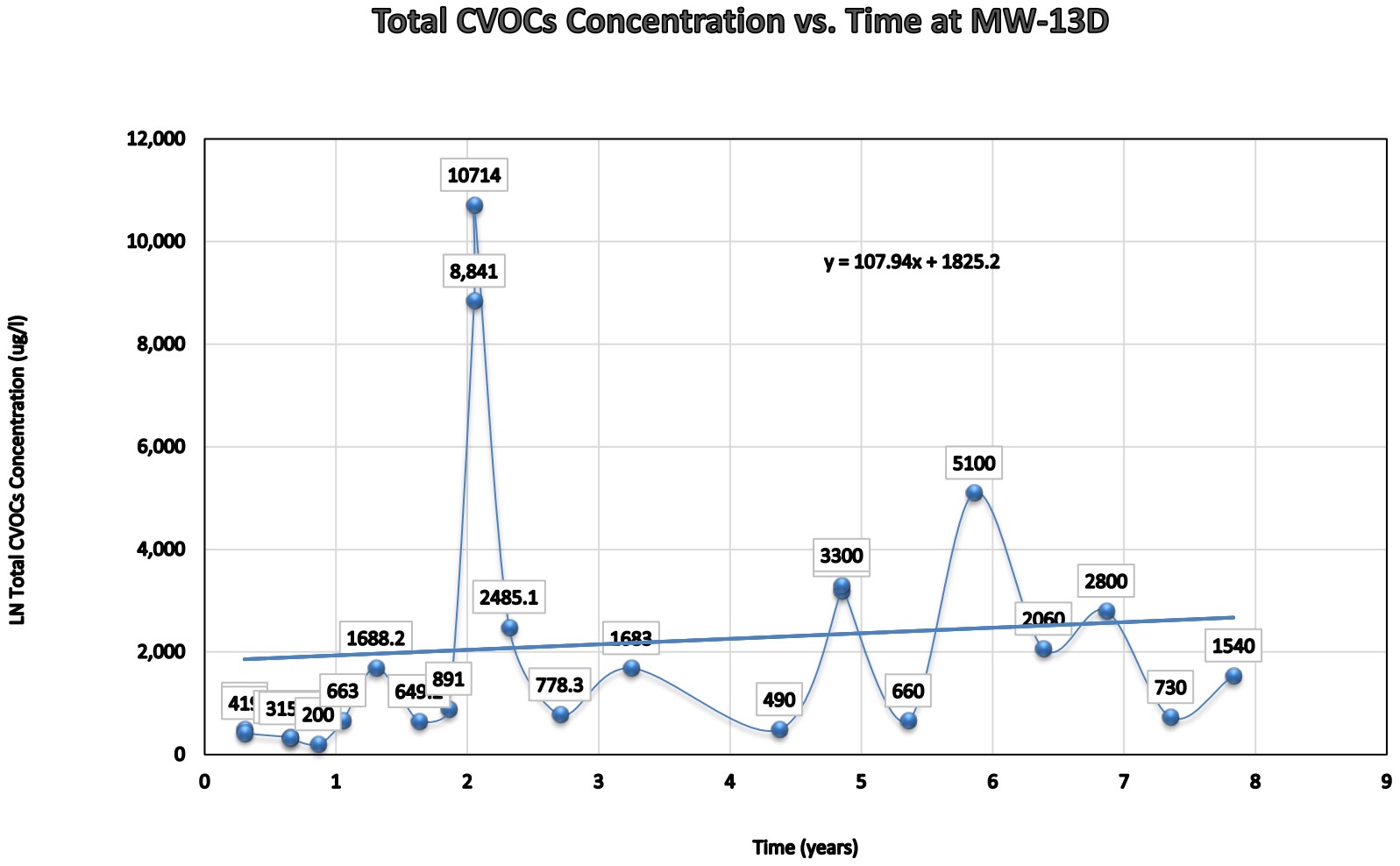
* Mandatory Fields

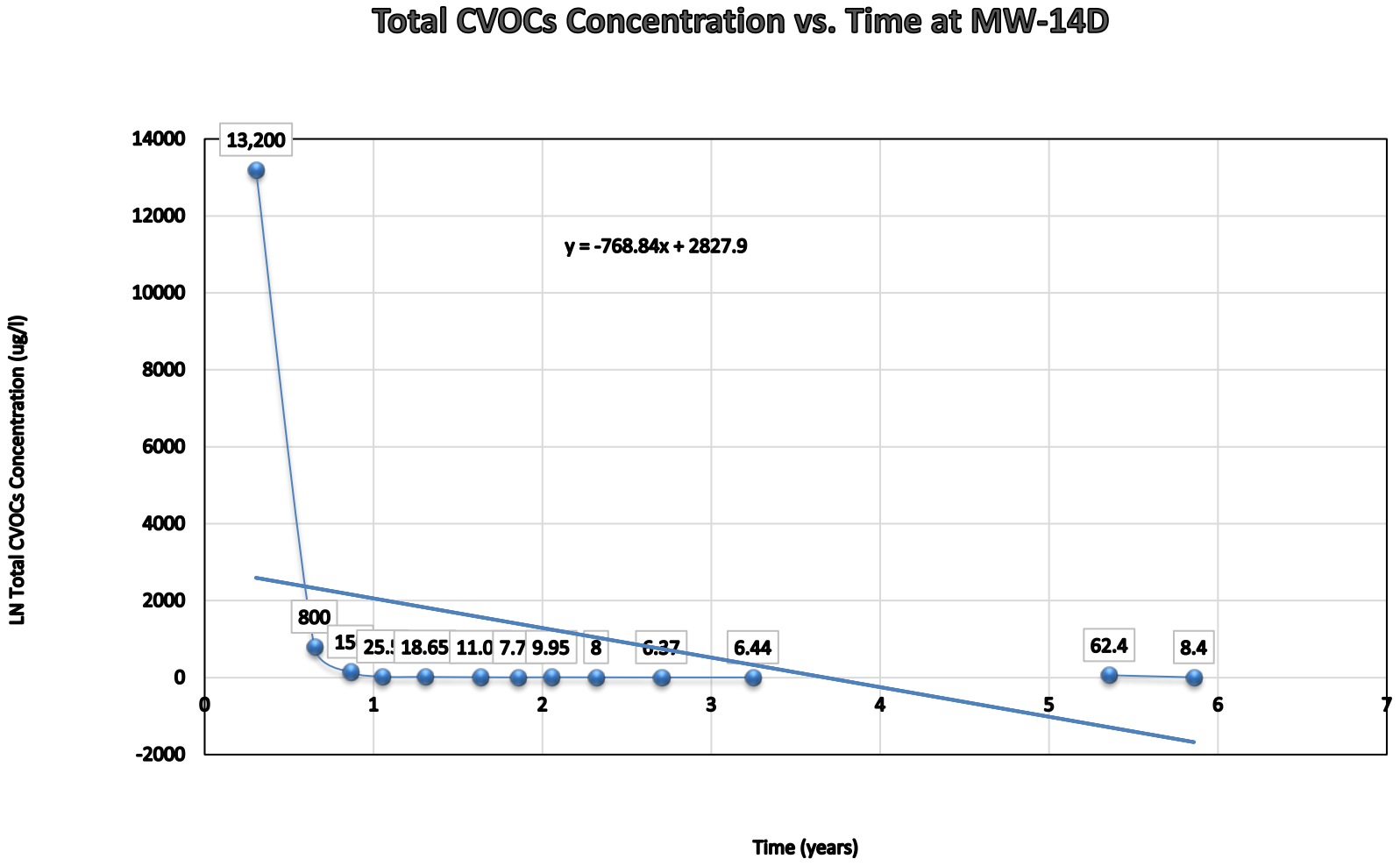
Appendix B-4

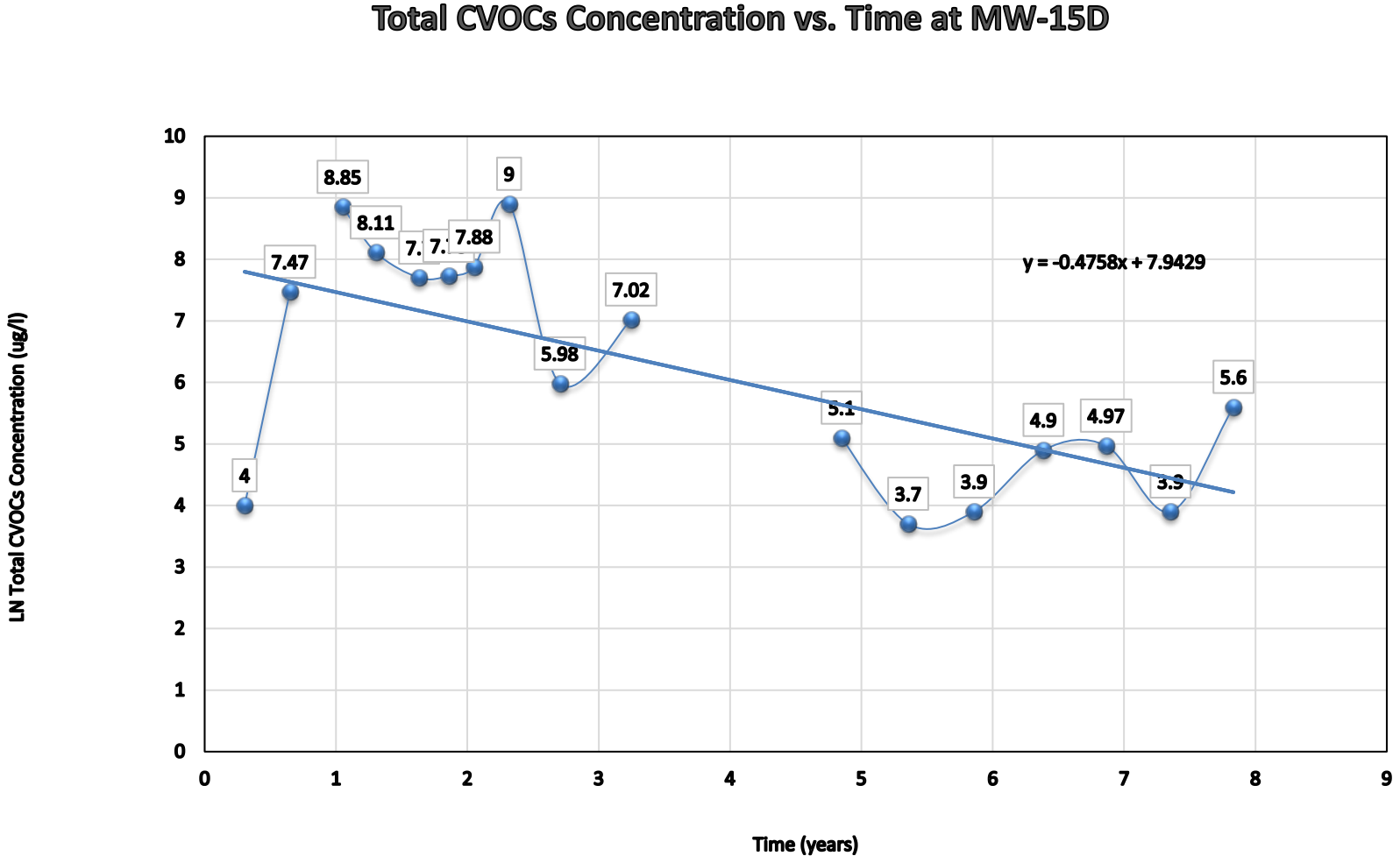
TOTAL CVOCS VS. TIME CHARTS


Total CVOCs Concentration vs. Time at MW-9D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = -0.9627x + 9.0724
10
9.06
9.15
8
6.82
7.92
6.96
6.61
7.85
5.48
0
7.46
0
3.6
1.42
4.20
3.90
0
2
4
6
8
10
12
0
1
2
3
4
5
6
7
8

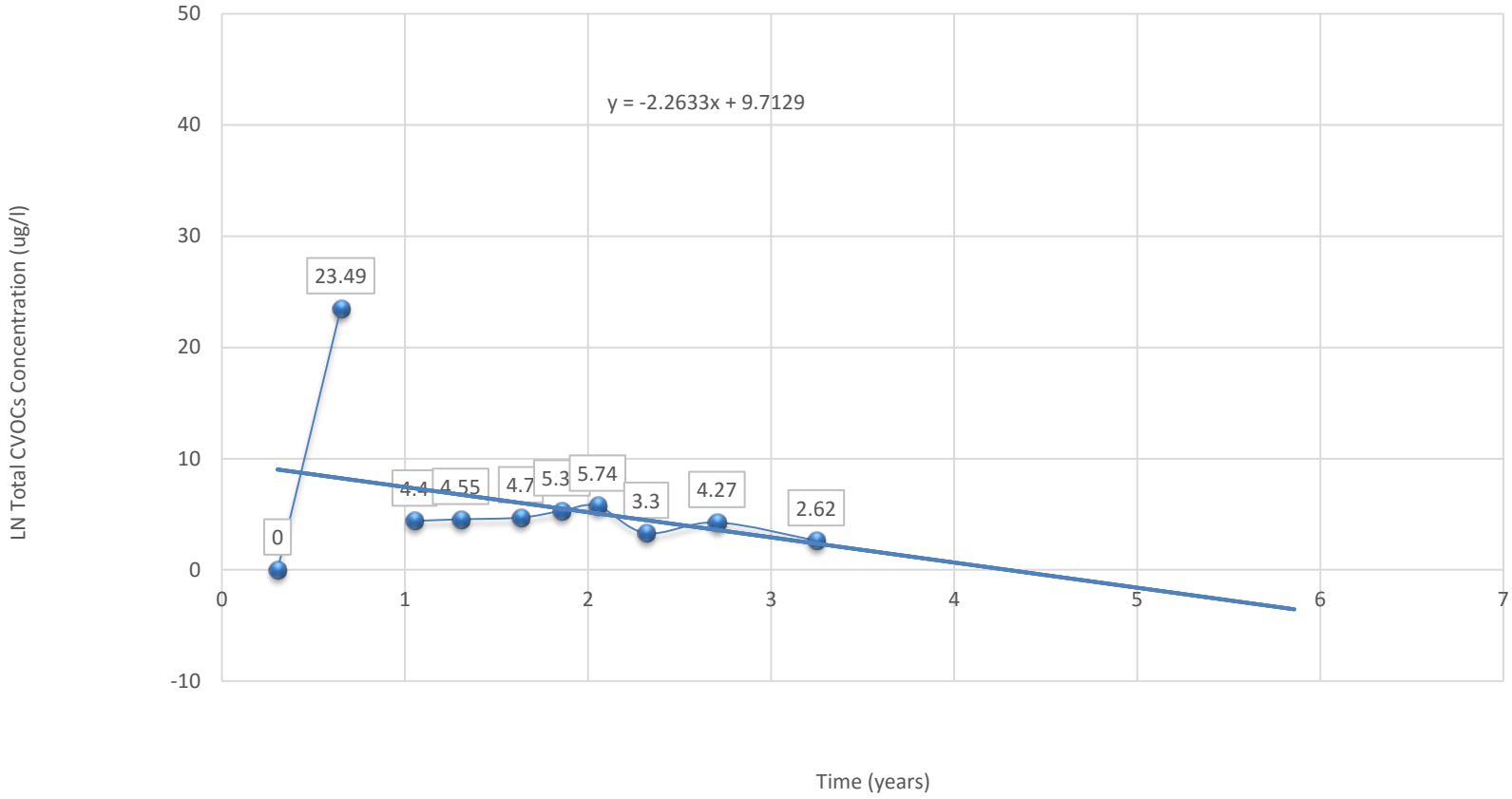

Total CVOCs Concentration vs. Time at MW-10D
y = 16.351x + 404.29
LN Total CVOCs Concentration (ug/l)
Time (years)
700
600
500
400
300
200
100
0
0
1
2
3
4
5
6
7
8
423
364.1
442
473.53
372
371.52
444.88
492
606
647
546
417
589
619
503
393
389


Total CVOCs Concentration vs. Time at MW-13D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = 107.94x + 1825.2
12,000
10,000
8,000
6,000
4,000
2,000
0
0
1
2
3
4
5
6
7
8
9
10714
8,841
5100
3300
2800
2485.1
2060
1688.2
1683
1540
891
778.3
730
663
660
490
315
200


Total CVOCs Concentration vs. Time at MW-14D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = -768.84x + 2827.9
14000
12000
10000
8000
6000
4000
2000
0
-2000
0
1
2
3
4
5
6
7
13,200
800
15
25.
18.65
11.0
7.7
9.95
8
6.37
6.44
62.4
8.4

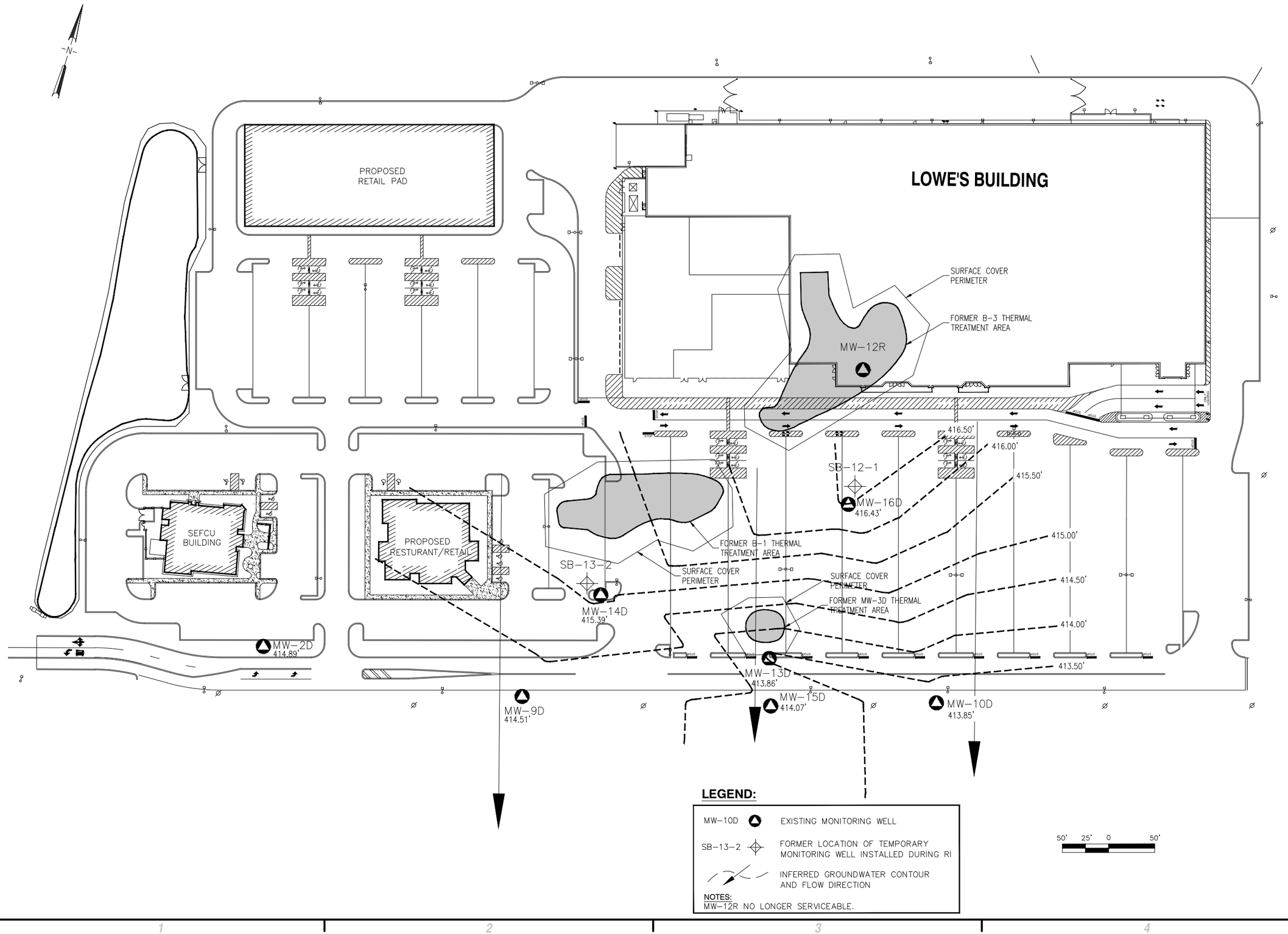

Total CVOCs Concentration vs. Time at MW-15D
LN Total CVOCs Concentration (ug/l)
Time (years)
y = -0.4758x + 7.9429
10
9
8
7
6
5
4
3
2
1
0
0
1
2
3
4
5
6
7
8
9
4
7.47
8.85
8.11
7.88
9
5.98
7.02
5.1
3.7
3.9
4.9
4.97
5.6

Total CVOCs Concentration vs. Time at MW-16D



Appendix B-5

Groundwater Contour Maps 2015



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

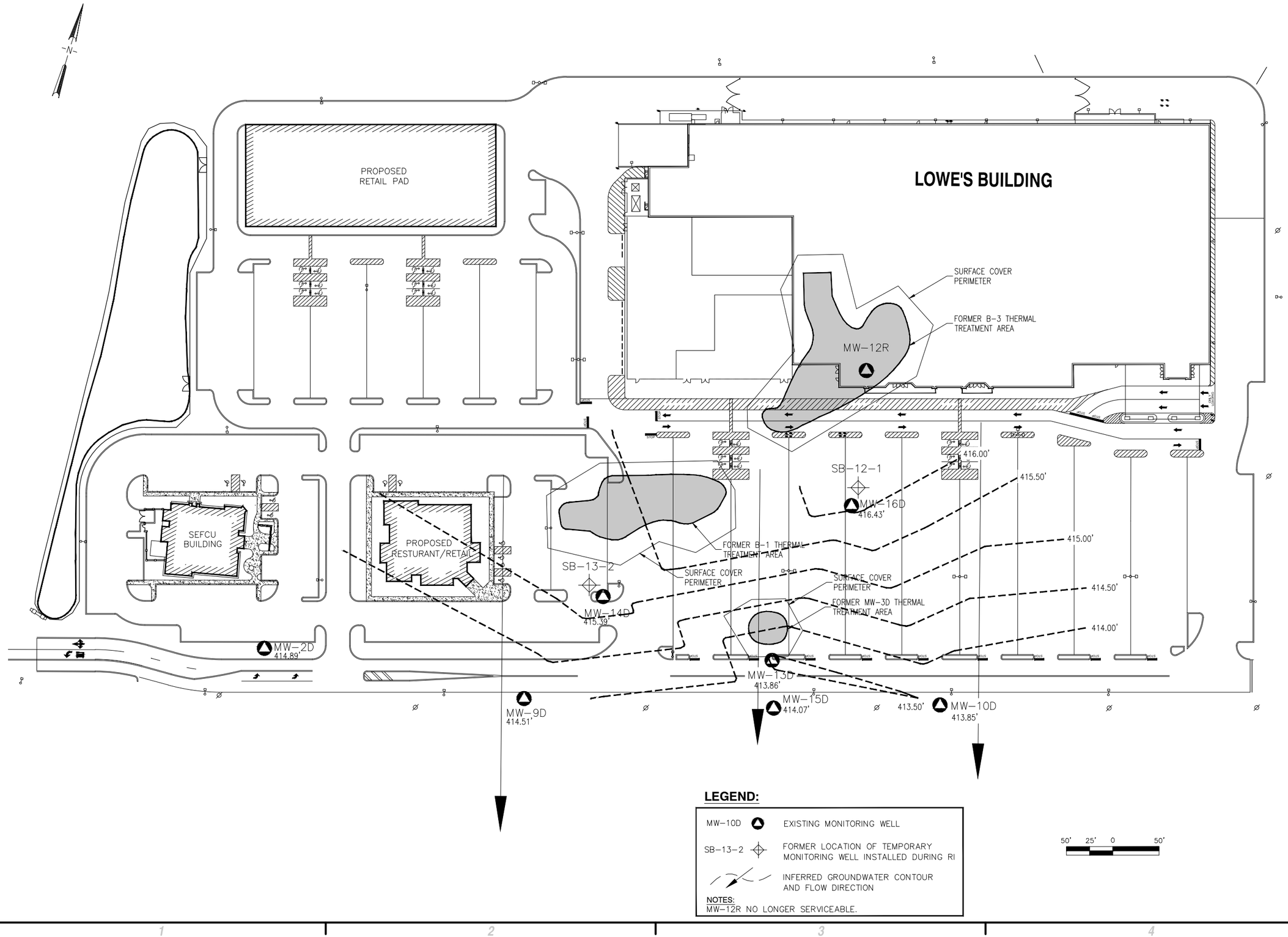
MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	
DATE:	JUNE 2015
SCALE:	AS SHOWN
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	
CHECKED BY:	

JUNE 19, 2015
GROUNDWATER
CONTOUR MAP

FIGURE 1

Jun 07, 2016 - 2:38pm F:\Project\C81 - Pioneer Development\C81006001Post IRM GW Monitoring\2015 Groundwater Sampling\Figure 1 June 2015.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:	JUNE 2015
SCALE:	AS SHOWN
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	
CHECKED BY:	

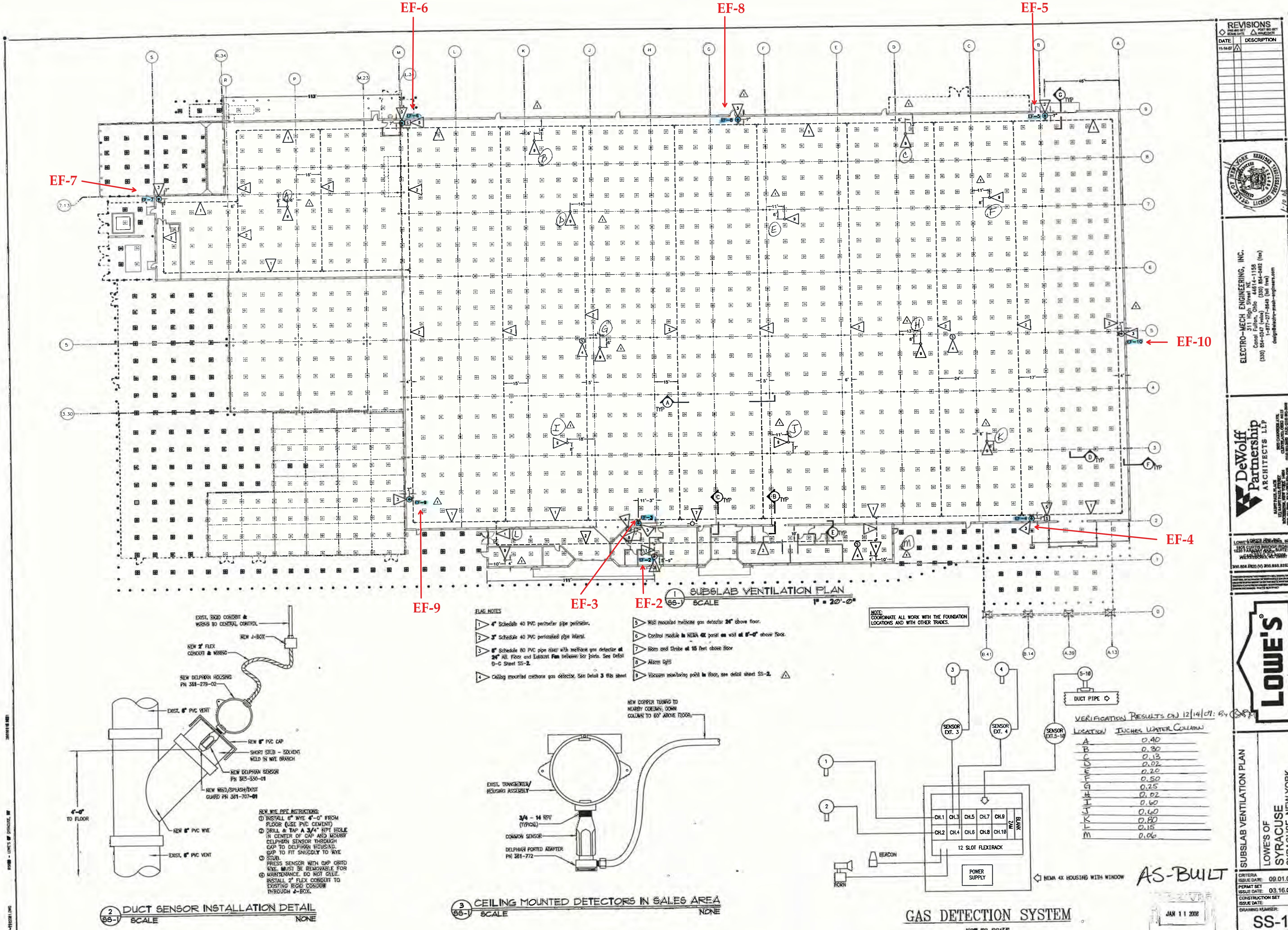
DECEMBER 11, 2015
GROUNDWATER CONTOUR MAP

FIGURE 1

Jun 07, 2016 - 2:35pm F:\Project\C81 - Pioneer Development\C81006001Post IRM GW Monitoring\2015 Groundwater Sampling\Figure 1 December 2015.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
SUBSLAB VENTILATION PLAN
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 6'-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.
DUCT SENSOR INSTALLATION DETAIL
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. CAP TO FIT SNUGGLY TO WYE STUB.
3 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.
CEILING MOUNTED DETECTORS IN SALES AREA
SCALE NONE
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
GAS DETECTION SYSTEM
NOT TO SCALE
SENSOR EXT. 3
SENSOR EXT. 4
SENSOR EXT.5-10
DUCT PIPE
CH.1 CH.3 CH.5 CH.7 CH.9
CH.2 CH.4 CH.6 CH.8 CH.10
BLANK
ZAM
12 SLOT FLEXIRACK
POWER SUPPLY
BEACON
HORN
NEMA 4X HOUSING WITH WINDOW
VERIFICATION RESULTS ON 12/14/07: BY
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
AS-BUILT
JAN 11 2008
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
CRITERIA ISSUE DATE: 09.01.06
PERMIT SET ISSUE DATE: 03.16.07
CONSTRUCTION SET ISSUE DATE:
DRAWING NUMBER: SS-1

DATE: 01/02/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @	SEFCU @ 1303
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: 01/09/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1350	SEFCU @ ~~1379~~ 1350
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'Bryan
(Print Name)

David F Bryan
(Signature)

DATE: 01/16/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1749	SEFCU @ 1422
2	-1	
3	-1	
4	-1	
5	-1	
6	-0.7	
7	-[redacted], -.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:
#6 less than optimal - may consider replacement

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F O'Bryan
(Signature)

DATE: 01/23/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1315	SEFCU @ 1325
2	-1	
3	-1	
4	-1	
5	-1	
6	-0.7	
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:

#6 FAN to be replaced MONDAY 01/26/15
#8 Leak around pipe

INSPECTED BY:

David F. O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

Invoice

Power-Comm Electric Co., Inc.

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 #
2/5/2015	8494

Bill To

PIONEER COMPANIES
C/O PIONEER MGMT. GROUP
333 WEST WASHINGTON ST
SUITE 600
SYRACUSE, NY 13202-5254

2/26
1650

P.O. No.	Terms	Project
LOWES BLDG	Net 30	1541 LOWES SERV CA...

Quantity	Description	Rate	Amount
	WORK COMPLETED AT THE LOWES BLDG ON MIDLER AVE TO REPLACE EXHAUST FAN WITH NEW ONE PROVIDED BY OWNER. WORK DONE ON 1/26/15.		
3	LABOR REG HOURS	85.00	255.00T
	Sales Tax	8.00%	20.40

RECEIVED
FEB - 9 2015
BY:

We are now accepting all major credit cards. Please contact our office to make your payment today.

Total $275.40

DATE: 01/30/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1255	SEFCU @ 1142
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'Boyars
(Print Name)

(Signature)

DATE: 02/06/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1237	SEFCU @ 1230
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: 02/03/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1256	SEFCU @ 1250
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 P. O'BRYAN
(Print Name)

(Signature)

DATE: 02/20/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1328	SEFCU @ 1308
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)

DATE: 02/27/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1342	SEFCU @ 1339
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: 03/06/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1353	SEFCU @ 1336
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'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 03/13/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1229	SEFCU @ 1246
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: 03/20/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU @ 1259
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'BRYAN
(Print Name)

David F. O'Bryan
(Signature)

DATE: 03/27/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1328	SEFCU @ 1335
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)

DATE: 04-03-15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1245	SEFCU @ 1301
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: 04-10-15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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: 04/16/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @	SEFCU @ 1538
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: 04/24/05

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1200	SEFCU @ 1195
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: 05/01/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S @ 1225	SEFCU @ 1220
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'BRYAN
(Print Name)

(Signature)

DATE: 05/08/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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'Brien — (Print Name)

David F Boyer — (Signature)

DATE: 05/18/15

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 F. O'Bryan
(Print Name)

David F. Bryan
(Signature)

DATE: 05/22/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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 E. O'Brien
(Print Name)

(Signature)

DATE: 05/29/15

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 E. O'Bryan
(Print Name)

David E. O'Bryan
(Signature)

DATE: 06/05/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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'BRYAN
(Print Name)

(Signature)

DATE: 26-12-15

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 F. O'Bryan
(Print Name)

David O'Bryan
(Signature)

DATE: 06/19/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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)

(Signature)

DATE: 06/26/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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)

David O'Bryan
(Signature)

DATE: 07/02/15

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)

(Signature)

DATE: 07/10/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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: 09/17/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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'Brayan
(Print Name)

(Signature)

DATE: 07/24/15

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 F. O'BRYAN
(Print Name)

(Signature)

DATE: 07/31/15

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 F. O'Bryan
(Print Name)

(Signature)

DATE: 08/02/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU @ #300
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: 08/14/15

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 F. O'Brien
(Print Name)

(Signature)

DATE: 03/21/05

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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)

DATE: 08/31/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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: 09/09/15

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 F. O'Brien
(Print Name)

David F. O'Brien
(Signature)

DATE: 09/11/15

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 F. O'Bryan
(Print Name)

(Signature)

DATE: 09/18/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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)

David F. Brien
(Signature)

DATE: 09/25/15

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 F. O'Bryan
(Print Name)

David F O'Bryan
(Signature)

DATE: 10/02/15

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 F. O'Bryan
(Print Name)

David F O'Bryan
(Signature)

DATE: 10/9/15

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 F. O'Bryan
(Print Name)

David F O'Bryan
(Signature)

DATE: 10/16/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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: 10/23/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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: 10/30/15

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 F. O'BRYAN
(Print Name)

(Signature)

DATE: 11/6/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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'Boyan
(Print Name)

(Signature)

DATE: 11/13/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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'BRYAN
(Print Name)

(Signature)

DATE: 11/20/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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. CZYAK
(Print Name)

(Signature)

DATE: 11/30/16

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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'BRYAN
(Print Name)

David F. O'Bryan
(Signature)

DATE: 12/4/15

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 F O'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 12/11/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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'Bryan
(Print Name)

David F. O'Bryan
(Signature)

DATE: 12/18/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	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'Brien
(Print Name)

David F. O'Brien
(Signature)

DATE: 12/28/15

SUBSLAB DEPRESSURIZATION SYSTEMS
MIDLER CROSSING
SYRACUSE, NEW YORK

EXHAUST FAN #	LOWE'S	SEFCU
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)

SHOPPING CENTER
PROPERTY INSPECTION

PROPERTY NAME _____ Inspected By Greg Henson Property Manager

PROPERTY NO. _____ Date 4/16/15

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 and visible

D. Fire Lanes and Handicapped Parking (properly marked & signed).

All fire lanes & handicapped parking signs 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

* 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).

All striping in good condition 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.).

All landscape areas where 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

SHOPPING CENTER
PROPERTY INSPECTION

PROPERTY NAME Miller Crossing
PROPERTY NO. 1650

Inspected By Greg Henson Property Manager
Date 9/11/15
Approved AGH

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 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, 2015 to March 01, 2016

	YES	NO
1. Is the information above correct?	☑	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
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 Gregory E. Henson (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.

Property Manager

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

3/21/16

Date

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)

June 7, 2016
Date