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Remedial Investigation Report (Revised)

Former Accurate Die Casting Site (Site No. C734052), Fayetteville, NY

Bright ideas. Sustainable change.

Remedial Investigation Report (Revised)

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I Bradley A. Kubiak , certify that I am currently a NYS registered professional engineer as defined in 6 NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with applicable statutes and regulations and in substantial conformance with the DER *Technical Guidance for Site Investigation and Remediation* (DER-10) and that activities were performed in general accordance with the DER-approved work plan and DER-approved modifications.

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1. Introduction

This Remedial Investigation Report (RIR) documents the Remedial Investigation (RI) activities conducted at the Former Accurate Die Casting Site (Site) located at 547 East Genesee Street, Fayetteville, NY (**Figure 1**). The investigation activities were conducted by Ramboll Americas Engineering Solutions, Inc. (Ramboll), formerly known as O'Brien & Gere Engineers, Inc. (O'Brien & Gere) on behalf of FOUBU Environmental Services, LLC (FOUBU).

The RI was conducted as a component of the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). An application for the Site to participate in the BCP was presented on behalf of FOUBU to the NYSDEC on January 13, 2015 and accepted by NYSDEC as complete on February 17, 2015 based on additional information provided to the NYSDEC on February 11 and February 16, 2015. FOUBU has entered the BCP as a "volunteer". The Site was accepted into the BCP on June 1, 2015 following a public review period that ended on March 27, 2015, and execution of the Brownfield Site Cleanup Agreement Index C734052-03-15.

The RI was conducted between November 11, 2019 and February 3, 2020 in accordance with the Remedial Investigation Work Plan (RIWP) dated October 2019. Additional investigations were completed in 2024 in accordance with the Supplemental Remedial Investigation Work Plan dated April 22, 2024 (Ramboll, 2024),

1.1 Project Objective

The main objective of the RI is to assess the presence of Site-related constituents resulting from historic Site operations. It is important to recognize that the Site was managed under the New York State Superfund Program from 1990 until acceptance in the BCP in 2015 during which time many investigations and remedial actions were conducted. Investigation activities under this RI focused on the collection of additional environmental data to fill data-gaps remaining from previous investigations and remedial actions and supplement ongoing monitoring activities. Specifically, the following data gaps were targeted by the investigation activities:

- Surface water and sediment in Bishop Brook
- Site-wide surface and near-surface soils
- Subsurface soils beneath the former manufacturing building, near former underground storage tanks (USTs), and within the former PCB/PAH/VOC area which was previously remediated and is now a Corrective Action Management Unit (CAMU)

1.2 Document Format

This RIR is organized into the following sections:

- Section 1 – Introduction
- Section 2 – Site Background
- Section 3 – Remedial Investigation Activities
- Section 4 – Site Characteristics
- Section 5 – Nature and Extent
- Section 6 – Transport and Fate
- Section 7 – Conceptual Site Model
- Section 8 – Qualitative Human Health Exposure Assessment Summary
- Section 9 – Summary and Conclusions
- Section 10 – References

2. Background

2.1 Site Description

The Site is approximately 32 acres in size and located at 547 East Genesee Street in Fayetteville, New York (**Figure 1)**. The Site is bordered to the west by a former railroad bed that is no longer in use, and residential housing is located west of the former railroad bed. Residential housing also borders the Site to the east and Bishop Brook and vacant wooded land border the Site to the north. East Genesee Street, and a commercial property border the Site to the south.

The former manufacturing building is approximately 130,000 square feet in size and occupies a portion of the southern side of the Site. This building is primarily a single story, high bay space with several warehouse/storage areas, and 8,500 sq. ft of office space. Parking lots are located to the east and north of the building. The remainder of the property is generally undeveloped open and vegetated land.

2.2 Site History

Accurate Die Casting and predecessor owners and operators of the facility conducted manufacturing operations at the Site from approximately 1950 until 1988 when Accurate Die Casting abandoned the facility. Accurate Die Casting and the predecessor owners and operators used the facility for die and casting operations to fabricate metal products for the automobile industry and other industries.

The disposal history at the Site is summarized as follows:

- A waste oil spill was discovered at the Site during 1987. The release was occurring in the northwest area of the Site (later identified as Area 1) at and near the discharge point of a cooling water outfall pipe. NYSDEC responded to the spill and approximately 120 tons of soil contaminated with waste oil was removed from the Site.
- Soil and water samples collected by NYSDEC during 1988 indicated the presence trichloroethene (TCE) and tetrachloroethene (PCE).
- A surface disposal area was also identified outside the northeast corner of the building (later identified as Area 2) and a degreasing system, which was used to degrease the castings, was located inside the eastern portion of the building. A former employee for Accurate Die Casting testified during a deposition in a Federal Court proceeding that spent TCE from the degreaser system was dumped periodically outside the northeast corner of the manufacturing building. This disposal practice has resulted in the contamination of the soil and groundwater at the Site. There are no records available to verify the quantity and/or the duration of the TCE disposal from the degreasing system.

ITT Commercial Finance Corporation, a former subsidiary of ITT Industries, now ITT Corporation (ITT), acquired the Site in 1988 as a result of foreclosure proceedings. ITT never conducted manufacturing operations at the Site and did not own or operate the facility at any time that a disposal or release of hazardous substances occurred at the Site.

A Phase I environmental assessment was completed during 1989 by Stearns & Wheler for ITT. Based on the available information, a report was prepared which included the history of the Site, potential areas of contamination and investigative efforts to characterize the Site.

A Phase II environmental assessment was completed during 1990 by Stearns & Wheler for ITT. During this assessment, three contaminated areas were identified and were remediated as Interim Remedial Measures (IRMs). The completed IRMs were as follows:

- Approximately 70 drums of waste found at the Site after foreclosure and located inside the building were characterized and disposed.
- The sludge from the TCE degreasing system was removed and the system was decontaminated.
- The TCE free product pool which was discovered above the water table adjacent to and outside the northeast corner of the building was pumped and the contents disposed of until no TCE free product was found in samples.

During 1990, transformers containing polychlorinated biphenyl (PCB) fluids were removed and disposed off-Site. The soil in the transformer area was sampled and soils exhibiting levels above guidance values were removed and disposed off-Site.

The Phase II environmental assessment concluded that TCE contamination existed in soil, groundwater, and surface water. A soil vapor survey was also conducted during this period.

In 1990, the NYSDEC included the Site on its Registry of Inactive Hazardous Waste Sites as a Class 2 Site, which indicated that the site constituted a significant threat to human health or the environment and that action was required to investigate and, if necessary, remediate the Site.

During 1991, ITT agreed to conduct a Remedial Investigation and Feasibility Study (RI/FS) and a Consent Order was entered into between the DEC and ITT for the implementation of the RI/FS program. The RI was conducted in two phases. The first phase was conducted between May 1992 and February 1993. In May of 1992, additional monitoring wells were installed in conformance with the approved Work Plan and the septic system was excavated and sampled. The second phase was conducted between July 1993 and February 1994. In August of 1993, MW-15 and MW-16 were installed.

A January 1993 Phase I RI Report and February 1994 Final RI Report were prepared describing the field activities and findings. The results of the RI showed that the groundwater and soil samples contain Site-related contamination. The primary contaminant in the soil and groundwater was TCE. The soil samples collected in the spill area contained polycyclic aromatic hydrocarbons (PAH), PCBs and volatile organic compounds (VOC). Zinc was detected in the septic tank sludge and chromium was detected in one groundwater sample. TCE was also detected in a groundwater seep in the steep bank of Bishop Brook.

The investigation identified five areas of concern at the Site that required remediation. The areas of concern were:

- an area of subsurface soil contaminated with TCE in the vicinity of MW-3
- a plume of dissolved TCE in the shallow groundwater
- dissolved TCE in the bedrock aquifer
- the former oil spill area
- sludge contained in the septic tank

Based upon the results of the RI/FS and the criteria identified for the evaluation of alternatives, the NYSDEC issued a Record of Decision (ROD) in 1994 which selected excavation and off-Site disposal for the contaminated soil and sludge, and extraction and on-Site treatment for the contaminated groundwater. The components of the selected remedy contained in the 1994 ROD are as follows:

- The contaminated soil from the oil spill area located on the northwest portion of the Site will be excavated and disposed of in a permitted landfill. The excavated area will be backfilled with clean soil. This will eliminate the potential for exposure to contaminated soil.
- The contaminated sludge from the septic tank located on the northeast portion of the site will be excavated and disposed of in a permitted landfill.
- The contaminated bedrock groundwater will be extracted and treated on-Site. The treated groundwater will be discharged to Bishop Brook. This will control the migration of contaminated ground water.
- The remediation of soil contaminated with TCE located in the northeast corner of the building has essentially been completed as an IRM. Confirmatory soil samples in this area need to be taken. The IRM also includes the remediation of shallow groundwater contamination which is in progress. Upon completion, the IRM will have controlled the groundwater migration to Bishop Brook and eliminated the potential exposure to contaminated soil.
- A long-term groundwater monitoring program will be implemented to monitor the effectiveness of the groundwater (shallow and bedrock) and soil remediation program.

Remedial actions to address the requirements of the ROD were conducted between 1995 and 1999. These actions are described in Section 2.3 and the remedial areas are shown on **Figure 2**. Based on conditions encountered during implementation of the remedial actions, NYSDEC prepared an Amended ROD (October 2, 1997) and an Explanation of Significant Differences (ESD) (October 1998) as discussed in Section 2.3.

A *Final Engineering Report* (O’Brien & Gere, 2000) was provided to the NYSDEC in March 2000 certifying and documenting that the remedial actions required to address the five areas identified in the 1994 ROD and the associated amendments were complete. The Final Engineering Report provided commitment to on-going groundwater recovery from four groundwater recovery points constructed at the Site including recovery wells RW-1 and RW-2, the sump outside the northeast corner of the existing facility (Area 2), and the overburden groundwater collection trench downgradient of the PCB/PAH/VOC area in Area 1.

On June 4, 2014, the NYSDEC changed the classification of the Site from a Class 2 site (meaning one presenting significant threat to the public health or environment – action required) to a Class 4 site (meaning one where the site is properly closed – requires continued management). Operation of the groundwater recovery and treatment system has continued since its construction and is required to operate until achieving Class GA Standards or reaching an asymptotic level below which further reduction is not practicable. The long-term groundwater monitoring program has continued since its inception in 1998.

The Site was sold to O’Brien & Gere Technical Services, Inc. in 1999. In 2000, O’Brien & Gere Technical Services, Inc. sold the Site to 547 East Genesee Street, LLC. A deed was recorded with the Onondaga County Clerk on December 29, 2017 transferring title to the Site from the Site owner, 547 East Genesee Street, LLC, to FOUBU Environmental Services, LLC (FOUBU).

FOUBU has entered the BCP as a “volunteer”. The Site was accepted into the BCP on June 1, 2015 following a public review period that ended on March 27, 2015, and execution of the Brownfield

Site Cleanup Agreement Index C734052-03-15. FOUBU intends to demolish the existing facility and redevelop the Site under the BCP.

2.3 Remedial Actions

A Remedial Design was prepared and Remedial Construction was implemented under NYSDEC Consent Order (Index #A7-0318-94-10) dated April 26, 1995, and NYSDEC-approved Site remediation was conducted that included soil excavation and construction of a groundwater collection and treatment (GWC&T) system as summarized below for each area.

PCB/PAH/VOC Soils (Area 1)

In accordance with the NYSDEC-approved PCB/PAH/VOCs Soils Area Excavation Plan (O'Brien & Gere, 1995a) dated March 1995, unsaturated soils exhibiting concentrations of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and volatile organic compounds (VOCs) above remedial action objectives (RAOs) in the northwest area of the Site were excavated during 1995. After excavating approximately 600 cubic yards (cy) of soil, grab samples of soil were collected from the excavations and analyzed for PAHs, VOCs, and PCBs to evaluate if further action was required. Based on the results of the sampling and analyses, it was concluded that the unsaturated soils containing PAHs, PCBs, and VOCs above the RAOs had been removed to the extent practicable; however, it was recognized that confirmatory samples collected from saturated soils indicated that TCE was detected above cleanup standards. A decision on the remediation of the groundwater was deferred by NYSDEC until additional groundwater sampling in the area was completed and evaluated.

In 1997, approximately 350 cy of the 600 cy of excavated soil was removed from the Site and transported to the ESMI facility in Fort Edward, New York for low temperature thermal destruction and subsequent off-Site disposal. The remaining 250 cy of soil was mechanically processed on-Site to enhance volatilization of VOCs in accordance with the ROD amendment issued in October 1997 (NYSDEC, 1997).

In April 1998, following analyses that indicated that the RAOs had been achieved, the 250 cy of mechanically processed soils were spread on-Site and covered with approximately 1 foot of general fill, topsoil, and grass seed. This area was designated as a Corrective Action Management Unit (CAMU) per the ROD amendment.

Pursuant to an Explanation of Significant Differences (ESD) Notice dated October 1998 (NYSDEC, 1998a), a groundwater collection trench was constructed to intercept groundwater (if any) containing VOCs present in the sand lenses observed in Area 1. Construction of the trench was completed in July 1999 and the collected groundwater is treated at the existing on-Site treatment system.

Northeast Corner of Facility (Area 2)

In accordance with the NYSDEC-approved IRM Work Plan dated May 1994 (O'Brien & Gere, 1994a), the area outside the northeast corner of the facility was addressed as part of an Interim Remedial Measure (IRM) during 1994 (**Figure 2**). As part of the IRM, soils exhibiting trichloroethylene (TCE) above the RAO were removed to the extent practicable without undermining the existing building foundations. The excavated soil was mechanically processed on-Site to enhance volatilization of the VOCs until residual VOC concentrations were documented to be below the RAOs. Following achievement of the RAOs, the soils were used to backfill the excavation. A description of the soil remediation activities completed in this area is provided in the NYSDEC-approved Soil Remediation Activities Summary Report dated October 1994 (O'Brien & Gere, 1994b).

Overburden Groundwater (Area 3)
In accordance with the NYSDEC-approved IRM Work Plan (O'Brien & Gere, 1994a) and as part of the IRM which addressed the soils outside the northeast corner of the facility (Area 2), a groundwater collection sump was constructed within the excavation (S-1 on **Figure 2**). The sump extends to the till layer that was found to be present at the base of the excavation made during the soil remediation activities. This sump is being utilized when water is present as a groundwater recovery point as part of the groundwater recovery and treatment system constructed at the Site to address the shallow/overburden groundwater. However, the sump is typically dry as reported in the quarterly reports provided to the NYSDEC.

Also, an overburden recovery well designated as RW-1 (**Figure 2**) was constructed on-Site as part of the IRM. This recovery well is currently being utilized to collect groundwater containing TCE in the overburden aquifer downgradient of the northeast corner of the facility. Recovered groundwater is treated on-Site using granular activated carbon and discharged to Bishop Brook under a SPDES permit.

Recovery and treatment of overburden groundwater using the sump and RW-1 has been ongoing since February 5, 1996 and is continuing. In addition, a groundwater collection trench was constructed in 1999 to intercept overburden groundwater flow from the PCB/PAH/VOC area. The collected groundwater is treated at the existing on-Site treatment system.

Shallow Bedrock Groundwater (Area 4)
A second groundwater recovery well, designated as RW-2, is being utilized on-Site to recover groundwater containing VOCs from the shallow bedrock in the vicinity of the northeast corner of the facility (**Figure 2**). This well was installed in 1995, and recovery and treatment of shallow bedrock groundwater using RW-2 was initiated on February 5, 1996 and is continuing.

Septic Tank (Area 5)
During 1995, the septic tank was uncovered, and the contents were removed and disposed of at an off-Site NYSDEC-approved landfill in accordance with the NYSDEC-approved Remedial Design/Remedial Action Work Plan dated March 1995 (O'Brien & Gere, 1995b). Once the contents were removed, the walls of the septic tank were cleaned using a pressure-washer as approved by the NYSDEC. Subsequent to decontaminating the floor and walls of the septic tank, the concrete vault was filled and buried, completing remediation of this area.

In addition to the remedial activities conducted in the five areas identified above, three underground storage tanks (USTs) were abandoned in 1995 as follows:

- *1,000-gallon leaded gas* – This tank, located outside along the western portion of the former manufacturing building (**Figure 2**), was removed during March 1995. Observations identified rust holes in the bottom of the tank. Directly below the tank was a 16-inch clay storm water drainpipe which drained to the back of the property near the PCB/PAH/VOC area. Field screening tests were performed, and DEC was notified of the leaking tank. With the approval of DEC, the tank was removed, and the excavation was backfilled.
- *85-gallon #2 fuel* – This tank, located outside along the northwestern portion of the former manufacturing building near the furnace room, was removed, however specific details of the removal are not available.
- *15,000-gallon #2 fuel oil* – This tank is located beneath the furnace room (**Figure 2**). On April 28, 1995, approximately 6,000 gallons of aged virgin fuel oil was removed from the tank and disposed. The tank was then pressure washed and hand wiped. The tank was closed in place.

Additional documentation regarding these tanks or the removal activities is not available.

Soil Vapor and Vapor Intrusion Evaluation and Mitigation

During the timeframe that the Site was managed under the New York State Superfund Program, a vapor intrusion evaluation was completed at the Site in 2006, at the request of the NYSDEC. The evaluation was performed in accordance with the NYSDOH document entitled *Guidance for Evaluating Soil Vapor intrusion in the State of New York* (NYSDOH, 2006) and the *On-Site Soil Vapor Sampling Work Plan* (O'Brien & Gere, February 13, 2006) and amended on February 16, 2006 (O'Brien & Gere, 2006a). As described in Section 3.6 of this RIR, the investigation consisted of collection and analysis of soil vapor samples along the eastern, western, and southern Site property boundaries, as well as sub-slab and indoor air samples within the former manufacturing building. The sampling and analysis were completed between March and May 2006 and the results of the were reported to NYSDEC and New York State Department of Health (NYSDOH) in *Technical Memorandum – Vapor Intrusion Evaluation Results* (O'Brien & Gere, September 18, 2006). This document is included as **Attachment B**.

As discussed in Section 5.5 of this RIR, the results of the evaluation indicated that vapor intrusion mitigation of the on-Site building was warranted to mitigate potential future vapor intrusion. However, due to the changing occupancy and probable Site redevelopment, NYSDEC allowed the mitigation system installation to be deferred until such changes were designed. The on-Site building is currently unoccupied, and soil vapor mitigation is pending Site/building redevelopment or re-occupancy.

Based on the results of the on-Site investigation, a series of phased follow up investigations were conducted to evaluate off-Site vapor impacts and reported to NYSDEC and NYSDOH in the following Technical Memoranda:

- *Technical Memorandum – Results of Vapor Intrusion Sampling at Off-Site Properties* (O'Brien & Gere, 2007)
- *Technical Memorandum – Results of Vapor Intrusion Re-Sampling at Seven Phase I Off-Site Properties* (O'Brien & Gere, 2008)
- *Technical Memorandum – Results of Vapor Intrusion Sampling at Thirteen Phase II Off-Site Properties* (O'Brien & Gere, 2011)
- *Technical Memorandum – Results of Vapor Intrusion Phase 1B and Phase 1C Re-Sampling at Two Off-Site Properties* (O'Brien & Gere, 2011)

Based on the results of the off-Site sampling, vapor intrusion mitigation systems were installed at five off-Site properties. The systems are currently being managed under the *Operation and Maintenance Plan for Off-Site Vapor Intrusion Mitigation Systems* (O'Brien & Gere, 2009) that includes annual inspections and reporting.

2.4 Current Groundwater Monitoring Program

Groundwater samples have been collected and analyzed for VOCs since 1998 in accordance with the NYSDEC-approved *Sampling and Analysis Plan* (SAP) dated March 1996 (O'Brien & Gere, 1996). Presently, the approved SAP requires sampling of select monitoring wells on two occasions each year, during the Spring (April) and Fall (October), and analysis for VOCs.

- For the Spring monitoring event, also referred to as the semi-annual event, the approved SAP requires samples to be collected from five monitoring wells including MW-10, MW-11, MW-13, MW-18, and MW-24.

- For the Fall (or annual) event, the approved SAP requires samples to be collected from fifteen monitoring wells and two piezometers including MW-5, MW-6, MW-9, MW-10, MW-11, MW-12, MW-13, MW-14, MW-15B, MW-16B, MW-17, MW-18, MW-21, MW-22, MW-24, PZ-1, and PZ-2.

TCE is the primary contaminant of concern in groundwater, although other chlorinated compounds including degradation byproducts (cis-1,2-dichloroethene, and trans-1,2-dichloroethene) have also been detected. The results of the groundwater monitoring events are provided to the NYSDEC with quarterly Operation and Maintenance Reports and Periodic Review Reports.

There are two areas on site where TCE concentrations are notable. One area is below the existing building where TCE concentrations in 2019 were 260 micrograms per liter (μg/L) and 220 μg/L in monitoring wells MW-13 and MW-14, respectively. The other area is located near the former PCB/PAH/VOC soils area, where TCE concentrations in 2019 at MW-18 and MW-24 were 1,400 μg/L and 290 μg/L, respectively. These areas are being addressed through the groundwater collection and treatment system.

2.5 Deed Restrictions

Deed restrictions were filed on May 15, 2014 for the Site that prohibit the following:

- construction of groundwater supply wells for consumption or production
- excavation within the CAMU
- disturbance or excavation of the property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils

The deed restrictions also require evaluation of the potential for soil vapor intrusion (SVI) by the Site owner should the on-Site building become occupied and for any buildings being developed on the Site. In such cases, a SVI sampling work plan will be developed and submitted to NYSDEC and NYSDOH for approval prior to occupation of the building or construction of any new buildings.

2.6 Current and Future Site Use

The property has historically been used for industrial and commercial purposes. It currently contains a vacant building formerly used for light manufacturing and offices. It is expected that the future use of this Site will include commercial, light industrial or a mixed-use that includes a multi-family housing component.

3. Remedial Investigation Activities

This section discusses the methodologies used during implementation of the RI field tasks. The RI was completed during various mobilizations between November 11, 2019 and February 3, 2020. The RI field activities were completed in accordance with the NYSDEC-accepted Remedial Investigation Work Plan (RI Work Plan; O'Brien & Gere, part of Ramboll, 2019) and the Supplemental Remedial Investigation Work Plan dated April 22, 2024 which was prepared in response to NYSDEC comments (2024 supplemental RI Work Plan). A copy of the 2024 Supplemental RI Work Plan is included as **Attachment A**. Exceptions and modifications to the scope are noted in Section 3.2, and associated procedures provided in the Field Sampling and Analysis Plan (FSAP), Quality Control Document (QCD), and the Health and Safety Plan (HASP).

3.1 Investigation Objectives

As described in Section 2.3, several remedial activities have been conducted at this Site to mitigate contamination associated with historic operations at the Site. However, several data gaps existed in consideration of the planned demolition of the existing building and the potential change in use.

As requested by NYSDEC comments to the 2021 RI Report provided in correspondence dated July 14, 2023, additional sampling activities were completed in 2024 to generate a current set of groundwater quality data and on-site soil vapor data. A 2024 Supplemental RI Work Plan dated April 22, 2024 (Ramboll, 2024) outlined the approach and techniques used for these activities. This work plan was approved by NYSDEC in correspondence dated April 30, 2024.

The objectives of the RI were to:

- Assess whether the top two feet of soil at the Site meets applicable SCOs identified in 6 CRR-NY Part 375
- Assess whether constituents are present in the surficial soil above the applicable SCOs which may present a potential exposure to humans
- Evaluate whether grossly contaminated material such as non-aqueous phase liquid (NAPL) is present below the existing building
- Evaluate the concentration of residual constituents that may be present in the PCB/PAH/VOC area (Area 1)
- Evaluate the residual petroleum-related constituents that may be present in the vicinity of the former USTs
- Evaluate surface water and sediment quality within Bishop Brook which flows through the northern portion of the BCP property
- Evaluate current groundwater quality
- Evaluate current on-site soil vapor concentrations
- Assess the potential exposure of Site-related constituents on public health and the environment
- Provide information to support the potential re-development of the Site to address the residual soil contamination, if required
- Evaluate groundwater quality
- Evaluate current on-site soil vapor concentrations

The RI activities included characterization of surface water, sediment, groundwater, soil vapor, and soil using a variety of investigation techniques. Surface water and sediment involved the collection of co-located surface water and sediment samples (discussed in Section 3.4). Soil characterization was conducted through collection and analysis of surface soils (discussed in

Section 3.5.1) and subsurface soils (discussed in Section 3.5.3). Groundwater and soil vapor evaluations were completed in 2024. Procedures related to these activities are provided in Sections 3.6 (Groundwater) and 3.7 (Soil Vapor)

3.2 Deviations from Remedial Investigation Work Plans

The following deviation from the approved work plans occurred during the implementation of the remedial investigation and the 2024 supplemental investigation activities:

- One soil sample (SB-20-5-9-11), from the underground storage tanks (USTs) area located west of the building, was collected, and sent to the laboratory for VOCs analysis. However, the soil sample vial arrived broken to the laboratory and was not analyzed. A field duplicate (FD-1-020320) was collected from SB-20-5-9-11 soil sample and analysis for VOCs was completed.
- Existing overburden monitoring well, MW-1 and bedrock monitoring well, MW-7, were dry and therefore samples were not collected.
- New monitoring well, MW-27, and existing wells, MW-13 and MW-24, produced a limited volume of groundwater. Therefore, the sample from this well was only analyzed for VOCs.

3.3 Identification of Subsurface utilities

Prior to the initiation of intrusive field activities, an underground facilities protection organization (UFPO) request was submitted to Dig Safely of New York to clear utilities. UFPO located and marked out underground utilities only on public property and rights-of-way.

The location of the on-Site building area subsurface utilities has been previously documented and is provided in **Figure 4**. As shown in **Figure 4**, a number of utilities, including stormwater lines, air handling lines, and two oil/water separators, are present beneath the slab on this end of the building. The southern portion of this side of the building appears to have been used for different operations. The floor is concrete and there is only a single storm sewer line running along the south side. Before the advancement of a soil boring, each soil boring was cleared (advanced) to up to 2-ft by using a hand auger.

At two locations, near the former above-grade degreaser in the eastern portion of the building and within the western portion of the building, undocumented subsurface utilities were encountered while conducting the hand auger clearance. The soil boring locations were relocated within 5-ft of original locations.

3.4 Surface Water and Sediment Characterization

To evaluate current potential environmental impacts to Bishop Brook, three co-located surface water (SW-01, SW-02, and SW-03) and sediment samples (SED-01, SED-02, and SED-03) were collected on November 18, 2019.

Surface water samples were collected from the most downstream location proceeding to the most upstream location. Surface water sample were collected by submerging a sample bottle below the water surface.

Sediment samples were collected by wading into Bishop Creek. Sediment samples were collected from the most downstream location proceeding to the most upstream location. For each sediment sample collected, sediment observations were recorded in the field book.

Sediment samples were collected from a depth of 0-6 inches using a hand auger. Upon sediment retrieval, a portion of the sample designated for volatile organic compound analysis was collected and placed in a sample container without headspace. The remainder of the sediment was homogenized in a stainless-steel mixing bowl and placed into the sample jars. Non-dedicated equipment was decontaminated prior to use at each location.

A summary of the surface water and sediment samples collected during the RI including sample identification, sample depth, and sample analysis is presented in **Table 1**. Locations of surface water and sediment samples collected during the RI are presented in **Figure 3**.

Surface Water and Sediment Laboratory Analysis
Surface water and sediment sample were submitted to ALS Environmental (ALS) and analyzed for the following:

- Target Compound List (TCL) VOCs using USEPA Method 8260
- TCL Semivolatile Organic Compounds (SVOCs) using USEPA Method 8270
- Polychlorinated Biphenyls (PCBs) using USEPA Method 8082
- Target Analyte List (TAL) Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

In addition, each surface water sample was analyzed for hardness using Standard Method SM20 2340C, and each sediment sample was analyzed for total organic carbon (TOC) using the Lloyd Kahn method.

3.5 Soil Characterization

Soil samples were collected from multiple intervals during the RI. Specifically, surface soils are samples collected and analyzed from the 0 to 2-inch interval to assess potential human exposures through ingestion, inhalation, or dermal contact as outlined in *Technical Guidance for Site Investigation and Remediation (DER-10)* (NYSDEC, May 2010). Soil samples from the 0-2, 2-12, and 12-24 inches, were collected to assess a 2-ft thickness as soil cover. These samples are evaluated together as near-surface soil. Additional s soil samples collected below 2 ft are categorized as subsurface soil samples.

A summary of the soil samples collected during the RI including sample identification, sample depth, and sample analysis is presented in **Table 1**. Surface soil/near-surface soil and subsurface soil sample locations are presented on **Figures 3** and **4**, respectively. Surface, near-surface and subsurface boring logs are provided in **Appendix A**.

3.5.1 Surface Soil Characterization

Surface soil samples were collected from 17 locations (SS-01 through SS-17) between November 12 and 15, 2019. The locations were distributed across vegetated areas of the Site. The surface soil sample locations are shown on **Figure 3**.

At each location, surface soil samples were collected from 0 to 2 inches below vegetative cover to provide information for assessment of human health exposures. The surface soil samples were collected using a hand auger and/or shovel.

Surface Soil Laboratory Analysis
Surface soil samples were submitted to ALS and analyzed for the following:

- TCL SVOCs using USEPA Method 8270
- PCBs using USEPA Method 8082

- TAL Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

As outlined in the RI Work Plan, one surface soil sample was also analyzed for Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-dioxane.

3.5.2 Near-Surface Soil Characterization

Near-surface soil samples were collected from 17 locations (SS-01 through SS-17) between November 12 to 15, 2019. The locations were distributed across vegetated areas of the Site. The near-surface soil sample locations are shown on **Figure 3**.

At each location, samples were collected from three depth intervals, 0 to 2-inches, 2 to 12-inches, and 12 to 24-inches, to assess whether the top 2 ft of existing material meets the criteria for soil cover. The near-surface soil samples were collected using a hand auger and/or shovel.

Near-Surface Soil Laboratory Analysis

Each near-surface soil sample was submitted to ALS and analyzed for the following:

- TCL VOCs using USEPA Method 8260
- TCL SVOCs using USEPA Method 8270
- PCBs using USEPA Method 8082
- TAL Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

As outlined in the RIWP, three of the near-surface soil samples were analyzed for PFAS and 1,4-dioxane.

3.5.3 Subsurface Soil Characterization

Subsurface soil samples were collected beneath the floor slab of the former manufacturing building, within and near the PCB/PAH/VOC area, and near former USTs.

Subsurface soil samples were collected continuously using direct push drilling methods to the base of the boring at each location. Upon retrieval, each soil sample was described for soil type, color, moisture content, texture, grain size and shape, evidence of staining or other chemically-related impacts, and any other relevant observations. In addition, soil was screened with a photoionization detector (PID) to allow evaluation of the bulk volatile organic concentration of each soil sample. This descriptive information was recorded on soil boring logs **(Appendix A).**

Headspace screening was performed by collecting a representative portion of each soil sample and placing it in a re-sealable plastic (e.g., Ziploc® or equivalent) bag. The bag and soil were allowed to warm, then the tip of the sample probe attached to the PID was inserted into the bag to measure the headspace for organic vapors.

3.5.2.1 Former Manufacturing Building Area Soil

The approach to assessing the subsurface soil beneath the former manufacturing building varied based on the portion of the building that was investigated. As described in Section 2.3, previous investigations and remedial measures had revealed that chlorinated VOCs were present in groundwater located to the northeast of the building. Conversely, no VOCs have been identified in the overburden groundwater monitoring wells, MW-2 and MW-8 (**Figure 3**), located downgradient of the western end of the building suggesting that no significant releases of VOCs had occurred from the western portion of the former manufacturing building. Therefore, the investigation strategy differed for each portion of the building.

Eastern Portion of the Former Manufacturing Building

The investigation within the eastern portion of the former manufacturing building included the use of direct sensing techniques, specifically a membrane interface probe (MIP), to assess the presence and extent of VOCs, followed by completion of soil borings to facilitate visual inspection of the subsurface material and the collection of soil samples for analysis.

The MIP probing was completed by Cascade Technical Services (Cascade) at six locations (MIP-1A, and MIP-2 through MIP-6) between January 20 and 23, 2020. The MIP probe was completed in the vicinity of MW-13, MW-14 and the former above-grade degreasing unit as shown in **Figure 4**. The MIP borings were advanced through the soil immediately beneath the concrete floor to refusal, which generally ranged in depth between 16-ft (MIP-3) and 25-ft (MIP-4) below ground surface (bgs). A report was provided by Cascade and is provided in **Appendix B**.

The MIP provides continuous qualitative measurements of relative concentrations of VOCs. The MIP instrument is advanced on the end of a direct-push drilling rod. A heater block on the probe increases the volatility of VOCs in the subsurface (both saturated and unsaturated), and the VOCs diffuse across a semi-permeable membrane into an inert gas loop. The vapors flow within this loop to equipment stationed at the surface and are analyzed in real time, generally by a flame ionization detector (FID), a photoionization detector (PID), and a halogen-specific detector (XSD). Each detector provides response in microvolts (µV). The FID and PID detect total VOCs, with the PID more sensitive to aromatic hydrocarbon compounds. The XSD is highly sensitive to chlorinated compounds. A greater response from the detector can be an indication of greater VOC concentrations in the subsurface. The MIP was also equipped with an electrical conductivity (EC) sensor to provide continuous qualitative stratigraphic information. In general, EC response is inversely proportional to grain size; that is, high EC values generally correspond with fine-grain deposits (e.g., silt and clay), and low EC values generally correspond with coarse-grained deposits (e.g., sand and gravel). Mineralogy and pore water chemistry (brines, pH, and contaminants) can also affect EC. The MIP was advanced to refusal based on down-pressure resistance identified by the operator to minimize potential damage to the instrument. Plots of the XSD, FID, and PID, EC measurements as a function of depth below ground surface are presented in in the Cascade report included in **Appendix B**.

Following completion of the MIP investigation, soil borings were completed in this area to further assess the subsurface and collect soil samples for analysis. Five soil borings (SB-MIP-1, and SB-MIP-3 through SB-MIP-6) were completed on January 30 and 31, 2020. The soil borings were co-located with the MIP probes (**Figure 4**).

The soil borings were advanced using direct-push methods to the top of bedrock at depths between 20-ft to 25-ft. Soil samples were collected continuously using Macrocore® samplers to the base of the boring at each location. Based on PID readings and visual observations, ten subsurface soil samples (two samples from each of the five soil borings) were collected for VOCs using Terra Core™ samplers provided by ALS and submitted to ALS for VOC analysis. The subsurface soil samples. In addition, one sample was analyzed for PFAS and 1,4-dioxane.

Western Portion of the Former Manufacturing Building

A total of twelve borings (SB-20-1 through SB-20-4 and SB-20-6 through SB-20-13) were completed within the western portion of the former manufacturing building between January 27, 2020 to January 31, 2020. Eight soil borings (SB-20-6 through SB-20-13) were completed to evaluate soils near former sub-slab process lines. Two borings (SB-20-3 and SB-20-4) were completed next to the two oil water separators. Two borings (SB-20-1 and SB-20-2) were completed near stormwater drains. These boring locations are shown in **Figure 4**.

These borings were completed to bedrock using direct-push methods to top of bedrock or refusal at depths between 22-ft to 25-ft. Soil samples were collected continuously using a Macrocore® to the base of each boring.

Subsurface Soil Laboratory Analysis
Based on PID readings and visual observations, twelve subsurface soil samples (one sample from each of the twelve soil borings) were submitted to ALS and analyzed for the following:

- TCL VOCs using USEPA Method 8260
- TCL SVOCs using USEPA Method 8270
- PCBs using USEPA Method 8082
- TAL Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

The subsurface soil samples collected for VOCs were sampled using Terra Core™ samplers. In addition, one surface soil sample was collected for PFAS and 1,4-dioxane analysis.

3.5.2.2 PCB/PAH/VOC Area Soils (AREA 1)

To document the concentration of constituents that are present within the subsurface soils in this area, two soil borings (SB-20-15 and SB-20-16) were completed on February 3, 2020 **(Figure 3)**. Soil borings were completed using direct-push methods to a maximum depth of 15 feet below grade to evaluate soils deeper than the maximum depth of the soil excavations (up to 11 feet deep) during the prior remedial activities performed in this area. Soil samples were collected continuously with a Macrocore® to the base of each boring.

Subsurface Soil Laboratory Analysis
Based on PID readings and visual observations, two subsurface soil sample were submitted to ALS and analyzed for the following:

- TCL VOCs using USEPA Method 8260
- TCL SVOCs using USEPA Method 8270
- PCBs using USEPA Method 8082
- TAL Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

The subsurface soil samples collected for VOCs were sampled using Terra Core™ samplers. In addition, one surface soil sample was collected for PFAS and 1,4-dioxane analysis.

3.5.2.3 Underground Storage Tanks

As indicated in Section 2.3, three USTs were removed or abandoned in place at the facility and the approximate locations of two of the three USTs are shown on **Figure 4**. The exact location of the third UST is unknown. Soil samples were collected from the vicinity of these two USTs to document the presence and concentration of petroleum-related compounds. Two soil borings (SB-20-14 and SB-20-5) were completed on February 3, 2020 in these two areas (**Figure 4**).

Soil borings were completed using direct-push methods to depths of 20-ft below grade. Soil samples were collected continuously with a Macrocore® to the base of each boring.

Subsurface Soil Laboratory Analysis

Based on PID readings and visual observations, two subsurface soil sample were submitted to ALS and analyzed for the following:

- TCL VOCs using USEPA Method 8260 and 5035
- TCL SVOCs using USEPA Method 8270
- Lead using USEPA Method 6010

3.6 Groundwater

Additional Monitoring Wells

As outlined in the 2024 Supplemental RI Work Plan, three additional overburden monitoring wells were installed to further assess groundwater quality at the site. Two wells, labeled MW-25 and MW-26, were located on the northwest side of the site and one well, labeled MW-27, was installed near the former UST on the west side of the building as shown on **Figure 3**. The Supplemental RI Work Plan is provided as **Attachment A**.

The borings were advanced using direct push methods to up to 2 ft into the glacial till to confirm its presence. Soil samples were be collected continuously for descriptive purposes and to confirm the depth of the glacial till unit. In addition, headspace screening of soil was performed with a PID to allow evaluation of the bulk volatile organic concentration of each soil sample. This descriptive information was recorded soil boring logs included in **Appendix A**.

The monitoring wells were set to screen the groundwater within the silt and sand unit that overlies the glacial till. Construction of each well is as follows:

Well ID	Well Depth (below grade)	Screened interval (below grade)
MW-25	14 ft	4 to 14 ft
MW-26	9 ft	4 to 9 ft
MW-27	9 ft	4 to 9 ft

The wells were constructed of 1-inch inside diameter PVC with a 0.010-inch slot pre-packed well screen. The annular space above the well screen was filled with cement/bentonite grout. Well heads were completed with locking steel protective casings set within a concrete pad. Copies of well completion logs are included in **Appendix A**. Well construction details and groundwater levels are provided on **Table 27**.

Groundwater Sampling

As outlined in the 2024 Supplemental RI Work Plan, groundwater samples were to be collected from the three new overburden monitoring wells (MW-25, MW-26, and MW-27), existing overburden monitoring wells (MW-1, MW-2, MW-5, MW-12, MW-13, MW-17, MW-18, MW-22, and MW-24) and existing bedrock monitoring wells (MW-7, MW-11, MW-15, and MW-23).

Groundwater samples collected were submitted to Eurofins in Amherst, NY for the following analyses with some exceptions:

- TCL VOCs using USEPA Method 8260
- TCL SVOCs using USEPA Method 8270
- PCBs using USEPA Method 8082
- TCL Pesticides using UASEPA method 8081

- TAL Metals using USEPA Method 6010/7471
- Cyanide using USEPA Method 9014

Existing overburden monitoring well, MW-1 and bedrock monitoring well, MW-7, were dry and therefore samples were not collected. New monitoring well, MW-27, and existing wells, MW-13 and MW-24, produced a limited volume of groundwater. Therefore, the samples from these three wells were only analyzed for VOCs. A summary of the analyses completed on the groundwater samples collected during 2024 is presented in **Table 1**

Prior to the collection of groundwater samples, groundwater levels were measured to the nearest 0.01 foot from the monitoring wells to be sampled. **Table 27** presents the groundwater elevations collected during the Supplemental Remedial Investigation.

Groundwater samples were collected using low-flow sampling techniques. The wells were purged at a flow rate not to exceed 500 milliliters per minute (ml/min) and water quality parameters were monitored. The samples were collected once the water quality measurements have stabilized as outlined below:

- Temperature ± 3% of measurement
- pH ± 0.1 pH units
- Specific conductance ± 3% of measurement
- Redox ±10 mV
- DO ±10% of measurement
- Turbidity ± 10% of measurement

Groundwater samples collected for VOC analysis, as part of the current groundwater monitoring program, (MW-11, MW-13, MW-18, and MW-24) were collected using passive diffusion bags (PDBs) for consistency with that program. The samples collected for the remaining analyses were collected using the low flow methods described above. Low flow groundwater sampling logs are provided in **Appendix G**.

3.7 Soil Vapor Sampling

Soil vapor samples were collected at the Site in May 2006 as discussed in Section 2.4. The samples were collected from nine locations along the east, west and south property lines as shown in **Figure 3** of *Technical Memorandum – Vapor Intrusion Evaluation Results* (O'Brien & Gere, September 18, 2006) provided in **Attachment B**.

As outlined in the 2024 Supplemental RI Work Plan, an additional set of soil vapor samples was collected on July 24, 2024 from the same locations as the original soil vapor samples. Due to a potential lab contamination issue, locations SV-02 and SV-01 were resampled on August 29 and November 15, 2024, respectively.

Samples collected in 2006 and 2024 were generally completed in the same manner. Sample points connected to tubing were advanced to approximately 4 ft below ground surface. Sand was installed around each sample point and extended approximately 1 foot above the point. The annular space above the sand to the ground surface was sealed with bentonite. Ambient air was purged from the sample tubing and the installations were allowed to cure for approximately 24 hours before samples were collected. Helium tracer gas was placed over the top of each soil vapor point to evaluate the integrity of the surface seal and verify no ambient air would be collected in the sample. Tracer gas results indicated the installation was sealed properly. Copies of the 2006 soil vapor sampling forms are included in **Attachment B**.

Soil vapor samples collected in 2024 were collected over a two-hour period, with batch certified-clean canisters. One duplicate soil vapor sample (from SV-09) was collected as part of this sampling program. A summary of the soil vapor samples collected and analyzed during 2024 is presented in **Table 1.** Soil vapor sampling forms are provided in **Appendix G**.

3.8 Data Deliverables and Validation

The canisters were shipped under routine Chain-of-Custody to a Eurofins in Burlington, Vermont, where they were analyzed by USEPA Method TO-15.Data Deliverables and Validation
Soil samples collected during the RI were delivered to ALS in Rochester, NY under standard chain-of-custody procedures. Soil vapor samples collected in 2024 were submitted to Eurofins in Burlington, Vermont. Groundwater samples collected in 2024 were submitted to Eurofins Laboratories in Amherst, NY. The laboratory provided analytical deliverable packages consistent with New York State Analytical Services Protocol (ASP) Category B. Copies of the laboratory reports are provided in **Appendix C**. Analytical laboratory data was received in electronic data deliverable (EDD) format and were uploaded to the environmental data management system database (EQuIS).

The analytical data packages for the RI were reviewed by Data Validation Services and a data usability summary report (DUSR) was developed. Analytical data collected during the 2024 sampling activities was reviewed by Environmental Data Services, Ltd. Copies of the DUSRs are provided in **Appendix D**.

3.9 Survey

Following the completion of the field investigation activities, locations of the surface water, sediment, and borings were surveyed. The survey was completed by CT Male Associates. Ground surface was surveyed to an accuracy of 0.01 ft and referenced to North American Vertical Datum of 1988 (NAVD88). The horizontal coordinated were referenced to New York State Plane feet relative to the North American Datum of 1983 (NAD83). Survey data is included in **Appendix E**.

The Site monitoring well network was surveyed in 2024. The monitoring well survey was completed by CT Male Associates on April 2024 and referenced to North American Vertical Datum of 1988 (NAVD88). The horizontal coordinated were referenced to New York State Plane feet relative to the North American Datum of 1983 (NAD83). Survey data is included in **Appendix E**.

3.10 Equipment Decontamination

The direct-push samplers used for the soil borings and wells and the MIP probe tooling were decontaminated after each use using a non-phosphate detergent wash followed by a potable water rinse. The decontamination water was periodically changed during the drilling program.

Reusable equipment used for surface water, sediment, and surface soil sampling (stainless-steel shovel, hand auger and bowl) was decontaminated using phosphate-free detergent and rinsed with distilled water following use.

Fluids generated during decontamination were transferred to 55-gallon drums and temporarily staged within the former manufacturing building for subsequent characterization and disposal.

3.11 Investigation Derived Waste Management

The RI activities produced investigation-derived waste (IDW) which will require appropriate management. IDW included the following:

- Soil cuttings
- Decontamination fluids resulting from decontamination of the drill rig and sampling equipment
- Purge water generated during well sampling in 2024
- Personal protective equipment (PPE)
- Disposable materials and supplies

Water generated was treated through the onsite groundwater treatment system. PPE and sampling supplies were disposed as normal solid waste. Soil generated during drilling was placed in DOT-approved 55-gallon drums and temporarily staged within the Site building pending characterization and off-Site disposal.

4. Site Characteristics

As outlined in Section 3, field investigation activities were completed during the RI to assess the site characteristics. These investigations included:

- Surface water and sediment sampling
- Surface soil sampling
- Soil borings and subsurface soil sampling
- MIP borings

In addition, as described in Section 2, several field investigation and remedial activities were previously completed at the Site.

The following summarizes the site characteristics based on the information generated by these investigations.

4.1 Geomorphology and Hydrology

The Accurate Die Casting site lies within the Ontario Lowland Physiographic Province, just north of the Appalachian Upland border scarp zone. The Ontario Lowland in this area consists of a relatively low relief lake plain blanketed by glacially derived sediments.

In general, the land surface slopes down across the Site from south to north. Slopes are gentle in the southern portion of the Site near the former manufacturing building and steepen northward at the embankment of Bishop Brook.

Surface waters in the area are within the Oneida River Basin and tributary to the Lake Ontario drainage system. The only surface water body within the Site boundary is Bishop Brook, which flows from east to west through the northern boundary of the Site. Bishop Brook is classified as a Class C receiving water with designated best usage for fishing. Bishop Brook also carries a TS designation meaning suitable for trout spawning. Bishop Brook discharges into Limestone Creek several miles west of the Site.

4.2 Geology and Hydrogeology

4.2.1 Regional Geology

Bedrock in the vicinity of the Site consists of dolostone, evaporites, and shale of the Upper Silurian Camillus and Bertie Formations and Cobleskill Limestone. These rocks were deposited in relatively stable, shallow, continental marine environments. Despite significant orogenic activity in areas in eastern New York State during the Devonian Acadian orogeny, bedrock in the Central New York region underwent little structural deformation. As a result, bedrock in the area exhibits only a slight dip of about one degree toward the south-southwest.

Silurian bedrock in the vicinity of the Site is immediately overlain by unconsolidated Pleistocene glacial deposits of varying thickness and lithology. Sediments deposited directly by glacial ice are poorly sorted and composed of matrix supported gravel and boulders. They are commonly dense and relatively impermeable and are generally designated as till. The most extensive glacial deposit in the area is lodgement till which overlies much of the bedrock in the area. The lodgement till unit in the area is commonly overlain by ice-contact deposits and in turn overlain by glaciofluvial and/or lacustrine sediments (Winkley, S.J., 1989).

4.2.2 Site Geology

Monitoring wells, soil borings, and test pits completed at the Site during the 1993 RI report and soil borings and MIP probing conducted during this investigation have provided information about the overburden and bedrock geology underlying the Site. This geologic information indicates that the site geology consists of glacially derived overburden material consisting of varying amounts of sand, silt, clay, gravel, and cobbles overlying Upper Silurian sedimentary bedrock composed of shale to shaley dolostone.

The overburden geology underlying the Site is variable and complex; however, the overburden stratigraphy can be simplified into two units, a permeable silty fine to coarse grained sand and gravel ablation till overlying a less permeable, dense lodgement till composed of poorly sorted silt, clay, and gravel with varying amounts of sand.

Figure 5 presents geologic profile A-A' that extends from south to north across the site (see **Figure 3** for the A-A’ profile orientation). As illustrated on **Figure 5**, the thickness of the permeable overburden sand and gravel unit ranges from approximately 22 feet at MW-1 to approximately 40 feet at MW-5, generally increasing from south to north. Where present, the thickness of the underlying lodgement till ranges from approximately 5 feet at SB-MIP-3 to approximately 20 feet at MW-11. Lodgement till was not encountered at MW-1 based on boring log information.

Figure 6 presents geologic profile B-B' that extends from west to east through the location of the former manufacturing building (see **Figure 3** for the B-B’ profile orientation). As illustrated on **Figure 6**, the thickness of the permeable overburden sand and gravel unit ranges from approximately 15 feet at SB-20-9 to approximately 22 feet at MW-14. The thickness of the underlying lodgement till ranges from approximately 16 feet at SB-20-8 to approximately 25 feet at SB-20-9.

Bedrock observed at several monitoring well and soil boring locations, as well as outcrops adjacent to Bishop Brook, has been described as gray-green shale to shaly dolostone. From the former manufacturing building northward to Bishop Brook, the bedrock surface slopes relatively steeply. Depth to bedrock ranges from approximately 20-ft in the southern and northwestern portions of the Site to approximately 40 to 45-ft in the eastern and northeastern portions of the Site.

4.2.3 Site Hydrogeology

Two groundwater zones underlie the Site. These include an unconfined (water table) unit present within the unconsolidated, glacially-derived overburden deposits and a confined water-bearing unit within the fractured bedrock underlying the glacial deposits.

Occurrence of groundwater in the permeable overburden material varies across the Site, controlled by the permeability and thickness of the overburden materials. In general the ablation till is finely grained and thinner in southern portions of the Site. The average depth to groundwater in the overburden water-bearing materials range from approximately 4 to 10 feet below grade in the southern and northwestern portion of the Site and from approximately 20 to 44 feet below grade in the northeastern portion of the Site. The greater depth to groundwater in the overburden in the northeastern portion of the Site compared to the southern and northeastern portions of the Site is attributed to the greater overburden thickness present as well as the lower elevation of the top of the lodgement till and bedrock in this portion of the Site.

Groundwater elevation contour maps for the overburden and bedrock groundwater zones are shown in **Figures 7** and **8**, respectively. As shown on **Figure 7**, groundwater flow in the overburden is generally to the north towards Bishop Brook under a hydraulic gradient of approximately 0.05 feet per foot (ft/ft). As shown on **Figure 8**, potentiometric groundwater flow in the bedrock is to the northwest towards Bishop Brook under a hydraulic gradient of about 0.04 ft/ft.

Under pre-pumping conditions, saturated thickness in the northern portion of the site is thickest (approximately 27 ft) at RW-1 and MW-6. The saturated thickness lessens to the west where the thickness is typically 0.5 feet at MW-17. Saturated conditions also decrease towards the east to approximately 21 ft at MW-9. The saturated thickness also decreases toward the southern portion of the site with saturation ranging from approximately 6 feet at MW-13 to approximately 11 feet at MW-14. Furthermore, the upgradient well, MW-1, located south of the building is periodically dry and recently installed well MW-27 contained 1.3 ft of water with limited recharge noted during sample collection. Additional information pertaining to the lack of groundwater in the overburden on the southern side of the Site was obtained from Wells MW-10, 11, 15, and 16 completed by Stearns & Wheler during the initial RI. Although these wells are screened in bedrock, boring logs completed indicate that the overburden was dry at the time of installation. The limited amount of water in this upgradient area of the site suggests that recharge from the south through the overburden is limited. In addition, operation of the groundwater collection trench on the northwest side of the site has reduced the amount of water present in nearby wells where water level measurements typically report dry conditions at wells MW-19, MW-21, and MW-24.

Additional information pertaining to the limited amount of water present in the sand and gravel at the southern portion of the site was obtained during dewatering operations during the excavation of source area soils in Area 2. As described in the Soil Remediation Activities IRM Summary Report (O'Brien & Gere Engineers, October 1994) dewatering was achieved by initially pumping approximately 3,000 gallons to a holding tank inside the former Accurate Die facility. Subsequent to removing the initial volume of stored ground water, it was noted that overburden aquifer yield in this vicinity was only approximately 2 gallons per minute (gpm).

Groundwater occurrence in the bedrock aquifer is limited to fractures. The potentiometric groundwater flow direction in the bedrock is to the northwest towards Bishop Brook under a hydraulic gradient of about 0.04 ft/ft (**Figure 8**).

5. Nature and Extent of Contamination

Based on investigations conducted during the RI and previous investigations and remedial actions, the primary contaminants of concern (COCs) are TCE and cis-1,2-dichloroethene (cis-1,2-DCE). COCs are considered as those contaminants that are sufficiently present in frequency and concentration in site environmental media above regulatory standards, criteria, and guidance (SCGs). The aforementioned COCs were detected most frequently at concentrations above applicable standards, criteria, and guidance (SCGs).

This section presents the nature and extent of Site-related COCs in surface water, sediment, surface soil, near-surface soil, subsurface soil, and overburden and shallow bedrock groundwater. For the purposes of discussion of the nature and extent of contamination, concentrations of detected constituents are compared to the following SCGs:

- For surface water: 6 CRR-NY Part 703.5 standards and guidance values for Class C surface water
- For sediment: NYSDEC freshwater guidance values for Class A sediment provided in *Screening and Assessment of Contaminated Sediment* (NYSDEC, June 24, 2014)
- For soil:
  - 6 CRR-NY Part 375 and CP-51 Unrestricted Use Soil Cleanup Objectives (SCOs)
  - 6 CRR-NY Part 375 and CP-51 Residential Use SCOs
  - 6 CRR-NY Part 375 and CP-51 Restricted-Residential Use SCOs
  - 6 CRR-NY Part 375 and CP-51 Commercial Use SCOs
  - 6 CRR-NY Part 375 and CP-51 Industrial Use SCOs
  - 6 CRR-NY Part 375 and CP-51 Protection of Groundwater (POGW) SCOs
- For groundwater: 6 CRR-NY Part 703.5 standards and guidance values for Class GA groundwater
- For PFAS: SCO guidance values for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS) for the following use categories: Unrestricted, Residential, Restricted-Residential, Commercial, and POGW provided in *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS)* (NYSDEC, January 2021).
- There are no established screening criteria for soil vapor.

5.1 Surface Water and Sediment

Concentrations of detected constituents in surface water were compared to Class C surface water SCGs. Concentrations of detected constituents in sediment were compared to Class A freshwater sediment SCGs. Surface water samples and sediment samples were co-located.

5.1.1 Surface Water

Three surface water samples (SW-01 through SW-03) were collected and analyzed for VOCs, SVOCs, PCBs, metals, cyanide, and hardness during the RI. The locations of these samples are shown in **Figure 3**. SW-03 was collected from an upstream location within the northeastern boundary of the Site and SW-01 was collected at a downstream location within the northern boundary of the Site.

VOC, SVOC, PCB, and metals/cyanide/hardness analytical results for surface water samples collected during the RI are presented in **Table 2** through **Table 5**, respectively.

<u>VOCs</u>

As shown in **Table 2,** no VOCs were detected above the Class C surface water SCGs.

<u>SVOCs</u>
As shown in **Table 3,** no SVOCs were detected in the surface water samples.

<u>PCBs</u>
As shown in **Table 4,** no PCBs were detected in the surface water samples

<u>Metals/Cyanide</u>
As shown in **Table 5,** no metals or cyanide were detected above the Class C surface water SCGs.

5.1.2 Sediment

Three sediment samples (SED-01 through SED-03) were collected during the RI and analyzed for VOCs, SVOCs, PCBs, metals, cyanide, and total organic carbon (TOC). The sediment samples were co-located with the surface water samples. The locations of the samples are shown in **Figure 3**. VOC/Total Organic Carbon (TOC), SVOC, PCB, and metals/cyanide analytical results for the sediment samples are presented in **Table 6** through **Table 9**, respectively.

<u>VOCs</u>
As shown in **Table 6,** no VOCs were detected above the Class A sediment SCGs.

<u>SVOCs</u>
As shown in **Table 7**, no SVOCs were detected above the Class A sediment SCGs.

<u>PCBs</u>
As shown in **Table 8,** no PCBs were detected in the sediment samples.

<u>Metals/Cyanide</u>
As shown in **Table 9,** no metals or cyanide were detected above the Class A sediment SCGs.

Surface Water and Sediment Summary
Constituents detected in surface water and sediment samples did not exceed the applicable SCGs.

5.2 Surface Soil

Surface soil samples were collected from seventeen locations (SS-01 through SS-17) during the RI investigation. Surface soil samples were collected from 0-2-inches below vegetative surface cover. The surface soil sample locations were distributed across the property as shown on **Figure 3**. At each location composite samples were collected from 0-2-inch interval and analyzed for SVOCs, PCBs, metals, and cyanide. In addition, one surface soil sample was analyzed for PFAS and 1-4 Dioxane.

Concentrations of constituents identified in the surface soils were compared to SCGs as follows:

- 6NYCRR Part 375 and CP-51 Unrestricted Use SCOs
- 6NYCRR Part 375 and CP-51 Residential Use SCOs
- 6NYCRR Part 375 and CP-51 Restricted-Residential Use SCOs
- 6NYCRR Part 375 and CP-51 Commercial Use SCOs
- 6NYCRR Part 375 and CP-51 Industrial Use SCOs
- 6NYCRR Part 375 and CP-51 POGW SCOs

SVOC (including 1,4-dioxane), PCB, metals/cyanide, and PFAS analytical results are presented in **Table 10** through **Table 13,** respectively. **Figure 9** presents the constituents exceeding one or more of the identified SCOs in the surface soil samples.

SVOCs

As shown in **Table 10** and **Figure 9,** four SVOCs (benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene) were detected at SS-15 at concentrations exceeding one or more of the SCGs as follows:

Constituent	Number of Exceedances	Range in Concentration (μg/Kg)	SCO Exceedance Use Category
Benzo(a)pyrene	1	1,300 J	Unrestricted Residential Restricted-Residential Commercial Industrial
Benzo(b)fluoranthene	1	1,700 J	Unrestricted Residential Restricted-Residential
Chrysene	1	1,100 J	Unrestricted Residential
Indeno(1,2,3-cd)pyrene	1	1,100 J	Unrestricted Residential Restricted-Residential

As shown on **Figure 9**, sample SS-15 was located near the northeast corner of the asphalt parking area, which is significantly weathered/deteriorated. The SVOCs detected above SCOs SS-15 are specifically polyaromatic hydrocarbons (PAHs) and PAHs are known to be components of asphalt. The SVOCs detected in the SS-15 sample are attributed to the close proximity of the SS-15 sample location to the asphalt parking lot and its deteriorated state. No other SVOCs were detected in surface soil samples at concentrations exceeding soil SCGs.

PCBs

As shown in **Table 11**, PCBs were not detected in the surface soil samples.

Metals/Cyanide

As shown in **Table 12** and **Figure 9**, four metals (arsenic, lead, mercury, and zinc) were detected at concentrations above one or more SCGs as follows:

Constituent	Number of Exceedances	Range in Concentration (mg/Kg)	SCO Exceedance Use Category
Arsenic	1	20.7 (SS-02)	Unrestricted Residential Restricted-Residential Commercial Industrial
Copper	1	53.3 (SS-04)	Unrestricted

Constituent	Number of Exceedances	Range in Concentration (mg/Kg)	SCO Exceedance Use Category
Lead	1	74.1 (SS-12)	Unrestricted
Mercury	3	0.204 (SS-04) – 0.303 (SS-12)	Unrestricted
Zinc	5	121 (SS-08) – 347 (SS-04)	Unrestricted

Cyanide was not detected at concentrations above soil SCGs.

PFAS
As shown in **Table 13**, five PFAS compounds were detected at low levels in SS-01. As shown on **Table 13**, NYSDEC has established guidance values for two PFAS compounds (PFOA and PFOS). PFOS was detected in SS-01 at 1.0 nanogram per gram (ng/g) and at an estimated concentration of 1.1 ng/g in the associated field duplicate sample. These concentrations marginally exceed the Unrestricted SCO guidance value of 0.88 ng/g but were less than the Residential SCO of 8.8 ng/g. PFOA did not exceed the SCOs.

Surface Soil Summary
Table 14 provides a summary of the frequency of constituents detected in surface soil above SCOs and the associated range in detected concentrations above SCOs. As indicated on **Table 14**, seventeen surface soil samples were collected and analyzed for SVOCs. Of the 17 samples, one sample, collected at location SS-15, exhibited concentrations of benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene marginally above Unrestricted, Residential, Restricted-Residential, and Commercial SCOs. The concentration of benzo(a)pyrene was also marginally above the Industrial SCO. As discussed above, the presence of these SVOCs in the SS-15 sample is attributed to the sample location’s close proximity to a significantly weathered/deteriorated asphalt parking lot. The presence of these SVOC in this location are not considered to be related to historic Site use or disposal practices.

Seventeen samples were collected and analyzed for metals and cyanide. Arsenic was detected in 1 of 17 samples at a concentration above the Unrestricted, Restricted, Restricted-Residential, and Commercial SCOs. Concentrations of copper and lead in two of 17 individual samples, mercury in three of 17 samples, and zinc in five of 17 samples were above the Unrestricted SCO, but below the Restricted, Restricted-Residential, and Commercial SCOs. Given that these metals were detected infrequently above SCOs and at relatively low concentrations and are distributed distant from the former manufacturing building and not associated with historic manufacturing operations, their presence are considered to be naturally occurring. Cyanide was not detected at concentrations above soil SCGs.

Surface soil sample SS-01-0-2 contained PFOS concentration of 1 ng/g. This concentration is marginally above the Unrestricted SCO guidance criteria of 0.88 ug/kg and well below the Restricted, Restricted-Residential, and Commercial SCO guidance. The SS-01 location is in the lawn area south of the former manufacturing building which has no association with historic manufacturing processes or disposal practices.

5.3 Near-Surface Soil

Near-surface soil samples were collected from seventeen locations (SS-01 through SS-17). The locations of near-surface soil samples are shown on **Figure 3**. As discussed in Section 3.5.1, surface soil samples were collected from different depth intervals to evaluate potential exposure pathways and whether the upper 2 ft of material is suitable for a cover per Section 4.1 of DER-10. Samples for VOC analysis were collected as grab samples from two depth intervals (5 and 18-inches) with the exception of the SS-06 location where the grab samples were collected from 8 and 18 inches. At each location composite samples were collected from three depth intervals (0-2, 2-12, and 12-24 inches) for a total of 51 samples which were for analysis of SVOCs, PCBs, metals, and cyanide. In addition, three samples were analyzed for PFAS and 1-4 Dioxane.

Concentrations of constituents identified in the near-surface soils were compared to SCGs as follows:

- 6 CRR-NY Part 375 and CP-51 Unrestricted Use SCOs
- 6 CRR-NY Part 375 and CP-51 Residential Use SCOs
- 6 CRR-NY Part 375 and CP-51 Restricted-Residential Use SCOs
- 6 CRR-NY Part 375 and CP-51 Commercial Use SCOs
- 6 CRR-NY Part 375 and CP-51 Industrial Use SCOs
- 6 CRR-NY Part 375 and CP-51 POGW SCOs

SVOC (including 1,4-dioxane), PCB, metals/cyanide, and PFAS analytical results are presented in **Tables 15** through **Table 19,** respectively. **Figure 9** presents the constituents exceeding one or more of the identified SCOs in the surface soil samples.

VOCs
As shown in **Table 15** and **Figure 9**, VOCs were not detected at concentrations above the soil SCGs.

SVOCs
As shown in **Table 16** and **Figure 9,** four SVOCs (benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene) were detected at SS-15 at concentrations exceeding one or more of the soil SCGs as follows:

Constituent	Number of Exceedances	Range in Concentration (µg/Kg)	SCO Exceedance Use Category
Benzo(a)pyrene	2	1,300 J (SS-15_0-2) – 1,600 J SS-15_2-12)	Unrestricted Residential Restricted-Residential Commercial Industrial
Benzo(b)fluoranthene	2	1,700 J (SS-15_0-2) – 1,900 J SS-15_2-12)	Unrestricted Residential Restricted-Residential
Chrysene	2	1,100 J (SS-15_0-2) – 1,200 J SS-15_2-12)	Unrestricted Residential
Indeno(1,2,3-cd)pyrene	2	1,100 J (SS-15_0-2) – 1,200 J SS-15_2-12)	Unrestricted Residential

As shown on **Figure 9**, sample SS-15 was located near the northeast corner of the asphalt parking area, which is significantly deteriorated. The SVOCs detected above SCOs SS-15 are specifically polyaromatic hydrocarbons (PAHs) and PAHs are known to be components of asphalt. The SVOCs detected in the SS-15 sample are attributed to the close proximity of the SS-15 sample location to the asphalt parking lot and its deteriorated state. No other SVOCs were detected in surface soil samples at concentrations exceeding soil SCGs.

<u>PCBs</u>

As shown in **Table 17,** PCBs were not detected above the soil SCGs.

<u>Metals/Cyanide</u>

As shown in **Table 18**, eight metals including arsenic, chromium, copper, lead, manganese, mercury, nickel, and zinc were detected at concentrations above soil SCGs as follows:

Constituent	Number of Exceedances	Range in Concentration (mg/Kg)	SCO Exceedance Use Category
Arsenic	1	20.7 (SS-02_0-2)	Unrestricted Residential Restricted-Residential Commercial Industrial
Chromium	1	39.7 (SS-13_2-12)	Unrestricted Residential
Copper	2	53.3 (SS-04_0-2) – 65.7 (SS-13_2-12)	Unrestricted
Lead	2	65.8 (SS-17_12-24) – 74.1 (SS-12_0-2)	Unrestricted
Manganese	1	2,030 (SS-13_2-12)	Unrestricted Residential Restricted- Residential
Mercury	5	0.2 (SS-12_2-12) 0.3 (SS-12_0-2)	Unrestricted
Nickel	1	37.5 (SS-13_2-12)	Unrestricted
Zinc	13	110 (SS-12_2-12) – 347 (SS-04_0-2)	Unrestricted

Cyanide was not detected at concentrations above soil SCGs.

<u>PFAS</u>

As shown in **Table 19**, five PFAS compounds were detected at low levels in SS-01. As shown on **Table 19**, NYSDEC has established guidance values for two PFAS compounds (PFOA and PFOS). PFOS was detected in SS-01 at 1.0 nanogram per gram (ng/g) and at an estimated concentration of 1.1 ng/g in the associated field duplicate sample. These concentrations marginally exceed the Unrestricted SCO guidance value of 0.88 ng/g. PFOA did not exceed the SCOs.

<u>Near-Surface Soil Summary</u>

Table 14 provides a summary of the frequency of constituents detected in near-surface soil above SCOs and the associated range in detected concentrations above SCOs. As indicated on

Table 14, thirty-four near-surface soil samples were collected and analyzed for VOCs. No VOCs were detected at concentrations above soil SCGs.

Fifty-one near-surface soil samples were collected and analyzed for SVOCs. Of the 51 samples, two samples, collected at location SS-15, exhibited concentrations above soil SCGs (Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs). However, as discussed above, the presence of SVOCs in the SS-15 sample is attributed to the sample location's close proximity to a significantly weathered/deteriorated asphalt parking lot. The presence of SVOC in this location are not considered to be related to historic Site use or disposal practices.

Fifty-one near-surface soil samples were collected and analyzed for PCBs. PCBs were not detected above the soil SCGs.

Fifty-one samples were collected and analyzed for metals and cyanide. Arsenic was detected in one of 51 samples at a concentration above the Unrestricted, Restricted, Restricted-Residential, Commercial, and Industrial SCOs. Manganese was detected in one of 51 samples at a concentration above the Unrestricted, Restricted, and Restricted-Residential SCOs. Chromium was detected in one of 51 samples at a concentration above the Unrestricted and Residential SCOs. Concentrations of copper and lead in two of 51 individual samples, mercury in three of 51 samples, nickel in one of 51 samples, and zinc in 12 of 51 samples were above the Unrestricted SCO, but below the Restricted, Restricted-Residential, and Commercial SCOs. Given that these metals were detected infrequently above SCOs and at relatively low concentrations and are distributed distant from the former manufacturing building and not associated with historic manufacturing operations, their presence is considered to be naturally occurring. Cyanide was not detected at concentrations above soil SCGs.

Surface soil sample SS-01-0-2 contained PFOS concentration of 1 ng/g. This concentration is marginally above the Unrestricted SCO guidance criteria of 0.88 ug/kg and well below the Restricted, Restricted-Residential, and Commercial SCO guidance. The SS-01 location is in the lawn area south of the former manufacturing building which has no association with historic manufacturing processes or disposal practices.

5.4 Subsurface Soil

A total of 26 subsurface soil samples were collected and analyzed from 21 soil borings locations (SB-MIP-1, SB-MIP-3 through SB-MIP-6, and SB-20-1 through SB-20-16). The locations of soil borings are shown on **Figures 3 and 4**. Concentrations of constituents detected in subsurface soils were compared to SCGs as follows:

- 6 CRR-NY Part 375 and CP-51 Unrestricted Use SCOs
- 6 CRR-NY Part 375 and CP-51 Residential Use SCOs
- 6 CRR-NY Part 375 and CP-51 Restricted-Residential Use SCOs
- 6 CRR-NY Part 375 and CP-51 Commercial Use SCOs
- 6 CRR-NY Part 375 and CP-51 Industrial Use SCOs
- 6 CRR-NY Part 375 and CP-51 POGW SCOs

VOC, SVOC (including 1,4-dioxane), PCB, metals/cyanide, and PFAS analytical results are presented in **Tables 20** through **24,** respectively. **Figure 10** presents the constituents exceeding one or more of the identified SCOs in the subsurface soil samples.

5.4.1 Building Area Soil

5.4.1.1 Eastern Portion of the Former Manufacturing Building

Ten subsurface soil samples were collected from five soil boring locations (SB-MIP-1 and SB-MIP-3 through SB-MIP-6) advanced beneath the floor slab within the eastern portion of the former manufacturing building. The samples were analyzed for VOCs and one sample was analyzed for PFAS.

VOCs

As shown in **Table 20** and **Figure 10**, one VOC, TCE, was detected at concentrations above soil SCGs as follows:

Constituent	Number of Exceedances	Range in Concentration (µg/Kg)	SCO Exceedance Use Category
TCE	3	670 D (SB-MIP-3_22-24) - 24,000 D (SB-MIP-6_23-25)	Unrestricted Residential Restricted- Residential Protection of Groundwater

As described in Section 2.4, subsurface soils outside of the northeast corner of the building (Area 2) exhibiting TCE above the RAOs were removed to the extent practicable in 1994. As noted in the *Interim Remedial Measure Summary Report* (O'Brien & Gere, 1994b), confirmation samples collected along the northern side of the building foundation identified TCE at concentrations of 4 to 24 mg/kg at the contact between the granular soil and the underlying lodgement till which was between 20 and 25 ft below grade and consistent with what has been observed at borings completed within the building during the RI.

PFAS

As shown in **Table 24**, one subsurface soil sample (SB-MIP-6-8-10) was collected and analyzed for PFAS. No PFAS compounds were detected in the soil sample, although one PFAS compound, perfluorooctane sulfonamide (FOSA) was detected in the duplicate sample (FD-1) at an estimated concentration of 0.077 ng/g.

5.4.1.2 Western End of Building

Twelve subsurface soil samples were collected from 12 soil boring locations (SB-20-1 through SB-20-4 and SB-20-6 through SB-20-13) advanced beneath the floor slab within the western portion of the former manufacturing building to assess whether residuals from former manufacturing operations were present in the underlying soil. Locations of the subsurface soil samples are shown in **Figure 4**. One soil sample was collected from each location based on PID readings and visual observations.

The analytical results of subsurface soil samples collected are presented in **Tables 20** through **Table 24. Figure 10** presents the constituents detected in subsurface soils which are above one or more of the identified SCOs.

VOCs

As shown in **Table 20**, VOCs were not detected at concentrations above the soil SCGs.

SVOCs

As shown in **Table 21,** SVOCs were not detected at concentrations above the soil SCGs.

PCBs

As shown in **Table 22,** two PCB aroclors were detected in one soil sample (SB-20-7-3-5). The total of these PCB aroclors total is 112 µg/Kg which is slightly above the Unrestricted SCO of 100 µg/Kg; however no PCBs were detected in the associated field duplicate for this sample.

Metals/Cyanide

As shown in **Table 23,** zinc was detected in soil sample SB-20-2-8-10 at a concentration of 118 mg/Kg which is marginally above the Unrestricted SCO of 109 mg/Kg. Cyanide was not detected at concentrations above soil SCGs.

PFAS

As shown in **Table 24**, one subsurface soil sample (SB-20-8-7-9) was analyzed for PFAS. No PFAS compounds were detected in this soil sample.

5.4.2 PCB/PAH/VOC Area (Area 1)

One subsurface soil sample was collected from each of two soil boring locations (SB-20-15 and SB-20-16) in the PCB/PAH/VOC area and analyzed for VOCs, SVOCs, PCBs, metals, and cyanide. One sample was analyzed for PFAS. Locations of the subsurface borings are shown in **Figure 3**. The selection of the sample interval for analysis was made based on PID readings and visual observations.

Analytical results for the subsurface soil samples collected are presented in **Tables 20** through **Table 24. Figure 10** presents the constituents identified at concentrations that exceed one or more of the identified SCOs.

VOCs

As shown in **Table 20** and **Figure 10**, TCE and cis-1,2-DCE were detected at concentrations exceeding SCOs in one soil sample, SB-20-16-9-12. cis-1,2-DCE was detected at an estimated concentration of 7,600 µg/Kg which is above the Unrestricted and POGW SCOs. TCE was detected at 23,000 µg/Kg which is above the Unrestricted, Residential, Restricted-Residential, Commercial, and POGW SCOs.

SVOCs

As shown in **Table 21**, SVOCs were not detected at concentrations above the soil SCGs.

PCBs

As shown in **Table 22**, PCBs were not detected in either of the two soil samples.

Metals/Cyanide

As shown in **Table 23**, metals and cyanide were not detected at concentrations above the soil SCGs.

PFAS

As shown in **Table 24**, one subsurface soil sample (SB-20-16-9-12) was collected for PFAS analysis. FOSA and sodium 1H,1H,2H,2H-perfluorooctane sulfonate (6:2) were detected at concentrations of 0.12 ng/g (estimated) and 1.1 ng/g, respectively. Neither of these compounds have specified soil SCGs.

5.4.3 USTs Area

One subsurface soil sample was collected from each of two soil borings (SB-20-14 and SB-20-5) located adjacent to the former fuel oil and former gasoline USTs. The locations of the borings are shown in **Figure 4**. At each location, a subsurface soil sample was collected from one depth interval based on PID readings and visual observations.

VOC, SVOC, and lead analytical results are presented in **Table 20, Table 21,** and **Table 23**, respectively. **Figure 10** presents the constituents identified in each sample at concentrations that exceed one or more of the identified SCOs.

<u>VOCs</u>
As shown in **Table 20**, no VOCs were detected in the soil sample collected near the former fuel oil UST at concentrations above soil SCGs.

As noted in Section 3.2, the soil sample container for the sample collected from the soil boring near the former gasoline UST (SB-20-5-9-11) arrived broken at the laboratory and therefore could not be analyzed. However, a field duplicate (FD-1-020320) was collected from SB-20-5-9-11 soil sample and analyzed for VOCs.

The analytical results of FD-1-020320 contains concentrations of BTEX at concentrations exceeding the Unrestricted SCOs. This boring was located adjacent to the former UST on the western end of the building. This UST was removed in 1995. The sample was collected from 9 to 11 ft below grade where an odor and PID readings were noted. Review of the drilling log indicates that this interval was unsaturated and located on top of the dense lodgement till.

As shown in **Table 20**, VOCs were detected in the field duplicate sample for SB-20-5-9-11. Five of the VOCs were detected above Unrestricted SCOs as shown on the following table.

Constituent	Number of Exceedances	Range in Concentration (µg/Kg)	SCO Exceedance Use Category
Benzene	1	130 DJ J µg/kg (FD-1-020320)	Unrestricted
Ethylbenzene	1	1,400 D µg/kg (FD-1-020320)	Unrestricted
m,p-Xylene	1	5,200 D µg/kg (FD-1-020320)	Unrestricted
o-Xylene	1	2,100 D µg/kg (FD-1-020320)	Unrestricted
Toluene	1	2,500 D µg/kg (FD-1-020320)	Unrestricted

<u>SVOCs</u>
As shown in **Table 21**, SVOCs were not detected in the soil sample.

<u>Lead</u>
As shown in **Table 23**, the detected concentration of lead was not above soil SCGs.

<u>Subsurface Soil Summary</u>
Analytical data for soil samples collected beneath the eastern portion of the former manufacturing building indicate that TCE, cis-1,2-DCE, and BTEX were detected above SCOs. These VOC SCO exceedances were detected in the following areas:

- TCE – eastern end of the former manufacturing building (near Area 2) and the PCB/PAH/VOC area (Area 1)
- cis-1,2-DCE – PCB/PAH/VOC area (Area 1)
- BTEX – former gasoline UST tank along the western side of the former manufacturing building

As discussed in Section 3.5.2.1, a MIP investigation was conducted beneath the eastern portion of the former manufacturing building to assess whether chlorinated VOCs were present in the soils beneath the building slab. The six MIP locations are shown on **Figure 4**.

Review of the MIP information indicated that the MIP was advanced to between 16 and 25 ft below the building floor. The EC responses suggest that finer grained material, suggestive of the lodgement till, was encountered at depths of 16 to 18 ft below the floor. The XSD generally did not exhibit responses with the exception of a slight response within fine-grained material at 23 ft at MIP-4 which is located sightly north of MW-14. This information suggests that high concentrations of VOCs are not present within the soil to depths of approximately 20 feet beneath the eastern portion of the former manufacturing building.

Within the eastern portion of the former building, TCE was detected at depths ranging between 20 and 25 feet below the building slab at concentrations above SCOs ranging from 670 µg/Kg to 24,000 µg/Kg. At SB-MIP-3, TCE was detected at 670 mg/Kg which is marginally above the Unrestricted SCOs. At SB-MIP-5, TCE was detected at 11,000 mg/Kg which is above the Unrestricted, Residential, and POGW SCOs. At SB-MIP-6, TCE was detected at 24,000 mg/Kg which is above the Unrestricted, Residential, Restricted-Residential, and POGW SCOs. As mentioned in Section 2.4, degreasing solvents were dumped immediately outside the building where the main building and the eastern building extension join, and during 1994, soils exhibiting TCE above the established remedial action objectives identified in the ROD were removed to the extent practicable without undermining the existing building foundations. SB-MIP-5 and SB-MIP-6 were installed along the interior wall of the eastern building extension and in close proximity to the outside area where the degreasing solvent was historically dumped over time. The presence of TCE at the concentrations detected in the deeper soil samples from SB-MIP-5 and SB-MIP-6 suggests that the historically dumped degreasing solvent migrated vertically downward and then to the south, likely controlled by the elevation of the top of the dense lodgement till, to areas beneath the building interior. SB-MIP-3 is located approximately 40 feet south of SB-MIP-5 and SB-MIP-6 and the deeper soil TCE concentration at SB-MIP-3 is two-orders of magnitude lower compared to the deeper soil concentrations at SB-MIP-5 and SB-MIP-6. VOCs were not detected at concentrations above soil SCOs in the 12 samples collected from the western portion of the former manufacturing building.

At the PCB/PAH/VOC area (Area 1), TCE and cis-1,2-DCE were detected in SB-20-16 at a depth between 9 and 12 feet below grade at concentrations of 230,000 µg/Kg and 7,600 µg/Kg, respectively. The detected concentration of TCE is above the Unrestricted, Residential, Restricted-Residential, Commercial, and POGW SCOs. The detected concentration of cis-1,2-DCE is above the Unrestricted and POGW SCOs. As shown on **Figure 2**, a groundwater collection trench was installed downgradient of the PCB/PAH/VOC area to control downgradient migration of VOCs from this area.

The former fuel oil UST is located within the building extension off the northwest corner of the main building (**Figure 2**). The former fuel oil UST was closed in-place during April 1995. Soil boring SB-20-14 was advanced at the former fuel oil UST and one soil sample was collected from 7 to 9 feet below the building slab and analyzed for VOCs and SVOCs to evaluate soil quality beneath the bottom of the UST. VOCs were not detected in the sample at concentrations above soil SCOs and SVOCs were not detected in the sample.

The former gasoline UST was located along the western side of the former manufacturing building (**Figure 2**). The former gasoline UST was removed during March 1995. BTEX was detected at concentrations above the Unrestricted SCOs in the soil sample collected from 9 to 11 feet below grade. A petroleum odor was noted and PID screening detected the presence of VOCs in this depth interval. Review of the drilling log for SB-20-5 indicates that the 9 to 11-ft interval was unsaturated and located on top of the dense lodgement till. No additional odors or PID responses were observed from approximately 11 feet to the terminal depth of the boring at 20 feet below grade.

5.5 Nature and Extent of Constituents in Groundwater

As discussed in Section 2.4 of this RIR, a groundwater monitoring program for the Site was established in 1998 and is conducted in accordance with the NYSDEC-approved *Sampling and Analysis Plan* (SAP) dated March 1996 (O'Brien & Gere, 1996). Presently, the SAP requires sampling of select monitoring wells on two occasions each year, during the Spring (semi-annual event) and Fall (annual event), and analyses for VOCs.

As requested by NYSDEC and outlined in the 2024 Supplemental RI Work Plan, an additional set of groundwater samples was collected from the monitoring well network (including the new wells) and analyzed for TCL VOCs, TCL SVOCs, Pesticides, PCBs, and TAL metals.

Table 25 presents the detected constituents from the 2024 groundwater sampling event. Concentrations of these compounds are compared to Class GA Groundwater Standards and Guidance values as compiled in the New York Division of Water Technical and Operational Guidance Series 1.1.1 titled *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* dated June 1998 with addenda (TOGs 1.1.1) and used to provide context for describing the nature and extent of constituents in the overburden and bedrock groundwater at the Site. As discussed in Section 3.6, samples were collected from up to 11 overburden monitoring wells and 3 bedrock monitoring wells. Some wells were not analyzed for all of the methods due to low sample volumes.

Overburden Groundwater

<u>VOCs</u>

TCE is the primary contaminant of concern in the Site groundwater and was detected in at concentrations exceeding Class GA SCGs in eight of the 11 well sampled. cis-1,2-DCE was also detected exceeding Class GA SCGs in six monitoring wells located in the northwest area of the Site property. The Sample from MW-27 located adjacent to the former UST also contained elevated concentrations of ethybenzene, toluene, and xylenes which were above the Class GA SCGs.

The table below summarizes this exceedances and ranges of concentrations of VOCs in overburden monitoring wells:

Constituent	Number of Exceedances	Range of Exceedances
TCE	8	11 µg/L (MW-22) – 290 µg/L (MW-18)
cis-1,2-DCE	6	12 µg/L (MW-24) – 120 µg/L (MW-18)
Ethylbenzene	1	980 µg/L (MW-27)
Toluene	1	1,200 µg/L (MW-27)
Xylenes	1	5,300 µg/L (MW-27)

Figure 11 depicts the VOCs detected in the overburden groundwater during the 2024 sampling event. A number of these monitoring wells are sampled for VOC analysis on a routine basis as

part of the long term groundwater monitoring program associated with the groundwater recovery and treatment program. Consistent with the long-term monitoring data, the highest concentrations are present in the overburden. There are two areas on-Site where concentrations of these constituents are notable.

- Beneath the eastern side of the building near the former source area
- In vicinity of the CAMU on the northwest corner of the property

Trend graphs showing TCE concentrations in from the 2024 Periodic Review report associated with the long term monitoring program, are provided in **Appendix F**. As shown on these graphs, declines in TCE concentrations of up to one to two orders of magnitude of have occurred over time in most of the monitoring wells and concentrations are relatively constant with some seasonal variations observed. This indicates that progress is being made toward meeting the remedial objectives established by the 1994 ROD.

Chlorinated VOCs are present in the two new wells located on the northwest side of the property, MW-25 and MW-26. The VOCs detected in MW-26 consists almost entirely of cis-1,2-DCE which suggests that the VOCs have degraded. Historic groundwater data is not available for this area of the site to assess trends in concentrations to support further evaluation.

SVOCs

The only SVOC detected in the groundwater samples was di-n-butylphthalate in one well (MW-26) at a concentration well below the Class GA SCG.

Pesticides

Five different pesticides were detected once at five different wells. The concentrations were below their respective Class GA SCGs.

PCBs

No PCBs were detected in the groundwater samples.

Inorganics

The following inorganic constituents were identified to be present at concentrations above the Class GA SCG in one or more of the eight wells where samples were analyzed: barium, chromium, iron, lead, magnesium, manganese and sodium. These constituents are naturally present in soil and bedrock.

Constituent	Number of Exceedances	Range of Exceedances
Barium	1	2.1 mg/L (MW-12)
Chromium	2	0.22 mg/L (MW-5) to 1 mg/L (MW-12)
Iron	4	1.8 mg/L (MW-26) to 70.4 mg/L (MW-12)
Lead	1	0.049 mg/L (MW-12)
Magnesium	2	52.7 mg/L (MW-25) tot 218 mg/L (MW-12)
Manganese	2	0.61 mg/L (MW26) to 2.1 mg/L (MW-12)
Sodium	1	40.4 mg/L (MW-12)

As illustrated on the above table, MW-12 generally contained the highest concentration of inorganic constituents above the Class GA SCGs. This well is located in the vicinity of the former septic tank which was evacuated and closed in place in 1995 as shown on **Figure 12**.

Bedrock Groundwater

VOCs

TCE was the only VOC detected at concentrations exceeding Class GA SCGs. cis-1,2-DCE was not detected. **Figure 13** depicts the VOCs detected in the bedrock groundwater during the 2024 sampling event.

The table below summarizes this exceedances and ranges of concentrations of VOCs in the bedrock monitoring wells:

Constituent	Number of Exceedances	Range of Exceedances
TCE	2	17 µg/L (MW-15(B)) – 570 µg/L (MW-11B)

SVOCs

Samples collected from three of the four bedrock wells were analyzed for SVOCs. No SVOCs were detected.

Pesticides

Two different pesticides were detected once at two different wells. The concentrations were below their respective Class GA SCGs.

PCBs

No PCBs were detected in the groundwater samples.

Inorganics

The following inorganic constituents were identified to be present at concentrations above the Class GA SCG in one or two of the three wells where samples were analyzed: chromium, iron, magnesium, and sodium. These constituents are naturally present in soil and bedrock.

Constituent	Number of Exceedances	Range of Exceedances
Chromium	1	0.2 mg/L (MW-15(B))
Iron	1	0.96 mg/L (MW-15(B))
Magnesium	3	43.6 mg/L (MW-23(B) to 63.8 mg/L (MW-15(B))
Sodium	2	50.1 mg/L (MW-11(B)) tot 182 mg/L (MW-23(B))

The distribution of the inorganics in bedrock groundwater is depicted on **Figure 14**.

5.6 Nature and Extent of Constituents in Soil Vapor, Sub-Slab Vapor, and Indoor Air

Soil Vapor

Table 26 summarizes the VOCs detected in the 10 soil vapor samples collected in 2024. The results of the soil vapor samples collected during May 2006 are provided in Table 2 of the *Technical Memorandum – Vapor Intrusion Evaluation Results* (Technical Memorandum; O’Brien &

Gere, September 18, 2006) included as **Attachment B**. As noted on Table 26, a sample was collected from the SV-03 location in 2024. A sample was not able to be collected from this location in 2006 due to lack of air flow.

Figure 15A and **Figure 15B** present the sample results for each of the VOCs contained in matrices A through F associated with the NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 (with updates).

As previously discussed, TCE and cis-1,2-DCE are the primary Site-related COCs. These two compounds as well as trans-1,2-dichlorotethylene (TDCE) and tetrachloroethylene (PCE) were also detected in one or more the samples. A general comparison of the concentrations of TCE in the 2024 samples with those collected in 2006 that concentrations are generally similar with a few exceptions. TCE concentrations at locations SV-04 and SV-07 in 2024 were less than their respective concentrations in 2006. These sample points are located on the east side of the site (**Figure 15B**). On the southwest side of the site, the TCE concentrations in sample SV-01, located on the west side of the site near the former pumphouse, was 1,400 µg/m^3 and 920 µg/m^3 as compared to the 2006 concentration of 37 µg/m^3. In addition, the concentration of TCE in SV-10, located on the southwest corner, was 24 µg/m^3 in 2024 and was non detect in 2006 (**Figure 15A**). As there have been no changes in site activities or site conditions since 2006, the cause of increases at the SV-01 and SV-10 locations is unknown.

Other detected compounds include petroleum-related compounds, such as benzene, toluene ethylbenzene and xylene (BTEX) as well as other petroleum compounds were also present at concentrations below 15 µg/m^3. These compounds were found in nearly every soil vapor sample. The concentrations of these compounds are generally higher in samples near Genesee Street. The source of these petroleum residuals is likely associated with uses of the parking lots, roadways as well as nearby service station/quick mart and the historic storage and use of gasoline on the western side property.

The potential for vapor intrusion into off-Site structures was further investigated in 2006. Based on the results of this investigation, vapor intrusion mitigation systems were recommended and installed at five off-Site properties. These systems are currently being managed under an *Operation and Maintenance Plan for Off-Site Vapor Intrusion Mitigation Systems* (O'Brien & Gere, 2009) that includes annual inspections and reporting.

Sub-Slab and Indoor Air

As discussed in Section 2 of the Technical Memorandum, on-Site vapor intrusion was evaluated in 2006. Paired sub-slab and indoor air sample sets were collected throughout the building at eight locations shown in Figure 2 of the Technical Memorandum. In addition to and concurrent with indoor air sampling, an ambient air sample was collected immediate to and upwind of the on-Site building to assess the potential of impacts from upwind air sources on indoor air concentrations. The ambient air sample was located west of the building, at the top of stairs leading down to a small field, as shown on Figure 2 of the Technical Memorandum.

Guidance for evaluating and managing potential vapor intrusion is provided in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH, October 2006) which was the version available at the time the evaluation was completed.

Review of the analytical data indicates that TCE was detected at the highest concentrations in sub-slab vapor and indoor air. These data, as well as other VOC constituents that are included in the decision matrices, are shown on **Figure 16**. Based on the decision matrix A, the concentrations of TCE would require mitigation should the on-Site building become occupied.

6. Transport and Fate

As described in Section 5 above, this RI identified the presence of Site-related constituents as well as other detected compounds that exceeded regulatory criteria. The fate and transport of these compounds are discussed in this section.

6.1 Site-Related Constituents of Concern

Based on investigations conducted during the RI and previous investigations and remedial actions, the primary COCs are TCE, cis-1,2-DCE, and BTEX. COCs are considered as those contaminants that are sufficiently present in frequency and concentration in site environmental media above regulatory standards, criteria, and guidance (SCGs). The aforementioned VOCs were detected most frequently at concentrations above applicable standards, criteria, and guidance (SCGs). Other constituents such as SVOCs, and metals were also detected during the RI exceeding SCOs but are not considered related to Site activities. As indicated in Sections 5.2 and 5.3, SVOCs were detected at one sample location (SS-15) to a depth of 12-inches below grade and they are most likely attributable to the sample location proximity to the asphalt parking lot, which is significantly deteriorated. Regarding metals, detected concentrations are considered representative of background conditions as they are relatively low in concentration and not associated with former manufacturing processes used at the Site. The following is a list of Site COCs exceeding SCOs, that were documented during the RI and the media they are associated with:

- TCE – Subsurface soil and groundwater
- cis-1,2-DCE – Subsurface soil and groundwater

The transport and fate of Site-related constituents is discussed below.

6.2 Transport and Fate of COCs in Subsurface Soils

COCs were detected in subsurface soil samples collected on-Site. Analytical data generated during the current recent RI identified TCE in soil samples collected from beneath the eastern end of the former manufacturing building and TCE and cis-1,2-DCE beneath the PCB/PAH/VOC area (Area 1). Of the 10 soil samples collected for analysis from beneath the eastern portion of the former manufacturing building, three contained TCE at concentrations above Unrestricted SCOs, one of them was also above the Residential SCO and one was above Residential and Restricted-Residential SCOs. One soil sample collected from beneath the PCB/PAH/VOC area contained TCE above Commercial SCO and cis-1,2-DCE above Unrestricted SCOs. BTEX was detected in subsurface soil at concentrations above the Unrestricted SCO at one location, which was near the former gasoline UST located on the western side of the former manufacturing building.

The soil beneath the east end of the former manufacturing building is under the building slab and soil beneath the former gasoline UST area is under an asphalt driveway. As such, the transport mechanisms are limited to the migration of vapors and transport by groundwater. Henry's Law suggests that TCE, cis-1,2-DCE, and BTEX are relatively volatile and therefore, can be expected to volatilize into and migrate as soil vapors.

When groundwater is in contact with these soils, VOCs would be expected to dissolve into the groundwater and be transported with groundwater flow. Groundwater concentrations near and downgradient of these existing subsurface soils suggest that the existing subsurface soils have impact on groundwater quality. Additional discussion about the transport and fate of groundwater is presented below.

Volatilization of VOCs to soil vapor and dissolution into groundwater will act to reduce VOCs concentrations in the subsurface soils. The Site COCs are susceptible to biodegradation and abiotic degradation.

6.3 Transport and Fate of COCs in Groundwater

Dissolved COCs in groundwater will migrate with groundwater flow. As such, the area of highest VOC concentration in groundwater will also migrate downgradient unless there is a continuing source of VOCs.

There are no current Site activities that act as a continuing source of COCs to the groundwater. In addition, no remnant tanks or other potential sources have been identified on-Site. Non-aqueous phase liquid (NAPL), that has entered the subsurface in the past, can act as a residual source of groundwater impact. However, NAPL was not observed during the installation of soil borings and NAPL has not been documented in soil borings or monitoring wells.

Transport of Site COCs can be affected by multiple attenuation processes that will govern the rate of transport and downgradient concentrations. Processes that can limit the downgradient migration and concentration in groundwater include diffusion, dispersion, volatilization, sorption, and biologic and abiotic degradation. Some degree of diffusion, dispersion, and sorption is likely occurring, as is the case in most groundwater systems. Also, some degree of biodegradation of Site COCs is occurring.

Volatilization is occurring as evidenced by the presence of Site COCs in historic soil vapor and sub-slab air samples.

6.4 Transport and Fate of COCs in Soil Vapor

Site COCs can partition into air-filled soil pores in soil. Henry's Law suggests that Site COCs are relatively volatile and therefore, can be expected to volatilize into and migrate with soil vapors. Soil vapor migration is primarily driven by vapor pressure gradients (advection) in the soil and by gaseous diffusion. Pressure gradients can develop due to natural processes, such as changes in barometric pressure, and anthropogenic processes such as negative pressure in a building due to heating, ventilation, and air-conditioning (HVAC) systems. In either condition, the soil vapors will migrate from a zone of higher pressure to a zone of lower pressure, which can include more permeable soil. Soil vapor also migrates as a result of the concentration gradient from areas with higher concentrations to areas of lower concentrations. This can result in upward, lateral, and downward migration through the vadose zone. Where soil vapors are under a low permeable surface, such as a building slab or pavement, the vapors typically migrate laterally to the edge of the low permeable surface and then discharge to the atmosphere. Low pressure gradients can exist under buildings resulting in stagnant or very slow vapor transport. If there are cracks or other permeable features in or under a building slab, then the vapors may migrate through the cracks and discharge to the building interior.

Processes such as sorption, degradation, diffusion, and dispersion, and partitioning into soil water can affect the transport and fate of Site COCs in soil vapor. Sorption to soil matrix can retard the migration of COCs in a similar manner as sorption processes associated with groundwater. The naturally occurring carbon content of the soils will affect the degree of sorption. Abiotic and biological processes can act to degrade Site COCs in the subsurface. Dispersion processes can act to reduce COC concentrations in soil vapors and COC concentrations when soil vapors discharge to a building or atmosphere.

7. Conceptual Site Model

The Former Accurate Die Casting property is approximately 30 acres in size, and it is bordered by residential housing and commercial properties. Vacant wooded land and a brook (Bishop Brook) border the Site to the north. The front portion of the property is currently zoned industrial while the back portion is zoned residential.

The former manufacturing building is approximately 130,000 square feet in size and occupies the southern side of the Site. The remainder of the property is generally undeveloped and covered with grass, trees, and other native vegetation.

Manufacturing operations at the Site were conducted from approximately 1950 until 1988. During this period, the Site was used for die cutting and casting operations to fabricate metal products for the automobile industry and other industries.

7.1 Site Geology

Site geology consists of glacially derived overburden materials overlying bedrock. The composition of the overburden materials is variable and complex, and the thickness varies across the Site as well. The upper portion of the overburden consists of silt with varying amounts of fine to medium angular gravel and fine to medium sand. A dense lodgement till overlies the majority of the bedrock underlying the Site, and where present, the its ranges in thickness from 5 to approximately 20 feet, pinching out to the south in the vicinity of MW-1 and getting thicker to the north.

The lodgement till is underlain by a fractured gray-green shale to shaly dolostone. The bedrock surface slopes to the north and steepens from south to north where it outcrops at the edges of the ravine where Bishop Brook is located. Depth to bedrock ranges from approximately 20-ft in the southern and northwestern portions of the Site to approximately 40 to 45-ft in the eastern and northeastern portions of the Site.

7.2 Site Hydrogeology

Two groundwater zones underlie the Site. These include an unconfined (water table) unit present within the unconsolidated glacially-derived overburden deposits and a confined water-bearing unit within the fractured bedrock underlying the glacial deposits.

Occurrence of groundwater in the overburden ablation till unit varies across the Site, controlled by the permeability and thickness of the overburden materials and the top of the underlying lodgement till. Ground water flow in the overburden aquifer is generally south to north toward Bishop Brook under a hydraulic gradient of approximately 0.05 ft/ft. There is limited saturated thickness of the overburden in the southern portion of the site. This condition suggests limited upgradient recharge to the northern portion of the overburden aquifer. Site hydrogeologic conditions also indicate decreasing overburden saturated conditions to the east and west of RW-1 in the northern portion of site. This condition, combined with a moderately steep ground water flow gradient, indicates a limited potential for lateral site overburden aquifer recharge from these areas.

Groundwater occurrence in the bedrock aquifer is limited to fractures. The potentiometric groundwater flow direction in the bedrock is to the northwest towards Bishop Brook under a hydraulic gradient of about 0.04 ft/ft.

7.3 Remedial Measures

A RI was conducted at the Site between 1990 and 1993. In December 1994 the NYSDEC issued a *Record of Decision* (ROD) (NYSDEC, 1994) in which the NYSDEC selected (1) excavation and off-Site disposal for contaminated soil, and (2) extraction and on-Site treatment for the contaminated groundwater at the Site. The NYSDEC identified five areas (**Figure 2**) in the December 1994 ROD which were addressed by remedial actions completed between 1995 and 1999 as follows:

A number of remedial measures have been completed at the Site to address source areas identified during the initial RI as follows:

- PCB/PAH/VOC Soils Area (Area 1) – Impacted soil from this area were excavated, treated to RAOs, and placed back into the area or disposed off-Site. An approximate 1 foot soil cover was placed over the area and designated as a CAMU.
- Northeast Corner of Facility (Area 2) – Soil containing elevated concentrations of chlorinated VOCs was excavated to the extent possible and treated to RAOs prior to placement back into the excavation.
- Groundwater Recovery and Treatment (Area 3) – A groundwater recovery and treatment system was installed to capture groundwater from the overburden and shallow bedrock on the eastern side of the Site that contained TCE and other chlorinated VOCs. This system was later augmented with a collection trench located downgradient of Area 1 to capture VOCs in the groundwater. The groundwater recovery and treatment system is operated and monitored under a NYSDEC-approved O& M Plan.
- Septic Tank (Area 5) – Sludges were removed and disposed off-Site. The tank was cleaned and filled with concrete.

In addition to the remedial activities conducted in the five areas identified above, three underground storage tanks (USTs) were removed or abandoned-in place in 1995.

A Final Engineering Report (O'Brien & Gere, 2000) was provided to the NYSDEC in March 2000 certifying and documenting that the remedial actions required to address the five areas identified in the 1994 ROD were complete. The Site was subsequently relisted to a Class 4 by NYSDEC in 2014 and an O&M Plan was established for the groundwater recovery and treatment system.

A Vapor Intrusion Evaluation was conducted at the Site between March and May 2006 and the results presented in *Technical Memorandum – Vapor Intrusion Evaluation Results* (O'Brien & Gere, September 18, 2006). Based on the findings of this study, sub-slab depressurization systems were placed within off-Site structures where vapor intrusion was suspected. An O&M plan for these systems was established that includes annual inspections of the individual systems and associated reporting.

7.4 Presence of Residual Sources and Contaminant Migration

As discussed in this document, a number of investigation and remediation activities have been conducted between 1993 and 2019. Historic operations at the Site resulted in the release of TCE in two areas; the area outside of the northeast end of the building (Area 2) where degreasing solvents were reportedly dumped and the PCB/PAH/VOC area (Area 1) where an oil spill occurred. The source material from both of these areas were removed during prior remedial activities and a groundwater recovery and treatment system was installed to mitigate offsite migration of the groundwater plume. However, residual COCs are still present in the soil and groundwater within these areas.

The degreaser wastes that were dumped outside of the northeast side of the building migrated though the upper overburden material and accumulated as free-product on top of the lodgement till. This product was originally removed via pumping. The surrounding soil in this area was subsequently excavated to the extent possible. Residual TCE remains at the interface between the lodgement till and the overlying silt, sand, and gravel layer. As evidenced by the borings completed within the buildings, TCE product or impacted water appears to have seeped beneath edges of the building along the top of the lodgement till. The presence of TCE in the bedrock groundwater suggests that some material has migrated vertically through the lodgement till. This material will continue to degrade with time through volatilization and dissolution into the groundwater system.

Within the PCB/PAH/VOCs area, the excavation activities were effective at removing the PCBs and PAH as the vertical migration of these materials within the oily waste was likely limited by the water table. However, some of the VOCs appear to have migrated to below the water table.

VOCs have been identified within the overburden and bedrock groundwater in the area north of the former disposal area near the eastern side of the building and in the overburden in the vicinity of the PCB/PAH/VOC area. Migration of these plumes is being controlled by the groundwater recovery components and the associated groundwater recovery and treatment system. VOCs were not detected in the surface water and sediment within Bishop Brook above surface water and sediment SCGs based on data collected during the current RI, indicating that the groundwater recovery system is effectively mitigating off-Site migration.

TCE and cis-1,2-DCE as raw solvents are DNAPLs that are denser than water, highly volatile, and moderately to highly soluble in water. Within the subsurface, DNAPL may become trapped in soil pores within unsaturated soil and act as a continuing source to soil vapor. It will also act as a continuing source of dissolved-phase constituents in groundwater. As a dissolved phase constituent, it will tend to migrate with groundwater to locations downgradient of the source area. These dissolved-phase constituents in groundwater may also act as a continuing source to soil vapor. Both groundwater and soil vapor migration have been confirmed at the Site and NYSDEC/NYSDOH-approved mitigation efforts have been established.

Petroleum compounds were identified in a groundwater sample collected from MW-27 located on the west side of the building near the former UST which was removed in 1995. These compounds represent residuals present in the fine grained soils at the edge of the UST excavation. There is a minimal amount of water present in this area as evidenced by the fact that the well did not produce water when the well was installed and only produced enough water to allow for the sample for VOC analysis to be completed. It is likely that the water observed localized and transient resulting from precipitation percolation through the broken pavement and backfilled UST excavation.

Constituents detected above SCOs in surface and near surface soil (0-24-inches) include SVOCs (PAHs) (benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno (1,2,3-cd) pyrene), metals (arsenic, chromium, copper, lead, manganese, mercury, nickel, and zinc), and one PFAS (PFOS).

As indicated in Section 5.3, these constituents present in the surface and near surface soil are not directly related to site operations. There have not been industrial operations at this facility for more than 35 years. PAHs were detected in one location, the northeast corner of a significantly weathered/deteriorated asphalt parking lot area. The presence of PAHs at this location is likely attributable to the proximity of the sample location to asphalt parking lot. The metal concentrations above SCOs were only observed at one location within the wooded area on the northern parcel. As not known dumping occurred on this portion of the site and the concentrations are only marginally above the SCOs, they are considered representative of natural or background conditions and not likely directly attributable to activities at the Site.

8. Qualitative Human Health Exposure Assessment

Select inorganic constituents were identified in groundwater samples at concentrations greater than the Class GA groundwater SCGs at some of the well locations. These constituents included barium, chromium, iron, lead, magnesium, manganese and sodium. Several of the constituents are naturally occurring elements in soil and bedrock and present in multiple overburden and bedrock well locations. Overburden well, MW-12, contained higher concentrations of these constituents than some of the other wells. This well is located near the former septic tank which was evacuated and closed in 1995 as approved by NYSDEC suggesting the presence of residuals in the nearby soil. Qualitative Human Health Exposure Assessment

This Qualitative Human Health Exposure Assessment (QHHEA) was completed for the Site in accordance with New York Environmental Conservation Law (ECL) §27-1415(2)(b) and Section 3.3(c)(4) and Appendix 3B of DER-10. As presented in DER-10, the purpose of the QHHEA is to evaluate and document the potential exposure routes and pathways, and to identify and characterize the potentially exposed populations currently and under reasonably anticipated future use of the Site. This QHHEA is apportioned into the following sub-sections:

8.1 – Human Health Conceptual Site Model
8.2 – Human Health Constituents of Concern
8.3 – Exposure Pathway Overview
8.4 – QHHEA Summary

8.1 Human Health Conceptual Site Model

The conceptual site model (CSM) is described in Section 7 and is discussed further in this section and presented in **Figure 17**. The primary function of the CSM is to evaluate the linkages between on-Site sources of COCs and human receptor populations and to identify potentially complete exposure pathways through which there may be human exposures. An exposure pathway analysis describes the transport of a COC from the affected medium to the human receptor population and links the potential sources, exposure media, and receptor populations to identify potential pathways of human exposure.

As defined in DER-10 (Appendix 3B), an exposure pathway has five elements:

1. A source and mechanism of COC release to the environment
2. An environmental transport medium (e.g., soil) for the COC and/or mechanism of transfer from one medium to another
3. A point of contact with the impacted environmental medium (exposure point)
4. An exposure route at the contact point (i.e., ingestion, inhalation, or dermal contact)
5. A characterization of the receptor populations that may be exposed

A pathway is considered complete if all five conditions listed above are satisfied for that pathway. If one or more of these conditions are not met, there is no physical means by which a receptor may be exposed to the COCs, and the pathway is considered incomplete. DER-10 exposure pathway elements 1 and 2 are described in Section 7. DER-10 exposure pathway elements 3 (exposure points), 4 (exposure routes), and 5 (receptor populations) are described in this section.

8.2 Human Health Constituents of Concern

The Site has been the subject of environmental investigations since 1990 when investigation activities were initiated to evaluate the nature and extent of Site-related contamination in soil and groundwater, and the potential discharge of Site contaminants to Bishop Brook surface water and sediment. Based on the results of the 1993 RI (Stearns and Wheler 1993), remedial actions were implemented at five areas of the Site from 1995 to 1999, as described in Section 2.3. These remedial actions included excavation and off-Site disposal of contaminated soil, and extraction and on-Site treatment of contaminated groundwater (NYSDEC 1994). Impacts to surface water and sediment of Bishop Brook were reported to be minimal. The *Technical Memorandum – Vapor Intrusion Evaluation Results* (O'Brien & Gere, September 18, 2006) recommended mitigation of the on-Site building and off-Site sub-slab and indoor air sampling with subsequent efforts implemented to mitigate the potential for off-Site vapor intrusion. Investigative activities conducted as part of the current RI have focused on assessing current nature and extent of Site-related constituents to identify whether additional efforts are warranted to mitigate exposures, and to assess whether the upper 2 feet of soil achieve applicable SCOs for exposed surface soil.

The environmental media for which analytical data are available are soil, groundwater, sediment, surface water, and soil vapor. Criteria and guidance used to identify human health COCs in these media and to assess the completeness of human exposure pathways at the Site include:

- 6 CRR-NY Part 375. Codes, Rules, and Regulations of the State of New York. *Environmental Remediation Programs*. Effective December 14, 2006.
- 6 CRR-NY Part 703. Codes, Rules, and Regulations of the State of New York. *Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations*. Effective March 12, 1998.
- NYSDEC. 2014. *Screening and Assessment of Contaminated Sediment*. Division of Fish, Wildlife and Marine Resources, Bureau of Habitat*.* June 24, 2014.
- 6 CRR-NY Part 899.4. Codes, Rules, and Regulations of the State of New York. *Classes and Standards of Quality and Purity Assigned to Fresh Surface and Tidal Salt Waters*. Article 14. Oswego River Drainage Basin Series, Part 899. Oneida River Drainage Basin.
- NYSDOH, 2006. *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*; and and updated Soil Vapor/Indoor Air Matrices, May 2017. Center for Environmental Health, Bureau of Environmental Exposure Investigation. May 2017.

Detected constituents in each medium are designated as "human health COCs" for the QHHEA if they exceed screening criteria corresponding with current and reasonable anticipated future land use. As discussed in Section 2.1, land use is currently vacant land and consists of both undeveloped land in the northern portion of the property and industrialized land in the southern portion of the property. Reasonably anticipated future land use is undeveloped or multi-family residential in the northern parcel and multi-family residential and/or commercial/light industrial in the southern parcel.

Environmental media assessed for potential impacts from historical Site operations and Site management practices, and the linkages of these impacted media to potentially exposed human populations, include soil, groundwater, sediment, surface water, and soil vapor. Additional details regarding the human health COCs identified in these media are presented below.

8.2.1 Soil

Soils evaluated for this QHHEA are segregated according to depth interval and include surface soil and subsurface soil. This QHHEA utilizes the Restricted-Residential SCOs (6 CRR-NY Part 375-6.8[b]) to identify human health COCs in soil and to evaluate the potential for human exposures to these soil COCs for two reasons: 1) the reasonably anticipated future use at the Site could include a mixed-use that includes multi-family residential housing, and 2) currently the Site could be visited by trespassers, a receptor group that includes off-Site residents.

Surface Soil

For the purposes of the QHHEA, surface soil is defined as soil collected from a depth of up to 2 feet bgs (encompassing surface and near-surface soils, as described in Sections 5.2 and 5.3) and therefore may include fill material and native material. Surface soil represents the environmental medium that is likely to be encountered by individuals engaged in activities that result in only modest soil disturbance and in activities resulting in purposeful excavation or subsurface work activities. As described in Sections 3.5.1 and 3.5.2, surface soil samples were collected from 17 locations across the Site. Surface soil samples were collected from three discrete depth intervals ranging from the soil surface (0 feet bgs) down to 2 feet bgs. The majority of incidental exposures to surface soil by potential human receptor populations involved in non-intrusive activities is likely to be incurred in the uppermost horizon (e.g., the upper 2 inches); however, sample data extending to 2 feet bgs account for potential hand digging or other limited soil disturbance activities by these receptors. Subsurface workers (utility workers, construction workers) are presumed to be exposed to materials across the full soil column, and therefore may be exposed to COCs in both surface soil and subsurface soil.

Results of the comparisons to Restricted-Residential SCOs are presented in Sections 5.2 and 5.3 and shown spatially in **Figure 9** (exceedances of SCOs only). SVOCs (namely PAHs) were detected in surface soils above Restricted-Residential SCOs at one location (SS-15), however their presence at this location is likely attributable to asphalt-bearing materials from the adjacent weathered/deteriorated parking lot and not from former Site operations. Metals detected above Restricted-Residential SCOs (arsenic and manganese) are likely representative of background conditions, as each are present above Restricted-Residential SCOs at only one location at relatively nominal concentrations and were not used in former Site manufacturing processes.

Based on the surface soil results and comparisons to applicable SCOs, there are no exposures to Site-related COCs, and surface soil exposures are not considered further.

Subsurface Soils

Subsurface soils are defined in this QHHEA as those soils between 2 feet bgs and the depth to which current and/or future subsurface utility lines or construction excavations occur (typically 12 feet bgs). Consequently, data for soils greater than 2 feet bgs were considered appropriate for assessment of potential subsurface impacts to human health in the QHHEA. Subsurface soil within this interval can be encountered by human receptors during excavation and other subsurface work activities such as construction and/or utility line work. As described in Section 3.5.3, subsurface soil samples were collected from five locations beneath the building slab in the eastern portion and at 12 locations near the western end of the building. Additionally, soil borings were advanced at two locations in the PCB/PAH/VOC area (Area 1) within the residentially-zoned northern portion of the property, at one location near a former gasoline UST along the western portion of the building of the building, and at one location near a former fuel oil UST located in the northwestern portion of the building. Samples were analyzed for various chemical constituents as described in Section 3.5.3.

Results of the comparisons to Restricted-Residential SCOs are presented in Section 5.4 and shown spatially in **Figure 10** (exceedances of SCOs only). Comparisons of subsurface soil sample results to the Restricted-Residential SCOs indicated that TCE was detected above its SCO in one sample at one location beneath the slab at the building's eastern end (SB-MIP-6) and in one sample in Area 1 (SB-20-16). No other constituents were detected above Restricted-Residential SCOs in subsurface soils. TCE is identified as a Site-related COC, as described in Section 6.1. The TCE exceedance at SB-20-16 in the PCB/PAH/VOC area occurred in soils collected from 9-12 feet bgs, a depth interval potentially available for contact by subsurface (e.g., construction, utility) workers.

8.2.2 Groundwater

Overburden groundwater at the Site occurs between 4 feet bgs (MW-22) and 44 feet bgs (MW-09) across the Site, based on a review of historical and recent (October 2019) groundwater elevation data. Groundwater occurs within the typical depth range of excavations and utilities (i.e., <12 feet bgs) in five monitoring wells, four of which (MW-17, MW-18, MW-21, and MW-22) are proximal to the PCB/PAH/VOC area in the northern portion of the Site; depth to groundwater at MW-02 in the northeastern portion of the industrial-zoned parcel is typically around 7 ft below grade. Overburden groundwater generally flows to the north towards Bishop Brook. As described in Section 2.4, groundwater is monitored twice annually (in the spring and fall) for VOCs at select monitoring wells across the Site as part of an ongoing groundwater monitoring program. Results from the most recent monitoring event (October 2019) were evaluated to identify COCs for human health.

Results of the comparisons to the New York State Class GA SCGs are presented in Section 5.5. Comparisons of sample results to the Class GA SCGs indicate that TCE is the primary COC for human health in Site groundwater, exceeding its Class GA SCG in the majority of the wells sampled as part of the groundwater monitoring program. Cis-1,2-DCE was also detected exceeding the Class GA SCG in monitoring wells located in the northwest area of the Site. Groundwater is not a source of drinking water at the Site as public water supply is available and the deed restriction prohibits its use, so the ingestion pathway is incomplete. Direct exposure to groundwater by subsurface worker receptors is possible at localized areas of the Site, as represented by the monitoring wells listed above. Groundwater sample results from 2024 indicated exceedances of Class GA SCGs both TCE and cis-1,2-DCE at the wells located proximal to the PCB/PAH/VOC area at shallower groundwater depths. MW-02 has not historically contained VOCs. These VOCs are therefore identified as COCs for subsurface workers via incidental ingestion and ambient air vapor inhalation.

8.2.3 Sediment

Three sediment samples were collected in November 2019 from the 0 to 0.5 foot bgs interval from Bishop Brook. NYSDEC, in its *Screening and Assessment of Contaminated Sediment* document (NYSDEC 2014), provides sediment guidance values for some chemicals based on food chain bioaccumulation potential; sediment guidance values for direct contact exposures are not available. The Bishop Brook reach that traverses the residential-zoned northern portion of the property is designated by NYSDEC as a Class C(TS) water under 6 CRR-NY 899.4, indicating that the best usage of these waters is fishing. As such, trout and other sport fish species that may be caught and consumed may be present in this reach.

Bioaccumulation in fish that could be consumed was evaluated as a potential exposure pathway. Of the constituents detected in RI sediment samples, NYSDEC bioaccumulation-based sediment guidance values (BSGVs) for Class C waters are available for benzo(a)pyrene and TCE. TCE was detected at an estimated concentration of 0.8 µg/kg in sample SED-1; this concentration is lower than the TCE BSGV of 250 µg/Kg. Benzo(a)pyrene concentrations at SED-1, SED-2, and SED-3 exceed the BSGV for this compound of 25 µg/Kg. It should be noted that BSGVs are based on 2% TOC content, and TOC content of Bishop Brook sediments ranged from 2.62% to 6.05%. As such, organic compounds are likely strongly sorbed to organic matter in creek sediments. Additionally, exceedance of a BSGV does not imply that a food chain bioaccumulation risk is present, only that risk might be present. Fish lipid content, proportions of dietary items that may be impacted by contaminants, metabolic and excretion processes, and other factors may strongly affect the degree of bioaccumulation (NYSDEC 2014). Furthermore, the benzo(a)pyrene detected in the stream sediments are not considered site-related as it is a common constituent in runoff from roadways and Bishop Brook passes near and under several nearby roads.

8.2.4 Surface Water

RI surface water samples collected in Bishop Brook were co-located with sediment samples. Detected chemicals were compared to New York State Ambient Water Quality Standards and Guidance Values for Class C waters to evaluate the nature and extent of potential impacts to surface water, as documented in Section 5.1.1.

Comparisons of surface water sample results to water quality standards related to human health protection endpoints (drinking water, fish consumption) are summarized as follows:

- The concentration of TCE, the only VOC detected in creek surface water, was below its water quality standards for drinking water and fish consumption.
- No SVOCs or PCBs were detected in RI surface water samples.
- Aluminum, barium, iron, and metals typically regarded as essential nutrients (calcium, magnesium, potassium, and sodium) were detected in RI surface water samples. No metals with corresponding water quality standards exceeded their respective values.

These results indicate that direct contact exposures (incidental ingestion, dermal contact) and fish consumption exposures are not expected to result in adverse health effects to users of Bishop Brook.

8.2.5 Soil Vapor

As discussed in Section 2.3, a VI investigation conducted in 2006 indicated that TCE was the primary compound detected in paired sub-slab and indoor air sample sets collected inside the Site building, and in three of nine soil vapor samples collected along the property line. Based on this investigation, mitigation of the on-Site building and off-Site sub-slab and indoor air sampling were recommended. The recommendation for mitigation of TCE at the Site is consistent with guidelines specified in NYSDOH's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (NYSDOH 2006).

The presence of TCE at elevated concentrations in some subsurface soil, groundwater, sub-slab soil vapor, and indoor air samples indicate that the vapor intrusion pathway is complete for the on-Site building and potentially complete in other on-Site areas. As indicated in Section 2.5, current deed restrictions require a soil vapor evaluation should the building become occupied and for future occupiable buildings to be erected on the Site. Concentrations in select perimeter soil vapor samples indicate the potential for vapor intrusion in off-Site residences. Off-Site residences where the vapor intrusion pathway is potentially complete have been provided with VI mitigation systems and are managed under a NYSDEC-approved operations and maintenance plan.

8.3 Exposure Pathway Overview

As described in Section 7 and shown in **Figure 3**, the southern portion of the Site is currently zoned for industrial use and contains a large building formerly used for die-molding and casting operations to manufacture metallic automobile products and other industrial products. Other areas within the southern portion of the Site include parking areas, roadways, walkways, and maintained lawn areas. Current redevelopment scenarios could include industrial or commercial uses as well as mixed-use that includes a multi-family residence component. The northern portion of the Site is currently zoned for residential use and contains mainly undisturbed, wooded land and Bishop Brook that traverses the northern edge of the property in a northwest-southeast orientation. This portion of the Site may remain undeveloped but also could be used to support multi-family residential housing in the future. Residences abut a portion of the Site boundary to the east and are present approximately 250 feet from the Site boundary to the west. Planned redevelopment of the southern industrial portion of the Site envisions razing of the existing building and demolition and removal of the building slab so that new buildings can be constructed to meet the needs of the redevelopment.

The potential for exposure to Site-related COCs in surface (0 to 2 ft bgs) and subsurface (2 to 12 ft bgs) soil in the southern, industrial portion of the Site is considered low for most receptors under current land use given that most of this area is covered by impervious or vegetated surfaces. Under the current land use scenario, the potential for soil exposure is more likely in the northern portion of the property that is accessible to potential trespassers who visit Bishop Brook. Under future land use scenarios, exposures to COCs in soil are more likely to potential construction workers that may support the property redevelopment, as well as to employees or customers of businesses, or residents that may inhabit housing erected in this area in the future. Potentially complete soil exposure routes for current and future human receptors at the Site include direct contact with and incidental ingestion of Site surface and subsurface soil. Although exposures to surface soil can occur, no site-related COCs have been identified so the exposure pathway for Site COCs is incomplete.

Similarly, although trespassers who may engage in recreational activities (e.g., wading, angling) in Bishop Brook may incur exposure to sediment and surface water or could be exposed through consumption of potentially impacted fish caught in Bishop Brook there are no site-related constituents present and therefore, the pathway is incomplete.

Depth to groundwater at the Site is variable, but in some locations is within the range of direct contact by workers whose job functions require work in subsurface environments. At these locations, direct contact exposure to COCs in groundwater by subsurface workers is feasible. Given that the Site is served by a municipal water supply, potable water use at the Site is not a realistic exposure pathway and is not considered further in this QHHEA.

VOCs, which are the site COCs, present in subsurface soils and groundwater have the potential to migrate into the interstitial pore spaces within unsaturated soil. Where this occurs below buildings or structures, VOCs originating from soils/groundwater could enter indoor air of an occupiable space and subsequently be inhaled. Elevated TCE concentrations in select soil, groundwater, sub-slab soil vapor and indoor air samples, as identified in the RI, indicate that the vapor intrusion pathway is potentially complete in the existing building and potentially complete in other on-Site areas.

8.3.1 Exposure Routes and Current and Future Receptors

Based upon site characteristics and current and reasonably anticipated future land use, the following receptor groups and exposure routes are considered potentially complete and evaluated in this QHHEA:

- *Future Industrial/Maintenance Worker (Adult)*: This adult-age (>18 years old) future receptor is anticipated to perform a variety of general service functions at the Site, including maintenance and industrial manufacturing activities. Industrial/maintenance worker activities at the Site include working in a future building or buildings that would be used to support industrial operations, performing outdoor tasks, including landscaping and general maintenance of Site grounds, and taking breaks in communal spaces and outdoor rest areas. Based on the available soil vapor, sub-slab vapor, and indoor sampling data, vapor intrusion to a future building occupied by workers represents a potentially complete exposure pathway for this receptor. Direct exposure to groundwater or subsurface soil by this receptor is not a viable exposure route because this receptor does not conduct subsurface work or utilize groundwater for industrial purposes.

- *Future Commercial Employees and Customers*: Adult-aged and potentially adolescent commercial workers under a hypothetical future use scenario would work within a building constructed on the Site. Customers of the goods or services would also access the future building under this hypothetical land use scenario. Direct contact with contaminants in the soil is unlikely because the area would be covered by the building and paved parking area, and any work and patronage by customers would occur within the building. Under a future commercial use scenario, indirect exposure via inhalation of groundwater-derived and/or soil-derived vapors in the interior spaces of buildings is considered a complete exposure pathway.

- *Future Construction Worker (Adult)*: The construction worker is identified as a receptor for the QHHEA due to the potential for excavation or construction to occur at the Site in the future. These workers are of adult age and may be exposed to subsurface soil containing TCE during excavation and construction activities. Incidental ingestion and dermal contact with subsurface soil and inhalation of volatilized constituents or particulate dust are applicable exposure routes for this receptor. Twelve feet is a reasonable maximum depth at which construction workers would potentially be exposed based on the depths of typical construction excavations. Groundwater is shallower than 12 feet bgs in some areas of the Site, therefore a construction worker could be exposed to groundwater via incidental ingestion or skin contact. VOCs have been detected in subsurface soil and groundwater (see Sections 8.2.1 and 8.2.2) within 12 ft below grade, therefore VOC vapors could be liberated to the ambient air and subsequently inhaled.

- *Current/Future Utility Worker (Adult)*: Subsurface utilities may require periodic inspection, servicing, and maintenance both currently and in the foreseeable future. The utility worker is of adult age and may be exposed to Site-related COCs in subsurface soil material through incidental ingestion or dermal contact. Utility workers could also inhale particulates or volatile vapors while engaging in subsurface work activities. Utility lines typically do not extend below 12 feet bgs; therefore, this depth is considered the maximum soil depth for possible utility worker exposures. Groundwater in some areas of the Site is less than 12 feet bgs (based on groundwater elevation data), therefore a utility worker could be directly exposed to groundwater via incidental ingestion or skin contact in these areas. As above for construction workers, current and future utility workers may contact VOC-bearing subsurface soils and shallow groundwater during the course of their work activities, potentially incurring inhalation exposure to volatile COCs in the ambient air.

- *Future On-Site Resident (Child, Adolescent, Adult):* The reasonably anticipated future use of the Site may have a multi-family residential component. Future residential receptors may comprise of persons of all age groups (children, adolescents, and adults), and are expected to reside at the Site over the majority of a given year and over a duration of potentially many years. The relevant exposure route for this receptor is inhalation of groundwater-derived or soil-derived volatile COC vapors that have migrated into the indoor space of a residence/residential building through cracks in the building foundation. However, as required by current deed restrictions, evaluation of the potential for soil vapor intrusion (SVI) will be conducted should the on-Site building become occupied and should any buildings be developed on the Site for human occupancy.

- *Current/Future Off-Site Resident (Child, Adolescent, Adult)*: Based on the vapor intrusion evaluation (Section 2.4), as discussed further in Section 8.2.5, residents in select single-family homes adjacent to the Site may be exposed to Site-related COCs in soil vapor that infiltrates the living spaces of these homes. Because residents of any age could be exposed in this manner, the child, adolescent, and adult ages are considered appropriate for evaluating this receptor group. However, this pathway has been mitigated by the ongoing vapor intrusion operation and maintenance program.

Environmental Media and Exposure Route(s)	Potential Receptors	Exposure Pathway Assessment
Direct contact with subsurface soils (2-12 ft bgs) via incidental ingestion, dermal contact, inhalation of fugitive dust or soil-derived vapors	Current/future utility worker Future construction worker	During underground utility line inspection, servicing, and maintenance activities, future utility workers could come into contact with site COCs in subsurface soil through incidental ingestion, dermal contact, and inhalation of soil dust or vapors. Future construction workers may be exposed to subsurface soil during excavation/construction activities that may result in exposure to Site COCs via incidental ingestion, dermal contact, and inhalation of soil dust or vapors.
Inhalation of soil-derived or groundwater-derived vapors in indoor air	Current/future industrial-maintenance worker Future Commercial Workers and Customers Future on-Site resident Current/future off-Site resident	Soil vapor data indicate that the vapor intrusion pathway is complete for industrial-maintenance workers as well as commercial workers and customers spending time indoors within a future building. Exposure may occur in this manner at select locations of the Site where volatile COCs are in excess of State guidelines. Future on-Site resident exposures to VOCs in indoor air would be restricted to the northern portion of the Site given that this portion of the Site is zoned for residential use. However, there is potential for mixed-uses on the industrially zoned southern parcel however, the housing would typically occur on upper floors. Current/future off-Site residents inhabiting homes at select locations adjacent to the Site are potentially exposed to Site-related volatile COCs via soil vapor migration and intrusion into the living spaces of these residences. This exposure pathway has been mitigated by the active Vapor Intrusion mitigation program that is in place.
Direct contact with groundwater via incidental ingestion, dermal contact; inhalation of groundwater-derived vapors in ambient air	Current/future utility worker Future construction worker	Current/future utility workers and future construction workers could be exposed to volatile COCs in areas of the Site where subsurface work is required and where groundwater is present at depths less than 12 feet bgs. Direct exposures to groundwater COCs are limited to incidental ingestion given that volatile COCs are likely to volatilize to the air before appreciable dermal absorption can occur. Indirect exposures to volatile COCs in groundwater by subsurface workers may occur via inhalation of groundwater-derived vapors in outdoor air.

Facility contractors/subcontractors associated with the collection and handling of environmental samples and with the potential management of impacted soil and groundwater are not evaluated. Contractor/subcontractor activities are typically covered under a facility-specific Health and Safety Plan (HASP), which provides for the use of personal protective equipment (PPE) and includes preventative procedures for eliminating exposure and maximizing personal safety. Therefore, Site contractors/subcontractors are not considered a viable receptor population for the QHHEA.

A summary of the environmental media, potentially complete exposure pathways, and potential human receptors relevant to the Site QHHEA are presented in the following table:

8.4 QHHEA Summary

The objective of this QHHEA was to evaluate potential human exposure to Site-related human health COCs under current and reasonably anticipated future use scenarios. The Site currently consists of a southern, industrial-zoned property containing a vacant manufacturing building and a largely undisturbed northern property containing woodlands and a reach of Bishop Brook. Fencing is present along portion of the Site boundary but is absent in other sections, but no fencing or other engineering control is present that would restrict human access in other sections. The Site was entered into the BCP for the purpose of supporting future redevelopment. Reasonable redevelopment scenarios include commercial, light industrial and mixed use with a multi-residential use component on the southern parcel. The northern parcel will most likely remain undeveloped; however, multi-family residences could potentially occupy some of the area. The Site is currently the subject of a remedial investigation which has identified Site-related human health COCs which are TCE in subsurface soil and TCE and cis-1,2-dichloroethene in groundwater. TCE was also identified in soil vapor as part of a vapor intrusion assessment conducted in 2006.

In summary, potentially complete exposure pathways associated with human receptor scenarios include:

- Future industrial/maintenance workers that may be exposed to subsurface-derived volatile COC vapors that may infiltrate the interior space of a future on-Site building designed for human occupancy.
- Current and future utility workers and future construction workers that may be exposed to TCE in Site subsurface soil through incidental ingestion, dermal contact, inhalation of soil dust/vapors, and to TCE and cis-1,2-DCE in groundwater via incidental ingestion, dermal contact, and ambient vapor inhalation.
- Future commercial employees and customers that may be exposed to TCE and cis-1,2-DCE in subsurface soil groundwater via ambient vapor inhalation.
- Future on-Site residents that may be exposed to volatile COCs via inhalation within the livable spaces of a future residence constructed at select locations.
- As discussed in Section 2.5, a deed restriction is in place to address vapor intrusion, as necessary, for any future on-Site building(s) constructed for human occupancy As discussed in Section 8.2.5, off-Site residences potentially impacted by vapor intrusion contain sub-slab depressurization systems designed to mitigate this exposure pathway.

9. Summary and Conclusions

The Former Accurate Die Casting site is approximately 32 acres in size and located within the Village of Fayetteville. The property consists of 2 parcels which are zoned differently. The southern parcel is zoned industrial and contains a 130,000 sq ft building that formerly housed the diecasting operations and associated parking areas. The northern parcel is zoned residential, is wooded and undeveloped.

From a regulatory perspective, contamination at the Site was managed/addressed under the NYSDEC State Superfund Program as a Class 2 Class 2 site (meaning one presenting significant threat to the public health or environment – action required) from 1990 to 2014, after which the Site was relisted as a Class 4 (meaning one where the site is properly closed – requires continued management). The Site was accepted into the NYSDEC BCP in 2015 for the purpose of facilitating redevelopment.

The original RI conducted at the site in 1993 identified soil and groundwater contamination in several areas. The 1994 ROD identified five areas requiring remedial action as follows:

- PCB/PAH/VOC Soils Area (Area 1)
- Northeast Corner of Facility (Area 2)
- Overburden Groundwater (Area 3)
- Shallow Bedrock Groundwater (Area 4)
- Septic Tank (Area 5)

In addition to the remedial activities conducted in the five areas identified above, three underground storage tanks (USTs) located in or adjacent to the manufacturing building were removed or abandoned-in place in 1995.

A *Final Engineering Report* (O’Brien & Gere, 2000) was provided to the NYSDEC in March 2000 certifying and documenting that the remedial actions required to address the five areas identified in the 1994 ROD were complete.

A Vapor Intrusion Evaluation was conducted at the Site between March and May 2006 and the results presented in a Technical Memorandum (O’Brien & Gere, 2006) dated September 18, 2006 (2006 VI). Based on the findings of this study, sub-slab depressurization systems were placed within off-Site structures where vapor intrusion was suspected. An O&M plan for these systems was established that includes annual inspections of the individual systems and associated reporting.

The Site was subsequently relisted to a Class 4 by NYSDEC in 2014 and an O&M Plan was established for the groundwater recovery and treatment system.

The 2019/2020 RI was conducted to assess the current site conditions with respect to current cleanup objectives as well as current and future site uses. In 2024, additional groundwater and soil vapor sampling and analysis was completed Based on the findings of the RI and 2024 Supplemental RI, TCE and cis-1,2-DCE are the site related COCs in subsurface soil, groundwater, and soil vapor media for this Site.

The QHHEA prepared for this Site concluded that the potentially complete exposure pathways associated with human receptor scenarios are limited to the following two scenarios:

- Exposure of current and future utility workers and future construction workers to TCE in Site subsurface soil through incidental ingestion, dermal contact, inhalation of soil dust/vapors, and to TCE and cis-1,2-DCE in groundwater via incidental ingestion, dermal contact, and ambient vapor inhalation.
- Exposure of future industrial/maintenance workers, commercial employees and customers, and on-Site residents to subsurface-derived volatile COC vapors that may infiltrate the interior space of a future on-Site building designed for human occupancy.

There are no complete exposure pathways related to surface water, sediment, surface soil or near-surface soil.

Based on historic data, the current groundwater recovery and treatment system controls the expansion and off-Site migration of the groundwater plume as intended. Further evaluation of the groundwater quality of wells MW-25 and MW-26 will be completed in conjunction with the long-term groundwater monitoring plan to further assess this area as historic information is not available. The system will remain in place under a regulatory-approved O&M Plan until the groundwater quality reaches remedial goals.

The current deed restrictions filed for the Site add to the level of protectiveness for both current and future site and prohibit the following:

- construction of groundwater supply wells for consumption or production
- excavation within the CAMU
- disturbance or excavation of the property which threatens the integrity of the engineering controls or which results in unacceptable human exposure to contaminated soils

The deed restrictions also require evaluation of the potential for soil vapor intrusion (SVI) by the Site owner should the on-Site building become occupied and for any buildings being developed on the Site. In such cases, a SVI sampling work plan will be developed and submitted to NYSDEC and NYSDOH for approval prior to occupation of the building or construction of any new buildings.

Additionally, off-Site residences potentially impacted by vapor intrusion were provided sub-slab depressurization systems designed to mitigate this exposure pathway.

The former remedial actions and active groundwater and vapor intrusion systems, together with the deed restriction and O&M plans, effectively mitigate exposures to Site media given current Site use.

As the next step, a Remedial Alternatives Analysis (RAA) will be conducted that incorporates considerations for future uses associated with redevelopment of the Site. The RAA will be submitted to NYSDEC within 90 days of approval of the RIR. An Environmental Easement will be developed to replace the current deed restriction document as part of the Certificate of Completion process.

10. References

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Tables

Table 1

Analytical Summary

Former Accurate Die Casting Site
Fayetteville, NY

Sample Location	Sample Date	Sample Depth	Analytical Parameters												
			VOCs	PCBs	SVOCs	Metals	Lead	Cyanide	Mercury	Hardness	Pesticides	Herbicides	TOC	1-4 Dioxane	PFAS
SURFACE WATER															
SW-01	11/18/2019	Midpoint of Water Column	X	X	X	X		X		X					
SW-02	11/18/2019	Midpoint of Water Column	X	X	X	X		X		X					
SW-03	11/18/2019	Midpoint of Water Column	X	X	X	X		X		X					
SEDIMENT		**Below Top of Sediment**													
SED-01	11/18/2019	0-0.5'	X	X	X	X		X					X		
SED-02	11/18/2019	0-0.5'	X	X	X	X		X					X		
SED-03	11/18/2019	0-0.5'	X	X	X	X		X					X		
NEAR-SURFACE SOIL (0-24")		**Below Ground Surface**													
SS-01	11/14/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X						X (0-2")	X (0-2")
SS-02	11/12/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-03	11/14/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X						X (6-12")	X (6-12")
SS-04	11/15/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-05	11/12/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-06	11/12/2019	8" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-07	11/12/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-08	11/13/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-09	11/13/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-10	11/12/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-11	11/14/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-12	11/15/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-13	11/13/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-14	11/14/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X						X (12-24")	X (12-24")
SS-15	11/13/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-16	11/13/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SS-17	11/15/2019	5" and 18"	X												
		0-2", 2-12", and 12-24"		X	X	X		X							
SUBSURFACE SOIL		**Below Building Slab**													
SB-MIP-1	1/31/2020	8-10' and 23-25'	X												
SB-MIP-3	1/30/2020	7-9' and 22-24'	X												
SB-MIP-4	1/31/2020	3-5' and 23-25'	X												
SB-MIP-5	1/30/2020	3-5' and 20-22'	X												
SB-MIP-6	1/31/2020	8-10' and 23-25'	X											X (8-10')	X (8-10')
SB-20-1	1/29/2020	8-10'	X	X	X	X		X							
SB-20-2	2/3/2020	8-10'	X	X	X	X		X							
SB-20-3	1/27/2020	10-12'	X	X	X	X		X							
SB-20-4	1/29/2020	3-5'	X	X	X	X		X							
SB-20-6	1/27/2020	11-13'	X	X	X	X		X							
SB-20-7	1/28/2020	3-5'	X	X	X	X		X							
SB-20-8	1/28/2020	7-9'	X	X	X	X		X						X (7-9')	X (7-9')
SB-20-9	1/28/2020	3-5'	X	X	X	X		X							
SB-20-10	1/27/2020	6-10'	X	X	X	X		X							
SB-20-11	1/29/2020	3-5'	X	X	X	X		X							
SB-20-12	1/29/2020	6-10'	X	X	X	X		X							
SB-20-13	1/28/2020	8-10'	X	X	X	X		X							
SB-20-14	1/30/2020	7-9'	X		X			X							
		Below Ground Surface													
SB-20-5	2/3/2020	9-11'	X				X	X							
SB-20-15	2/3/2020	2-4'	X	X	X	X		X							
SB-20-16	2/3/2020	9-12'	X	X	X	X		X						X (9-12')	X (9-12')
GROUNDWATER															
MW-01	2/22/2024					Well Was Dry During the Sampling Event.									
MW-02	2/22/2024		X	X	X	X		X	X		X	X			
MW-05	3/1/2024		X	X	X	X		X	X		X	X			
MW-07	2/22/2024					Well Was Dry During the Sampling Event.									
MW-11	3/1/2024		X	X	X	X		X	X		X	X			
MW-12	2/21/2024		X	X	X	X		X	X		X	X			
MW-13	2/20/2024		X			Water Volume Insufficient for the Remainder of the Analyses.									
MW-15	2/21/2024		X	X	X	X		X	X		X	X			
MW-17	2/22/2024		X	X	X	X		X	X		X	X			
MW-18	2/20/2024		X	X	X	X		X	X		X	X			
MW-22	2/22/2024		X	X	X	X		X	X		X	X			
MW-23	2/21/2024		X	X	X	X		X	X		X	X			
MW-24	2/20/2024		X			Water Volume Insufficient for the Remainder of the Analyses.									
MW-25	2/22/2024		X	X	X	X		X	X		X	X			
MW-26	2/22/2024		X	X	X	X		X	X		X	X			
MW-27	2/21/2024		X			Water Volume Insufficient for the Remainder of the Analyses.									
SOIL VAPOR															
SV-01	10/15/2024		X												
SV-02	8/29/2024		X												
SV-03	7/24/2024		X												
SV-04	7/24/2024		X												
SV-05	7/24/2024		X												
SV-06	7/24/2024		X												
SV-07	7/24/2024		X												
SV-08	7/24/2024		X												
SV-09	7/24/2024		X												
SV-10	7/24/2024		X												

Notes:

Volatile organic compounds (VOCs)	USEPA Method 8260C
Semivolatile organic compounds (SVOCs)	USEPA Method 8270D
Polychlorinated biphenyls (PCBs)	USEPA Method 8082A
Metals	USEPA Method 6010C/7471B
Cyanide	USEPA Method 9014
Per- and Polyfluoroalkyl Substances (PFAS)	USEPA Method 537 Modified
1,4-Dioxane	USEPA Method 8270 SIM
Soil vapor (VOCs)	USEPA Method TO-15

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Table 2

Surface Water Analytical Data - Volatile Organic Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class C Surface Water Criteria (µg/L) $^{(1)}$	Site Zoning	Residential	Residential	Residential	Residential
		Location	SW-01	SW-02	SW-02	SW-03
		Sample ID	SW-01_11182019	SW-02_11182019	FD-01_11182019	SW-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	µg/L	µg/L	µg/L	µg/L
1,1,1-Trichloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,1,2,2-Tetrachloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,1,2-Trichloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,2,3-Trichlorobenzene	5**		5.0 U	5.0 U	5.0 U	5.0 U
1,2,4-Trichlorobenzene	5**		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichlorobenzene	5**		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dichloropropane	NS		5.0 U	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	5**		5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	5**		5.0 U	5.0 U	5.0 U	5.0 U
1,4-Dioxane	NS		100 U	100 U	100 U	100 U
2-Butanone	NS		10 U	10 U	10 U	10 U
2-Hexanone	NS		10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone	NS		10 U	10 U	10 U	10 U
Acetone	NS		10 U	10 U	10 U	10 U
Benzene	10		5.0 U	5.0 U	5.0 U	5.0 U
Bromochloromethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
Bromodichloromethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
Bromoform	NS		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Bromomethane	NS		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Carbon disulfide	NS		10 U	10 U	10 U	10 U
Carbon Tetrachloride	NS		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Chlorobenzene	5		5.0 U	5.0 U	5.0 U	5.0 U
Chloroethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
Chloroform	NS		5.0 U	5.0 U	5.0 U	5.0 U
Chloromethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Cis-1,3-Dichloropropene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Cyclohexane	NS		10 U	10 U	10 U	10 U
Dibromochloromethane	NS		5.0 UJ	5.0 UJ	5.0 UJ	5.0 UJ
Dichlorodifluoromethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Isopropylbenzene	NS		5.0 U	5.0 U	5.0 U	5.0 U
m,p-Xylene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Methyl Acetate	NS		10 U	10 U	10 U	10 U
Methylcyclohexane	NS		10 U	10 U	10 U	10 U
Methylene Chloride	200		5.0 U	5.0 U	5.0 U	5.0 U
MTBE	NS		5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Styrene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Toluene	6,000		5.0 U	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Trans-1,3-Dichloropropene	NS		5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene	40		0.21 J	5.0 U	5.0 U	5.0 U
Trichlorofluoromethane	NS		5.0 U	5.0 U	5.0 U	5.0 U
TRICHLOROTRIFLUOROETHANE	NS		5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride	NS		5.0 U	5.0 U	5.0 U	5.0 U

Notes:

[1] - 6 CRR-NY Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations

5** - Applies to the sum of 1,2,3-, 1,2,4-, and 1,3,5-trichlorobenzene and to the sum of 1,2-, 1,3-, and 1,4-dichlorobenzene.

NS - Not Specified

U - Not Detected

J - Estimated Values

FD - Field Duplicate

Table 3

Surface Water Analytical Data - Semivolatile Organic Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class C Surface Water Criteria (µg/L) (1)	Site Zoning	Residential	Residential	Residential	Residential
		Location	SW-01	SW-02	SW-02	SW-03
		Sample ID	SW-01_11182019	SW-02_11182019	FD-01_11182019	SW-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	µg/L	µg/L	µg/L	µg/L
1,1'-Biphenyl	NS		10 U	9.3 U	10 U	9.7 U
1,2,4,5-Tetrachlorobenzene	NS		10 U	9.3 U	10 U	9.7 U
2,3,4,6-Tetrachlorophenol	1		10 U	9.3 U	10 U	9.7 U
2,4,5-Trichlorophenol	1		10 U	9.3 U	10 U	9.7 U
2,4,6-Trichlorophenol	1		10 U	9.3 U	10 U	9.7 U
2,4-Dichlorophenol	1		10 U	9.3 U	10 U	9.7 U
2,4-Dimethylphenol	1,000		10 U	9.3 U	10 U	9.7 U
2,4-Dinitrophenol	400		50 U	46 U	50 U	49 U
2,4-Dinitrotoluene	NS		10 U	9.3 U	10 U	9.7 U
2,6-Dinitrotoluene	NS		10 U	9.3 U	10 U	9.7 U
2-Chloronaphthalene	NS		10 U	9.3 U	10 U	9.7 U
2-Chlorophenol	NS		10 U	9.3 U	10 U	9.7 U
2-Methylnaphthalene	NS		10 U	9.3 U	10 U	9.7 U
2-Methylphenol	NS		10 U	9.3 U	10 U	9.7 U
2-Nitroaniline	NS		50 U	46 U	50 U	49 U
2-Nitrophenol	NS		10 U	9.3 U	10 U	9.7 U
3- AND 4- METHYLPHENOL (TOTAL)	NS		10 U	9.3 U	10 U	9.7 U
3,3-Dichlorobenzidine	NS		10 U	9.3 U	10 U	9.7 U
3-Nitroaniline	NS		50 U	46 U	50 U	49 U
4,6-Dinitro-2-methylphenol	NS		50 U	46 U	50 U	49 U
4-Bromophenyl-phenylether	NS		10 U	9.3 U	10 U	9.7 U
4-Chloro-3-methylphenol	NS		10 U	9.3 U	10 U	9.7 U
4-Chloroaniline	NS		10 U	9.3 U	10 U	9.7 U
4-Chlorophenyl-phenylether	NS		10 U	9.3 U	10 U	9.7 U
4-Nitroaniline	NS		50 U	46 U	50 U	49 U
4-Nitrophenol	NS		50 U	46 U	50 U	49 U
Acenaphthene	NS		10 U	9.3 U	10 U	9.7 U
Acenaphthylene	NS		10 U	9.3 U	10 U	9.7 U
Acetophenone	NS		10 U	9.3 U	10 U	9.7 U
Anthracene	NS		10 U	9.3 U	10 U	9.7 U
Atrazine	NS		10 U	9.3 U	10 U	9.7 U
Benzaldehyde	NS		50 U	46 U	50 U	49 U
Benzo[a]anthracene	NS		10 U	9.3 U	10 U	9.7 U
Benzo[a]pyrene	NS		10 U	9.3 U	10 U	9.7 U
Benzo[b]fluoranthene	NS		10 U	9.3 U	10 U	9.7 U
Benzo[g,h,i]perylene	NS		10 U	9.3 U	10 U	9.7 U
Benzo[k]fluoranthene	NS		10 U	9.3 U	10 U	9.7 U
Bis(2-Chloroethoxy)methane	NS		10 U	9.3 U	10 U	9.7 U
Bis(2-Chloroethyl)Ether	NS		10 U	9.3 U	10 U	9.7 U
Bis(2-Chloroisopropyl)ether	NS		10 U	9.3 U	10 U	9.7 U
Bis(2-Ethylhexyl)phthalate	0.6		10 U	230 U	9.7 U	9.7 U
Butylbenzylphthalate	NS		10 U	9.3 U	10 U	9.7 U
Caprolactam	NS		10 U	9.3 U	10 U	9.7 U
Carbazole	NS		10 U	9.3 U	10 U	9.7 U
Chrysene	NS		10 U	9.3 U	10 U	9.7 U
Dibenzo[a,h]Anthracene	NS		10 U	9.3 UJ	10 U	9.7 U
Dibenzofuran	$6x10^{-10}$		10 U	9.3 U	10 U	9.7 U
Diethylphthalate	NS		10 U	9.3 U	10 U	9.7 U
Dimethylphthalate	NS		10 U	9.3 U	10 U	9.7 U
Di-n-butylphthalate	NS		10 U	9.3 U	10 U	9.7 U
Di-n-octylphthalate	NS		10 U	9.3 U	10 U	9.7 U
Fluoranthene	NS		10 U	9.3 U	10 U	9.7 U
Fluorene	NS		10 U	9.3 U	10 U	9.7 U
Hexachlorobenzene	$3x10^{-5}$		10 U	9.3 U	10 U	9.7 U
Hexachlorobutadiene	1		10 U	9.3 U	10 U	9.7 U
Hexachlorocyclopentadiene	0.45		10 U	9.3 U	10 U	9.7 U
Hexachloroethane	0.6		10 U	9.3 U	10 U	9.7 U
Indeno[1,2,3-cd]pyrene	NS		10 U	9.3 U	10 U	9.7 U
Isophorone	NS		10 U	9.3 U	10 U	9.7 U
Naphthalene	NS		10 U	9.3 U	10 U	9.7 U
Nitrobenzene	NS		10 U	9.3 U	10 U	9.7 U
N-Nitroso-Di-N-Propylamine	NS		10 U	9.3 U	10 U	9.7 U
N-Nitrosodiphenylamine	NS		10 U	9.3 U	10 U	9.7 U
Pentachlorophenol	Calc based on pH		50 U	46 U	50 U	49 U
Phenanthrene	NS		10 U	9.3 U	10 U	9.7 U
Phenol	5		10 U	9.3 U	10 U	9.7 U
Pyrene	NS		10 U	9.3 U	10 U	9.7 U

Notes:

[1] - 6 CRR-NY Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations

NS - Not Specified

U - Not Detected

FD - Field Duplicate

Table 4

Surface Water Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class C Surface Water Criteria (µg/L) $^{(1)}$	Site Zoning	Residential	Residential	Residential	Residential
		Location	SW-01	SW-02	SW-02	SW-03
		Sample ID	SW-01_11182019	SW-02_11182019	FD-01_11182019	SW-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	µg/L	µg/L	µg/L	µg/L
Aroclor-1016	NS		0.98 U	0.95 U	0.98 U	0.93 U
Aroclor-1221	NS		2.0 U	1.9 U	2.0 U	1.9 U
Aroclor-1232	NS		0.98 U	0.95 U	0.98 U	0.93 U
Aroclor-1242	NS		0.98 U	0.95 U	0.98 U	0.93 U
Aroclor-1248	NS		0.98 U	0.95 U	0.98 U	0.93 U
Aroclor-1254	NS		0.98 U	0.95 U	0.98 U	0.93 U
Aroclor-1260	NS		0.98 U	0.95 U	0.98 U	0.93 U
Total PCBs	$1.2x10^{-6}$		ND	ND	ND	ND

Notes:

[1] - 6 CRR-NY Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations

U - Not Detected

ND - None Detected

NS - Not Specified

FD - Field Duplicate

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Table 5

Surface Water Analytical Data - Metals, Cyanide, and Hardness

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class C Surface Water Criteria (µg/L) (1)	Site Zoning	Residential	Residential	Residential	Residential
		Location	SW-01	SW-02	SW-02	SW-03
		Sample ID	SW-01_11182019	SW-02_11182019	FD-01_11182019	SW-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	µg/L	µg/L	µg/L	µg/L
Aluminum	100		34.3 J	59.1 J	56.4 J	35.5 J
Antimony	NS		60 U	60 U	60 U	60 U
Arsenic	150		10 U	10 U	10 U	10 U
Barium	NS		93.6	92.9	95.3	93.8
Beryllium	Calc based on hardness		3 U	3 U	3 U	3 U
Cadmium	Calc based on hardness		5 U	5 U	5 U	5 U
Calcium	NS		158000	152000	155000	153000
Chromium	Calc based on hardness		10 U	10 U	10 U	10 U
Cobalt	5		50 U	50 U	50 U	50 U
Copper	Calc based on hardness		20 U	20 U	20 U	20 U
Iron	NS		28.2 J	49.6 J	68.7 J	46.3 J
Lead	Calc based on hardness		50 U	50 U	50 U	50 U
Magnesium	NS		24900	24300	24900	24400
Manganese	NS		10 U	10 U	10 U	10 U
Mercury	0.77		0.2 U	0.2 U	0.2 U	0.2 U
Nickel	Calc based on hardness		40 U	40 U	40 U	40 U
Potassium	NS		2000 J	1980 J	2030	2020
Selenium	4.6		10 U	10 U	10 U	10 U
Silver	0.1		10 U	10 U	10 U	10 U
Sodium	NS		67800	66900	68500	68500
Thallium	8		10 U	10 U	10 U	10 U
Vanadium	14		50 U	50 U	50 U	50 U
Zinc	Calc based on hardness		20 U	20 U	20 U	20 U
Cyanide, Total	5.2		10 U	10 U	10 U	10 U
Hardness, Total as $CaCO_3$	NS		497000	479000	490000	482000

Notes:

[1] - 6 CRR-NY Part 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations

NS - Not Specified

U - Not Detected

J - Estimated Values

FD - Field Duplicate

Table 6

Sediment Analytical Data - Volatile Organic Compounds and Total Organic Carbon

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class A Fresh Water Sediment Guidance Values (µg/kg) (1)	Site Zoning	Residential	Residential	Residential	Residential
		Location	SED-01	SED-02	SED-02	SED-03
		Sample ID	SED-01_11182019	SED-02_11182019	FD-01_11182019	SED-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	<1,900		8.7 U	7.9 U	6.4 U	7.7 U
1,1,2,2-Tetrachloroethane	<2,800		8.7 U	7.9 U	6.4 U	7.7 U
1,1,2-Trichloroethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,1-Dichloroethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,1-Dichloroethene	<520		8.7 U	7.9 U	6.4 U	7.7 U
1,2,3-Trichlorobenzene	<230		8.7 U	7.9 U	6.4 U	7.7 U
1,2,4-Trichlorobenzene	<35,000		8.7 U	7.9 U	6.4 U	7.7 U
1,2-Dibromo-3-chloropropane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,2-Dibromoethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,2-Dichlorobenzene	<280		8.7 U	7.9 U	6.4 U	7.7 U
1,2-Dichloroethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,2-Dichloropropane	NS		8.7 U	7.9 U	6.4 U	7.7 U
1,3-Dichlorobenzene	<1,800		8.7 U	7.9 U	6.4 U	7.7 U
1,4-Dichlorobenzene	<720		8.7 U	7.9 U	6.4 U	7.7 U
1,4-Dioxane	NS		170 U	160 U	130 U	150 U
2-Butanone	NS		84 U	5.7 U	6.4 U	7.7 U
2-Hexanone	NS		8.7 U	7.9 U	6.4 U	7.7 U
4-Methyl-2-Pentanone	NS		8.7 U	7.9 U	6.4 U	7.7 U
Acetone	NS		1600 U	260 U	6.4 UJ	7.7 U
Benzene	<530		8.7 U	7.9 U	6.4 U	7.7 U
Bromochloromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Bromodichloromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Bromoform	NS		8.7 U	7.9 U	6.4 U	7.7 U
Bromomethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Carbon disulfide	NS		5.3 J	7.9 U	6.4 U	7.7 U
Carbon Tetrachloride	<1,070		8.7 U	7.9 U	6.4 U	7.7 U
Chlorobenzene	<200		8.7 U	7.9 U	6.4 U	7.7 U
Chloroethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Chloroform	NS		8.7 U	7.9 U	6.4 U	7.7 U
Chloromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
cis-1,2-Dichloroethene	NS		8.7 U	7.9 U	6.4 U	7.7 U
Cis-1,3-Dichloropropene	NS		8.7 U	7.9 U	6.4 U	7.7 U
Cyclohexane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Dibromochloromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Dichlorodifluoromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Ethylbenzene	<430		8.7 U	7.9 U	6.4 U	7.7 U
Isopropylbenzene	<210		8.7 U	7.9 U	6.4 U	7.7 U
m,p-Xylene	<480		17 U	16 U	13 U	15 U
Methyl Acetate	NS		20 U	10 U	6.4 U	7.7 U
Methylcyclohexane	NS		8.7 U	7.9 U	6.4 U	7.7 U
Methylene Chloride	NS		8.7 U	7.9 U	6.4 U	7.7 U
MTBE	NS		2.1 J	1.7 J	6.4 U	7.7 U
o-Xylene	<820		8.7 U	7.9 U	6.4 U	7.7 U
Styrene	NS		8.7 U	7.9 U	6.4 U	7.7 U
Tetrachloroethene	<16,000		8.7 U	7.9 U	6.4 U	7.7 U
Toluene	<930		8.7 U	7.9 U	6.4 U	7.7 U
trans-1,2-Dichloroethene	<1,200		8.7 U	7.9 U	6.4 U	7.7 U
Trans-1,3-Dichloropropene	NS		8.7 U	7.9 U	6.4 U	7.7 U
Trichloroethene	<1,800		0.80 J	7.9 U	6.4 U	7.7 U
Trichlorofluoromethane	NS		8.7 U	7.9 U	6.4 U	7.7 U
TRICHLOROTRIFLUOROETHANE	NS		8.7 U	7.9 U	6.4 U	7.7 U
Vinyl Chloride	NS		8.7 U	7.9 U	6.4 U	7.7 U
Carbon, Total Organic (TOC) (mg/Kg)	NS		60500	52200	NA	26200

Notes:

1 - Screening and Assessment of Contaminated Sediment (NYSDEC, June 24, 2014)

U - Not Detected

J - Estimated Values

NS - Not Specified

D - Diluted

Table 7

Sediment Analytical Data - Semivolatile Organic Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class A Fresh Water Sediment Guidance Values (µg/kg) (1)	Site Zoning Location Sample ID Sample Date Units	Residential SED-01 SED-01_11182019 11/18/2019 ug/Kg	Residential SED-02 SED-02_11182019 11/18/2019 ug/Kg	Residential SED-02 FD-01_11182019 11/18/2019 ug/Kg	Residential SED-03 SED-03_11182019 11/18/2019 ug/Kg
1,1'-Biphenyl	NS		560 U	580 U	420 U	570 U
1,2,4,5-Tetrachlorobenzene	<3,000		560 U	580 U	420 U	570 U
2,3,4,6-Tetrachlorophenol	NS		560 U	580 U	420 U	570 U
2,4,5-Trichlorophenol	NS		560 U	580 U	420 U	570 U
2,4,6-Trichlorophenol	NS		560 U	580 U	420 U	570 U
2,4-Dichlorophenol	NS		560 U	580 U	420 U	570 U
2,4-Dimethylphenol	NS		560 U	580 U	420 U	570 U
2,4-Dinitrophenol	NS		2900 R	3000 U	2200 U	2900 U
2,4-Dinitrotoluene	NS		560 U	580 U	420 U	570 U
2,6-Dinitrotoluene	NS		560 U	580 U	420 U	570 U
2-Chloronaphthalene	NS		560 U	580 U	420 U	570 U
2-Chlorophenol	NS		560 U	580 U	420 U	570 U
2-Methylnaphthalene	NS		560 U	580 U	420 U	570 U
2-Methylphenol	NS		560 U	580 U	420 U	570 U
2-Nitroaniline	NS		2900 U	3000 U	2200 U	2900 U
2-Nitrophenol	NS		560 U	580 U	420 U	570 U
3- AND 4- METHYLPHENOL (TOTAL)	NS		560 U	580 U	420 U	570 U
3,3-Dichlorobenzidine	NS		560 U	580 U	420 U	570 U
3-Nitroaniline	NS		2900 U	3000 U	2200 U	2900 U
4,6-Dinitro-2-methylphenol	NS		2900 R	3000 U	2200 U	2900 U
4-Bromophenyl-phenylether	NS		560 U	580 U	420 U	570 U
4-Chloro-3-methylphenol	NS		560 U	580 U	420 U	570 U
4-Chloroaniline	NS		560 U	580 U	420 U	570 U
4-Chlorophenyl-phenylether	NS		560 U	580 U	420 U	570 U
4-Nitroaniline	NS		2900 U	3000 U	2200 U	2900 U
4-Nitrophenol	NS		2900 U	3000 U	2200 U	2900 U
Acenaphthene	9,820		560 U	580 U	420 U	200 J
Acenaphthylene	9,040		560 U	580 U	420 U	570 U
Acetophenone	NS		560 U	580 U	420 U	570 U
Anthracene	11,880		560 U	290 J	190 J	510 J
Atrazine	NS		560 U	580 U	420 U	570 U
Benzaldehyde	NS		2900 U	3000 U	2200 U	2900 U
Benzo[a]anthracene	16,820		690	1100	930	840
Benzo[a]pyrene	19,280		780	1200	1000	750
Benzo[b]fluoranthene	19,580		1000	1500	1400	920
Benzo[g,h,i]perylene	21,900		590	810	740	470 J
Benzo[k]fluoranthene	19,580		400 J	540 J	500	350 J
Bis(2-Chloroethoxy)methane	NS		560 U	580 U	420 U	570 U
Bis(2-Chloroethyl)Ether	NS		560 U	580 U	420 U	570 U
Bis(2-Chloroisopropyl)ether	NS		560 U	580 U	420 U	570 U
Bis(2-Ethylhexyl)phthalate	<360,000		850 U	880 U	630 U	860 U
Butylbenzylphthalate	NS		560 U	580 U	420 U	570 U
Caprolactam	NS		560 U	580 U	420 U	570 U
Carbazole	NS		560 U	190 J	190 J	240 J
Chrysene	16,860		950	1400	1200	870
Dibenzo[a,h]Anthracene	22,440		560 U	580 U	160 J	570 U
Dibenzofuran	NS		560 U	580 U	420 U	570 U
Diethylphthalate	NS		560 U	580 U	420 U	570 U
Dimethylphthalate	NS		560 U	580 U	420 U	570 U
Di-n-butylphthalate	NS		560 U	580 U	420 U	570 U
Di-n-octylphthalate	NS		560 U	580 U	420 U	570 U
Fluoranthene	14,160		1800	2900	2400	2300
Fluorene	10,780		560 U	580 U	420 U	250 J
Hexachlorobenzene	NS		560 U	580 U	420 U	570 U
Hexachlorobutadiene	<1,200		560 U	580 U	420 U	570 U
Hexachlorocyclopentadiene	<810		560 R	580 U	420 U	570 U
Hexachloroethane	NS		560 R	580 U	420 U	570 U
Indeno[1,2,3-cd]pyrene	22,300		610	830	780	500 J
Isophorone	NS		560 U	580 U	420 U	570 U
Naphthalene	7,700		560 U	580 U	420 U	570 U
Nitrobenzene	NS		560 U	580 U	420 U	570 U
N-Nitroso-Di-N-Propylamine	NS		560 U	580 U	420 U	570 U
N-Nitrosodiphenylamine	NS		560 U	580 U	420 U	570 U
Pentachlorophenol	<14,000		2900 U	3000 U	2200 U	2900 U
Phenanthrene	11,940		830	1700	1200	2000
Phenol	NS		560 U	580 U	420 U	570 U
Pyrene	13,960		1600	2500	2200	1800

Notes:

1 - Screening and Assessment of Contaminated Sediment (NYSDEC, June 24, 2014)

U - Not Detected

J - Estimated Values

R - Rejected

NS - Not Specified

Table 8

Sediment Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class A Fresh Water Sediment Guidance Values (µg/kg) (1)	Site Zoning	Residential	Residential	Residential	Residential
		Location	SED-01	SED-02	SED-02	SED-03
		Sample ID	SED-01_11182019	SED-02_11182019	FD-01_11182019	SED-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Aroclor-1016	NS		65 U	72 U	41 U	59 U
Aroclor-1221	NS		130 U	150 U	84 U	120 U
Aroclor-1232	NS		65 U	72 U	41 U	59 U
Aroclor-1242	NS		65 U	72 U	41 U	59 U
Aroclor-1248	NS		65 U	72 U	41 U	59 U
Aroclor-1254	NS		65 U	72 U	41 U	59 U
Aroclor-1260	NS		65 U	72 U	41 U	59 U
Total PCBs	<100		ND	ND	ND	ND

Notes:

1 - Screening and Assessment of Contaminated Sediment (NYSDEC, June 24, 2014)

NS - Not Specified

U - Not Detected

ND - None Detected

Table 9

Sediment Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Class A Fresh Water Sediment Guidance Values (mg/kg) (1)	Site Zoning	Residential	Residential	Residential	Residential
		Location	SED-01	SED-02	SED-02	SED-03
		Sample ID	SED-01_11182019	SED-02_11182019	FD-01_11182019	SED-03_11182019
		Sample Date	11/18/2019	11/18/2019	11/18/2019	11/18/2019
		Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS		6080	6410	4760	10800
Antimony	NS		9.8 U	10.5 U	7.4 U	10.3 U
Arsenic	<10		2.5	2.8	2.2	2.7
Barium	NS		65.4	79.4	58.4	47.6
Beryllium	NS		0.31 J	0.332 J	0.247 J	0.445 J
Cadmium	<1		0.424 J	0.489 J	0.346 J	0.428 J
Calcium	NS		78100	87700	68000 *	152000
Chromium	<43		11.3	11.7	8.7	20.9
Cobalt	NS		4.3 J	4.9 J	3.5 J	7.5 J
Copper	<32		13.9	14.2	10.6	10.4
Iron	NS		9510	10500	7750	17100
Lead	<36		12.1	12.3	8.2	10.1
Magnesium	NS		16800 J	17800	13200 *	66200
Manganese	NS		132 N	246 N	184 N	431 N
Mercury	<0.2		0.053 J	0.04 J	0.029 J	0.034 J
Nickel	<23		12.2	14	9.9	22.4
Potassium	NS		1240	1300	962	1790
Selenium	NS		1.6 U	1.8 U	1.2 U	1.7 U
Silver	<1		1.6 U	1.8 U	1.2 U	1.7 U
Sodium	NS		195	129 J	94.4 J	252
Thallium	NS		1.3 J	2.2	1.9	3.6
Vanadium	NS		12.1	13.3	9.5	17.8
Zinc	<120		66.2	74.5	58.3	70.4
Cyanide, Total	NS		0.37 U	0.41 UJ	1.3 J	0.45 U

Notes:

1 - Screening and Assessment of Contaminated Sediment (NYSDEC, June 24, 2014)

U - Not Detected

J - Estimated Values

NS - Not Specified

* - Quality control parameters has exceeded labortory limits

Table 10

Surface Soil Analytical Data - Semivolatile Organic Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^{1}	Residential Use SCOs (µg/Kg)^{2}	Restricted-Residential Use SCOs (µg/Kg)^{3}	Commercial Use SCOs (µg/Kg)^{4}	Industrial Use SCOs (µg/Kg)^{5}	Protection of Groundwater SCOs (µg/Kg)^{6}	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-01	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	SS-07	SS-8	SS-09	SS-10	SS-11	SS-12
							Sample ID	SS-01_0-2_11142019	FD-01_11142019	SS-02_0-2_11122019	SS-03_0-2_11142019	SS-04_0-2_11152019	SS-05_0-2_11122019	SS-06_0-2_11122019	SS-07_0-2_11122019	SS-8_0-2_11132019	SS-09_0-2_11132019	SS-10_0-2_11122019	SS-11_0-2_11142019	SS-12_0-2_11152019
							Interval (inches)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
							Date	11/14/2019	11/14/2019	11/12/2019	11/14/2019	11/15/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019	11/12/2019	11/14/2019	11/15/2019
							Units	µg/Kg	µg/kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
1,4-Dioxane	100	9800	13000	130000	250000	100		90 U	90 U	---	---	---	---	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		2300 U	---	2500 U	2100 U	2200 U	2900 U	2200 U	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Acetophenone	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Anthracene	100000	100000	100000	500000	1000000	1000000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Atrazine	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		2300 U	---	2500 U	2100 U	2200 U	2900 U	900 J	2400 U	2300 U	2300 U	2500 U	2100 U	5400 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		200 J	---	330 J	410 U	130 J	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		210 J	---	340 J	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		250 J	---	440 J	410 U	180 J	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		160 J	---	260 J	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		660 U	---	720 U	630 U	650 U	840 U	660 U	710 U	670 U	670 U	720 U	610 U	1600 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Caprolactam	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Carbazole	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Chrysene	1000	1000	3900	56000	110000	1000		230 J	---	370 J	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		500	---	720	410 U	300 J	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Fluorene	30000	100000	100000	500000	1000000	386000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		160 J	---	250 J	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Isophorone	NS	NS	NS	NS	NS	4400		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Naphthalene	12000	100000	100000	500000	1000000	12000		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Nitrobenzene	NS	15000	15000	69000	NS	170		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Pentachlorophenol	800	2400	6700	6700	55000	800		2300 U	---	2500 UJ	2100 U	2200 U	2900 UJ	2200 UJ	2400 UJ	2300 UJ	2300 UJ	2500 UJ	2100 U	5400 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		330 J	---	390 J	410 U	160 J	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Phenol	330	100000	100000	500000	1000000	330		440 U	---	480 U	410 U	430 U	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U
Pyrene	100000	100000	100000	500000	1000000	1000000		470	---	650	410 U	280 J	560 U	440 U	470 U	440 U	440 U	480 U	400 U	1000 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 10

Surface Soil Analytical Data - Semivolatile Organic Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-13	SS-14	SS-15	SS-16	SS-17
							Sample ID	SS-13_0-2_11132019	SS-14_0-2_11142019	SS-15_0-2_11132019	SS-16_0-2_11132019	SS-17_0-2_11152019
							Interval (inches)	0-2	0-2	0-2	0-2	0-2
							Date	11/13/2019	11/14/2019	11/13/2019	11/13/2019	11/15/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		760 U	450 U	1900 U	370 U	430 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		760 U	450 U	1900 U	370 U	430 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		3900 U	2300 U	9800 U	1900 U	2200 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		760 U	450 U	1900 U	370 U	430 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		760 U	450 U	1900 U	370 U	430 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		760 U	450 U	1900 U	370 U	430 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		3900 U	2300 U	9800 U	1900 U	2200 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		760 U	450 U	1900 U	370 U	430 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		3900 U	2300 U	9800 U	1900 U	2200 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		3900 U	2300 U	9800 U	1900 U	2200 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		3900 U	2300 U	9800 U	1900 U	2200 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		3900 U	2300 U	9800 U	1900 U	2200 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		760 U	450 U	1900 U	370 U	430 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		760 U	450 U	1900 U	370 U	430 U
Acetophenone	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Anthracene	100000	100000	100000	500000	1000000	1000000		760 U	450 U	1900 U	370 U	430 U
Atrazine	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		3900 U	2300 U	9800 U	1900 U	2200 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		760 U	450 U	820 J	370 U	160 J
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		760 U	450 U	1300 J	370 U	430 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		760 U	450 U	1700 J	370 U	190 J
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		760 U	450 U	1100 J	370 U	430 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		760 U	450 U	1900 U	370 U	430 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		1200 U	680 U	2900 U	560 U	640 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		760 U	450 U	1900 U	370 U	430 U
Caprolactam	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Carbazole	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Chrysene	1000	1000	3900	56000	110000	1000		760 U	450 U	1100 J	370 U	170 J
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		760 U	450 U	1900 U	370 U	430 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		760 U	450 U	1900 U	370 U	430 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		760 U	450 U	1900 U	370 U	430 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		760 U	450 U	1900 U	370 U	430 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		760 U	450 U	1900 U	370 U	430 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		760 U	450 U	1900 U	370 U	430 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		760 U	450 U	1700 J	370 U	360 J
Fluorene	30000	100000	100000	500000	1000000	386000		760 U	450 U	1900 U	370 U	430 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		760 U	450 U	1900 U	370 U	430 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		760 U	450 U	1100 J	370 U	430 U
Isophorone	NS	NS	NS	NS	NS	4400		760 U	450 U	1900 U	370 U	430 U
Naphthalene	12000	100000	100000	500000	1000000	12000		760 U	450 U	1900 U	370 U	430 U
Nitrobenzene	NS	15000	15000	69000	NS	170		760 U	450 U	1900 U	370 U	430 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		760 U	450 U	1900 U	370 U	430 U
Pentachlorophenol	800	2400	6700	6700	55000	800		3900 U	2300 UJ	9800 UJ	1900 UJ	2200 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		760 U	450 U	840 J	370 U	230 J
Phenol	330	100000	100000	500000	1000000	330		760 U	450 U	1900 U	370 U	430 U
Pyrene	100000	100000	100000	500000	1000000	1000000		760 U	450 U	1700 J	370 U	320 J

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 11

Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	SS-07	SS-8	SS-09	SS-10
							Sample ID	SS-01_0-2_11142019	SS-02_0-2_11122019	SS-03_0-2_11142019	SS-04_0-2_11152019	SS-05_0-2_11122019	SS-06_0-2_11122019	SS-07_0-2_11122019	SS-8_0-2_11132019	SS-09_0-2_11132019	SS-10_0-2_11122019
							Interval (inches)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
							Date	11/14/2019	11/12/2019	11/14/2019	11/15/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019	11/12/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS		44 U	47 U	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Aroclor-1221	NS	NS	NS	NS	NS	NS		89 U	96 U	84 U	89 U	110 U	86 U	88 U	97 U	88 U	91 U
Aroclor-1232	NS	NS	NS	NS	NS	NS		44 U	47 U	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Aroclor-1242	NS	NS	NS	NS	NS	NS		44 U	47 U	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Aroclor-1248	NS	NS	NS	NS	NS	NS		44 U	47 U	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Aroclor-1254	NS	NS	NS	NS	NS	NS		44 U	47 U	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Aroclor-1260	NS	NS	NS	NS	NS	NS		44 U	29 J	42 U	44 U	53 U	43 U	44 U	48 U	43 U	45 U
Total PCBs	100	1000	1000	1000	25000	3200		ND	29 J	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 11

Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17
							Sample ID	SS-11_0-2_11142019	SS-12_0-2_11152019	SS-13_0-2_11132019	SS-14_0-2_11142019	SS-15_0-2_11132019	SS-16_0-2_11132019	SS-17_0-2_11152019
							Interval (inches)	0-2	0-2	0-2	0-2	0-2	0-2	0-2
							Date	11/14/2019	11/15/2019	11/13/2019	11/14/2019	11/13/2019	11/13/2019	11/15/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Aroclor-1221	NS	NS	NS	NS	NS	NS		84 U	190 U	170 U	91 U	83 U	79 U	87 U
Aroclor-1232	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Aroclor-1242	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Aroclor-1248	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Aroclor-1254	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Aroclor-1260	NS	NS	NS	NS	NS	NS		41 U	95 U	85 U	45 U	41 U	39 U	43 U
Total PCBs	100	1000	1000	1000	25000	3200		ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 12

Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	SS-07	SS-8	SS-09
							Sample ID	SS-01_0-2_11142019	SS-02_0-2_11122019	SS-03_0-2_11142019	SS-04_0-2_11152019	SS-05_0-2_11122019	SS-06_0-2_11122019	SS-07_0-2_11122019	SS-8_0-2_11132019	SS-09_0-2_11132019
							Interval (ft)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
							Date	11/14/2019	11/12/2019	11/14/2019	11/15/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		11800	12000	9450	8220	8080	7700	9370	10400	9310
Antimony	NS	NS	NS	NS	NS	NS		7.3 UN	8.4 U	7.6 UN	7.7 U	8.8 UN	7 U	7.6 U	7.8 U	7.6 U
Arsenic	13	16	16	16	16	16		7.8 N	20.7	5 N	5.7	3.4	4.7	6.7	5.9	6.5
Barium	350	350	400	400	10000	820		74	69.8	43.9	50.9	76.6	37.2	62.3	76.3	67.2
Beryllium	7.2	14	72	590	2700	47		0.716	0.711	0.504	0.384 J	0.352 J	0.281 J	0.394	0.637	0.507
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.655	0.781	0.403 J	1.1	0.396 J	0.222 J	0.343 J	0.468 J	0.418 J
Calcium	NS	NS	NS	NS	NS	NS		5940	23700	42000	92800	4210	639	1290	4900	2690
Chromium	30	36	180	1500	6800	NS		23.3	23.3	15.2	16.1	10.7	9	11.9	16.7	14.2
Cobalt	NS	NS	NS	NS	NS	NS		9	21	7.4	6.6	4.9 J	6.1	8.4	8.6	7.7
Copper	50	270	270	270	10000	1720		18.6	28.8	20.4	53.3	13.8	13	18.7	26.7 N	23.3
Iron	NS	NS	NS	NS	NS	NS		22300	24200	16900	18600	10800	12300	16800	18500	17200
Lead	63	400	400	1000	3900	450		32.3	39.1	18.7	56.2	21.5	23.9	30.1	14.1	21.8
Magnesium	NS	NS	NS	NS	NS	NS		7590	16800	30000	36000	3510	2000	3340	5620	4010
Manganese	1600	2000	2000	10000	10000	2000		787	770	508	466	549	406	679	328	855
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.093	0.091	0.062	0.204	0.073	0.076	0.072	0.064	0.082
Nickel	30	140	310	310	10000	130		18.8	28.6	17	15.6	9.6	8.8	13	15.5	13.2
Potassium	NS	NS	NS	NS	NS	NS		1530	1750	1480	1580	1080	556	825	1210	1230
Selenium	3.9	36	180	1500	6800	4		0.971 J	1.4 U	1.3 U	1.3 U	0.822 J	0.948 J	1.3 U	1.3 U	0.886 J
Silver	2	36	180	1500	6800	8.3		1.2 U	0.223 J	1.3 U	0.103 J	1.5 U	1.2 U	1.3 U	1.3 U	1.3 U
Sodium	NS	NS	NS	NS	NS	NS		121 U	139 U	78.5 J	125 J	147 U	117 U	127 U	130 U	127 U
Thallium	NS	NS	NS	NS	NS	NS		1.2 U	1.4 U	1.3 U	2.4	1.5 U	1.2 U	1.3 U	1.3 U	1.3 U
Vanadium	NS	NS	NS	NS	NS	NS		26.2	26.7	19.4	16.7	14.2	15.9	19.5	21	20.2
Zinc	109	2200	10000	10000	10000	2480		86.3 N	215	104 N	347	64.4	38.3	47.4	121	62.7
Cyanide, Total	27	27	27	27	10000	40		0.50 U	0.50	0.48 U	0.78 U	0.45	0.31 J	0.38	0.34 U	0.58 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 12

Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-10	SS-11	SS-12	SS-13	SS-14	SS-15	SS-16	SS-17
							Sample ID	SS-10_0-2_11122019	SS-11_0-2_11142019	SS-12_0-2_11152019	SS-13_0-2_11132019	SS-14_0-2_11142019	SS-15_0-2_11132019	SS-16_0-2_11132019	SS-17_0-2_11152019
							Interval (ft)	0-2	0-2	0-2	0-2	0-2	0-2	0-2	0-2
							Date	11/12/2019	11/14/2019	11/15/2019	11/13/2019	11/14/2019	11/13/2019	11/13/2019	11/15/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		9940	9100	7520	13400	11300	3660	5750	9780
Antimony	NS	NS	NS	NS	NS	NS		7.5 UJ	7 UN	16.5 U	13 U	7.6 UN	6.4 U	6.6 U	7 U
Arsenic	13	16	16	16	16	16		5.9	5.5 N	9	7.7	6.5 N	10.6 U	4.2	6.4
Barium	350	350	400	400	10000	820		51.5	26.5	57.9	191	61	55.4	23.3	56.3
Beryllium	7.2	14	72	590	2700	47		0.515	0.493	0.495 J	0.93	0.617	0.201 J	0.287 J	0.457
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.44 J	0.305 J	1.8	0.627 J	0.491 J	0.466 J	0.221 J	0.316 J
Calcium	NS	NS	NS	NS	NS	NS		1650	31400	34400	11800	16800	190000	168000	10600
Chromium	30	36	180	1500	6800	NS		15.3	15.5	15.1	26.7	17.4	17.7	10.1	14
Cobalt	NS	NS	NS	NS	NS	NS		6.3	6.9	5.6 J	8.6 J	8.5	3 J	4.2 J	8.7
Copper	50	270	270	270	10000	1720		14.9	42.8	33.2	38 N	17.9	25.9 N	24.5 N	22.7
Iron	NS	NS	NS	NS	NS	NS		16600	15600	12700	20300	20200	7810	11900	17800
Lead	63	400	400	1000	3900	450		29.3	14.4	74.1	44.3	22.9	33.6	9.8	19.2
Magnesium	NS	NS	NS	NS	NS	NS		3880	19900	5570	6750	12300	27400	67300	9040
Manganese	1600	2000	2000	10000	10000	2000		364	367	349	1560	737	286	338	675
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.09	0.059	0.303	0.249	0.076	0.023 J	0.022 J	0.058
Nickel	30	140	310	310	10000	130		13.7	17.1	14.6	28	17.3	10.5	10.7	13.9
Potassium	NS	NS	NS	NS	NS	NS		917	1490	1560	1700	1280	977	1500	1130
Selenium	3.9	36	180	1500	6800	4		12.6 U	1.2 U	2.1 J	2.1 J	0.781 J	1.1 U	1.1 U	1.2 U
Silver	2	36	180	1500	6800	8.3		1.3 U	1.2 U	2.8 U	0.195 J	1.3 U	1.1 U	1.1 U	1.2 U
Sodium	NS	NS	NS	NS	NS	NS		126 U	64.4 J	275 U	162 J	126 U	176	196	117 U
Thallium	NS	NS	NS	NS	NS	NS		1.3 U	1.2 U	2.8 U	2.2 U	1.3 U	6.8	5.9	1.2 U
Vanadium	NS	NS	NS	NS	NS	NS		22	16.7	17.3	25.1	23.7	20.5	12.4	19
Zinc	109	2200	10000	10000	10000	2480		54.8	47.1 N	171	68.4	70.9 N	211	46.8	61.4
Cyanide, Total	27	27	27	27	10000	40		0.39	0.35 U	1.24 U	1.12	0.41 U	0.25 U	0.07 J	0.46 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥 Exceeds Unrestricted SCO
🟧 Exceeds Unrestricted and Residential SCOs
🟦 Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪 Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩 Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 13

Surface Soil Analytical Data - Per- and Polyfluoroalkyl Substances

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[1]	Restricted-Residential Use SCOs (µg/Kg)[1]	Commercial Use SCOs (µg/Kg)[1]	Industrial Use SCOs (µg/Kg)[1]	Protection of Groundwater SCOs (µg/Kg)[1]	Site Zoning	INDUSTRIAL	INDUSTRIAL
							Location	SS-01	SS-01
							Sample ID	SS-01_0-2_11142019	FD-01_11142019
							Interval (ft)	0-2	0-2
							Date	11/14/2019	11/14/2019
							Units	ng/g	ng/g
2-(N-methyl perfluorooctanesulfonamido) acetic acid	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROBUTANESULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROBUTYRIC ACID (PFBA)	NS	NS	NS	NS	NS	NS		0.57 J	0.62 J
PERFLUORODECANE SULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUORODECANOIC ACID (PFDA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUORODODECANOIC ACID (PFDoA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROHEPTANE SULFONATE (PFHpS)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	NS	NS	NS	NS		0.19 J	1.3 U
PERFLUOROHEXANESULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROHEXANOIC ACID (PFHxA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUORONONANOIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
Perfluorooctane Sulfonamide (FOSA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROOCTANE SULFONIC ACID (PFOS)	0.88	8.8	44	440	440	3.7		1.0	1.1 J
Perfluorooctanoic acid (PFOA)	0.66	6.6	33	500	600	1.1		0.60 J	0.63 J
PERFLUOROPENTANOIC ACID (PFPeA)	NS	NS	NS	NS	NS	NS		0.29 J	1.3 U
PERFLUOROTETRADECANOIC ACID (PFTeA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROTRIDECANOIC ACID (PFTriA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
PERFLUOROUNDECANOIC ACID (PFUnA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U

Notes:

[1] *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs* (NYSDEC, January 2021)

🟥 Exceeds Unrestricted SCO
🟧 Exceeds Unrestricted and Residential SCOs
🟦 Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪 Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩 Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 14

Frequency of Constituents Detected Above Soil Cleanup Objectives

Former Accurate Die Casting Site
Fayetteville, NY

Compound	Soil Cleanup Objectives (SCOs)						Range in Detected Concentration Above SCO	Frequency of Samples Exceeding Soil Cleanup Objectives (SCOs)						Samples Exceeding SCOs
	Unrestricted	Residential	Restricted-Residential	Commercial	Industrial	POGW		Unrestricted	Residential	Restricted-Residential	Commercial	Industrial	POGW	
Surface Soil (0-2")														
SVOCs														
Benzo(a)pyrene	1,000	1,000	1,000	1,000	1,100	22,000	1300 J µg/Kg	1/17	1/17	1/17	1/17	1/17	0/17	SS-15 (0-2")
Benzo(b)fluoranthene	1,000	1,000	1,000	5,600	11,000	1,700	1700 J µg/Kg	1/17	1/17	1/17	0/17	0/17	0/17	SS-15 (0-2")
Chrysene	1,000	1,000	3,900	56,000	110,000	1,000	1100 J µg/Kg	1/17	1/17	1/17	0/17	0/17	0/17	SS-15 (0-2")
Indeno(1,2,3-cd)pyrene	500	500	500	5,600	11,000	8,200	1100 J µg/Kg	1/17	1/17	1/17	0/17	0/17	0/17	SS-15 (0-2")
PCBs	---	---	---	---	---	---	Not Applicable	0/17	0/17	0/17	0/17	0/17	0/17	
Metals														
Arsenic	13	16	16	16	16	16	20.7 mg/Kg	1/17	1/17	1/17	1/17	1/17	0/17	SS-02 (0-2")
Copper	50	270	270	270	10,000	1,720	53.3 mg/Kg	1/17	0/17	0/17	0/17	0/17	0/17	SS-4_(0-2')
Lead	63	400	400	1,000	3,900	450	74.1 mg/Kg	1/17	0/17	0/17	0/17	0/17	0/17	SS-12 (0-2")
Mercury	0.18	0.81	0.81	2.8	5.7	0.73	0.204 mg/Kg - 0.303 mg/Kg	3/17	0/17	0/17	0/17	0/17	0/17	SS-4 (0-2"); SS-12 (0-2"); SS-13 (0-2")
Zinc	109	2,200	10,000	10,000	10,000	2,480	211 mg/Kg - 215 mg/Kg	5/17	0/17	0/17	0/17	0/17	0/17	SS-02 (0-2"); SS-04 (0-2"); SS-08 (0-2"); SS-12 (0-2"); SS-15 (0-2")
Per-and Polyfluoroalkyl Substances														
PFOS	0.88	8.8	44	440		3.7	1.1 J ng/Kg	1/1	0/1	0/1	0/1	0/1	0/1	SS-01 (0-2")
Near-Surface Soil (0-24")														
VOCs	---	---	---	---	---	---	Not Applicable	0/34	0/34	0/34	0/34	0/34	0/34	
SVOCs														
Benzo(a)pyrene	1000	1000	1000	1000	1,100	22000	1300 J µg/Kg - 1600 J µg/Kg	2/51	2/51	2/51	2/51	2/51	0/51	SS-15 (0-2"); SS-15 (2-12")
Benzo(b)fluoranthene	1000	1000	1000	5600	11,000	1700	1700 J µg/Kg - 1900 J µg/Kg	2/51	2/51	2/51	0/51	0/51	0/51	SS-15 (0-2"); SS-15 (2-12")
Chrysene	1000	1000	3900	56000	110,000	1000	1100 J µg/Kg - 1200 J µg/Kg	2/51	2/51	0/51	0/51	0/51	0/51	SS-15 (0-2"); SS-15 (2-12")
Indeno(1,2,3-cd)pyrene	500	500	500	5600	11,000	8200	1100 J µg/Kg - 1200 J µg/Kg	2/51	2/51	2/51	0/51	0/51	0/51	SS-15 (0-2"); SS-15 (2-12")
PCBs	---	---	---	---	---	---	Not Applicable	0/51	0/51	0/51	0/51	0/51	0/51	
Metals														
Arsenic	13	16	16	16	16	16	20.7 mg/Kg	1/51	1/51	1/51	1/51	1/51	0/51	SS-02 (0-2")
Chromium	30	36	180	1,500	6,800	NS	39.7 mg/Kg	1/51	1/51	0/51	0/51	0/51	0/51	SS-13 (2-12")
Copper	50	270	270	270	10,000	1,720	53.3 mg/Kg - 65.7 mg/Kg	2/51	0/51	0/51	0/51	0/51	0/51	SS-4_(0-2'); SS-13 (2-12")
Lead	63	400	400	1,000	3,900	450	65.8 mg/Kg - 74.1 mg/Kg	2/51	0/51	0/51	0/51	0/51	0/51	SS-12 (0-2"); SS-17 (12-24")
Manganese	1,600	2,000	2,000	10,000	10,000	2,000	2030 mg/Kg	1/51	1/51	1/51	0/51	0/51	0/51	SS-13 (2-12")
Mercury	0.18	0.81	0.81	2.8	5.7	0.73	0.204 mg/Kg - 0.303 mg/Kg	3/17	0/17	0/17	0/17	0/51	0/17	SS-4 (0-2"); SS-12 (0-2"); SS-13 (0-2")
Nickel	30	140	310	310	10,000	130	37.5 mg/Kg	1/51	0/51	0/51	0/51	0/51	0/51	SS-13 (2-12")
Zinc	109	2,200	10,000	10,000	10,000	2,480	110 mg/Kg - 347 mg/Kg	12/51	0/51	0/51	0/51	0/51	0/51	SS-02 (0-2"); SS-02 (2-12"); SS-03 (12-24"); SS-04 (0-2"); SS-08 (0-2"); SS-08 (2-12"); SS-12 (0-2"); SS-12 (2-12"); SS-12 (12-24"); SS-15 (0-2"); SS-15 (2-12"), SS-15 (12-24")
Per-and Polyfluoroalkyl Substances														
PFOS	0.88	8.8	44	440		3.7	1.1 ng/Kg	1/3	0/3	0/3	0/3	0/3	0/3	SS-01 (0-2")
Subsurface Soil - PCB/PAH/VOC Area														
VOCs														
cDCE	250	59,000	100,000	500,000	1,000,000	250	7600 J µg/Kg	1/2	0/2	0/2	0/2	0/2	1/2	SB-20-16 (9-12')
TCE	470	10,000	21,000	200,000	400,000	470	230000 µg/Kg	1/2	1/2	1/2	1/2	0/2	1/2	SB-20-16 (9-12')
SVOCs	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
PCBs	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
Metals	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
Per- and Polyfluoroalkyl Substances	---	---	---	---	---	---	Not Applicable	0/1	0/1	0/1	0/1	0/1	0/1	
Subsurface Soil - Former Manufacturing Building														
VOCs														
TCE	470	10,000	21,000	200,000	400,000	470	670 D µg/Kg - 24000 D µg/Kg	3/22	2/22	1/22	0/22	0/22	3/22	SB-MIP-3 (22-24'); SB-MIP-5 (20-22'); SB-MIP-6 (23-25')
SVOCs	---	---	---	---	---	---	Not Applicable	0/22	0/22	0/22	0/22	0/22	0/22	
PCBs														
Total PCBs	100	1,000	1,000	1,000	25,000	3,200	112 µg/Kg	1/12	0/12	0/12	0/12	0/12	0/12	SB-20-7 (3-5')
Metals														
Zinc	109	2,200	10,000	10,000	10,000	2,480	118 mg/Kg	1/12	0/12	0/12	0/12	0/12	0/12	SB-20-2 (8-10')
Per-and Polyfluoroalkyl Substances	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
Subsurface Soil - Underground Storage Tanks														
VOCs														
Benzene	60	2,900	4,800	44,000	89,000	60	130 DJ µg/Kg	1/2	0/2	0/2	0/2	0/2	0/2	FD-1-020320 (parent sample - SB-20-5-9-11-020320)
Ethylbenzene	1,000	30,000	41,000	390,000	780,000	1,000	1400 D µg/Kg	1/2	0/2	0/2	0/2	0/2	0/2	FD-1-020320 (parent sample - SB-20-5-9-11-020320)
Xylene	260	100,000	100,000	500,000	1,000,000	1,600	7300 D µg/Kg	1/2	0/2	0/2	0/2	0/2	0/2	FD-1-020320 (parent sample - SB-20-5-9-11-020320)
Toluene	700	100,000	100,000	500,000	1,000,000	700	2500 D µg/Kg	1/2	0/2	0/2	0/2	0/2	0/2	FD-1-020320 (parent sample - SB-20-5-9-11-020320)
SVOCs	---	---	---	---	---	---	Not Applicable	0/3	0/3	0/3	0/3	0/3	0/3	
PCBs	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
Metals	---	---	---	---	---	---	Not Applicable	0/2	0/2	0/2	0/2	0/2	0/2	
Lead	---	---	---	---	---	---	Not Applicable	0/1	0/1	0/1	0/1	0/1	0/1	
Per- and Polyfluoroalkyl Substances	---	---	---	---	---	---	Not Applicable	0/1	0/1	0/1	0/1	0/1	0/1	

Notes:
Residential Zone Soil Sample Locations include SS-04 through SS-13, SB-20-15, and SB-20-16
Industrial-Zoned Soil Sample Locations - SS-01 through SS-03, SS-14 through SS-17, SB-MIP-1, SB-MIP-3 through SB-MIP-6, SB-20-1 through SB-20-14
mg/Kg - miligrams per kilogram
µg/Kg - micrograms per kilogram
ng/Kg - nanogram per kilogram
J - estimated concentration
D - diluted concentration

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Table 15

Near-Surface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-01	SS-01	SS-02	SS-02	SS-03	SS-03	FD-02	SS-04	SS-04
							Sample ID	SS-01_5_11142019	SS-01_18_11142019	SS-02_5_11122019	SS-02_18_11122019	SS-03_5_11142019	SS-03_18_11142019	SS-03_18_11142019	SS-04_5_11152019	SS-04_18_11152019
							Interval (inches)	5	18	5	18	5	18	18	5	18
							Date	11/14/2019	11/14/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019	11/14/2019	11/15/2019	11/15/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
2-Butanone	NS	100000	100000	500000	1000000	120		6.3	8.2	5.8 U	4.3 U	5.6 U	4.8 U	3.0 J	4.9 U	4.9 U
2-Hexanone	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Acetone	50	100000	100000	500000	1000000	50		950 U	580 U	5.8 U	14 U	5.6 U	7700 U	76 U	8.5 U	15 U
Benzene	60	2900	4800	44000	89000	60		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Bromoform	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Bromomethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Chloroethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Chloroform	370	10000	49000	350000	700000	370		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Chloromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	0.27 J	0.20 J	2.4 J	15
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Cyclohexane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
M,P-XYLENE	260	100000	100000	500000	1000000	1600		12 U	13 U	12 U	8.6 U	11 U	9.6 U	8.8 U	9.9 U	9.7 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		2.6 U	260 U	5.8 U	4.3 U	5.6 U	130 U	4.4 U	4.9 U	4.9 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Methylene Chloride	50	51000	100000	500000	1000000	50		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
MTBE	930	62000	100000	500000	1000000	930		1.3 J	0.92 J	5.8 U	4.3 U	5.6 U	1.4 J	0.38 J	4.9 U	4.9 U
o-Xylene	260	100000	100000	500000	1000000	1600		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Styrene	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	0.88 J	1.0 J
Toluene	700	100000	100000	500000	1000000	700		5.9 U	6.4 U	5.8 U	0.22 J	5.6 U	4.8 U	4.4 U	4.9 U	0.35 J
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	0.23 J
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Trichloroethene	470	10000	21000	200000	400000	470		5.9 U	6.4 U	5.8 U	4.3 U	3.5 J	13 J	9.8 J	77	100
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NS	NS	NS	6000		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U
Vinyl Chloride	20	210	900	13000	27000	20		5.9 U	6.4 U	5.8 U	4.3 U	5.6 U	4.8 U	4.4 U	4.9 U	4.9 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 15

Near-Surface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^1	Residential Use SCOs (µg/Kg)^2	Restricted-Residential Use SCOs (µg/Kg)^3	Commercial Use SCOs (µg/Kg)^4	Industrial Use SCOs (µg/Kg)^5	Protection of Groundwater SCOs (µg/Kg)^6	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-05	SS-05	SS-06	SS-06	SS-07	SS-07	SS-08	SS-08	SS-09
							Sample ID	SS-05_5_11122019	SS-05_18_11122019	SS-06_8_11122019	SS-06_18_11122019	SS-07_5_11122019	SS-07_18_11122019	SS-8_5_11132019	SS-08_18_11132019	SS-09_5_11132019
							Interval (inches)	5	18	8	18	5	18	5	18	5
							Date	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019	11/13/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
2-Butanone	NS	100000	100000	500000	1000000	120		10 U	4.6 U	24 U	4.1 U	18 U	4.3 U	4.6 U	4.9 U	5.0 U
2-Hexanone	NS	NS	NS	NS	NS	NS		0.58 J	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Acetone	50	100000	100000	500000	1000000	50		190 U	120 U	1400 U	50 U	540 U	500 U	6.6 U	32 U	5.0 U
Benzene	60	2900	4800	44000	89000	60		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Bromoform	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Bromomethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	0.31 J	5.0 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Chloroethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Chloroform	370	10000	49000	350000	700000	370		1.2 J	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Chloromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		0.35 J	2.4 J	4.6 U	4.1 U	4.8 U	4.3 U	2.9 J	17	5.0 U
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Cyclohexane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
M,P-XYLENE	260	100000	100000	500000	1000000	1600		9.5 U	9.2 U	9.2 U	8.3 U	9.6 U	8.6 U	9.2 U	9.2 U	10 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		1.6 U	1.8 U	3200 U	5.5 U	830 U	280 U	4.6 U	0.82 U	5.0 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Methylene Chloride	50	51000	100000	500000	1000000	50		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
MTBE	930	62000	100000	500000	1000000	930		4.8 U	0.34 J	0.38 J	4.1 U	0.74 J	0.29 J	4.6 U	4.6 U	5.0 U
o-Xylene	260	100000	100000	500000	1000000	1600		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Styrene	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Toluene	700	100000	100000	500000	1000000	700		0.32 J	0.24 J	0.34 J	0.46 J	0.21 J	0.29 J	4.6 U	4.6 U	0.27 J
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	0.43 J	5.0 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Trichloroethene	470	10000	21000	200000	400000	470		6.9	4.7	4.6 U	4.1 U	4.8 U	4.3 U	1.7 J	1.2 J	6.9
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NS	NS	NS	6000		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U
Vinyl Chloride	20	210	900	13000	27000	20		4.8 U	4.6 U	4.6 U	4.1 U	4.8 U	4.3 U	4.6 U	4.6 U	5.0 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 15

Near-Surface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-09	SS-10	SS-10	SS-11	SS-11	SS-12	SS-12	FD-03	SS-13
							Sample ID	SS-09_18_11132019	SS-10_5_11122019	SS-10_18_11122019	SS-11_5_11142019	SS-11_18_11142019	SS-12_5_11152019	SS-12_18_11152019	SS-12_18_11152019	SS-13_5_11132019
							Interval (inches)	18	5	18	5	18	5	18	18	5
							Date	11/13/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019	11/15/2019	11/15/2019	11/15/2019	11/13/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 UJ	11 UJ
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,2-Dichloroethane	20	2300	3100	30000	60000	20		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 UJ	1400 U	11 UJ	11 UJ
2-Butanone	NS	100000	100000	500000	1000000	120		4.7 U	8.6 U	4.2 U	7.7	5.8	19 U	1400 U	7.6 J	11 U
2-Hexanone	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	2.7 J	1400 U	2.2 J	11 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Acetone	50	100000	100000	500000	1000000	50		510 U	560 U	5.6 U	440 U	190 U	51 U	1400 U	200 U	11 U
Benzene	60	2900	4800	44000	89000	60		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Bromoform	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 UJ	11 U	11 U
Bromomethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 UJ	11 U	11 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 UJ	11 U	11 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Chloroethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Chloroform	370	10000	49000	350000	700000	370		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Chloromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Cyclohexane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 UJ	11 U	11 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
M,P-XYLENE	260	100000	100000	500000	1000000	1600		8.7 U	12 U	8.4 U	9.1 U	9.6 U	39 U	2900 U	21 U	22 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		260 U	1300 U	4.2 U	220 U	28 U	19 U	690 U	5.7 U	11 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Methylene Chloride	50	51000	100000	500000	1000000	50		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
MTBE	930	62000	100000	500000	1000000	930		0.37 J	1.1 J	4.2 U	0.95 J	0.55 J	19 U	1400 U	0.56 J	11 U
o-Xylene	260	100000	100000	500000	1000000	1600		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Styrene	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	1.8 J
Toluene	700	100000	100000	500000	1000000	700		0.30 J	5.8 U	4.2 U	4.5 U	4.8 U	1.3 J	1400 U	1.1 J	11 U
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Trichloroethene	470	10000	21000	200000	400000	470		26 DJ	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	18
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NS	NS	NS	6000		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U
Vinyl Chloride	20	210	900	13000	27000	20		4.3 U	5.8 U	4.2 U	4.5 U	4.8 U	19 U	1400 U	11 U	11 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
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🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 15

Near-Surface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^1	Residential Use SCOs (µg/Kg)^2	Restricted-Residential Use SCOs (µg/Kg)^3	Commercial Use SCOs (µg/Kg)^4	Industrial Use SCOs (µg/Kg)^5	Protection of Groundwater SCOs (µg/Kg)^6	Site Zoning	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-13	SS-14	SS-14	SS-15	SS-15	SS-16	SS-16	FD-01	SS-17
							Sample ID	SS-13_18_11132019	SS-14_5_11142019	SS-14_18_11142019	SS-15_5_11132019	SS-15_18_11132019	SS-16_5_11132019	SS-16_18_11132019	SS-16_18_11132019	SS-17_5_11152019
							Interval (inches)	18	5	18	5	18	5	18	18	5
							Date	11/13/2019	11/14/2019	11/14/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/15/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
2-Butanone	NS	100000	100000	500000	1000000	120		4.4 U	8.7	8.0	11 U	1.9 J	2.5 J	6.1 U	4.3 U	13
2-Hexanone	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	0.56 J	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Acetone	50	100000	100000	500000	1000000	50		26 U	770 U	140 U	380 U	62 U	100 U	660 U	120 U	240 U
Benzene	60	2900	4800	44000	89000	60		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Bromoform	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Bromomethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Chloroethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Chloroform	370	10000	49000	350000	700000	370		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Chloromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Cyclohexane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
M,P-XYLENE	260	100000	100000	500000	1000000	1600		8.8 U	10 U	10 U	10 U	8.7 U	10 U	8.8 U	8.5 U	14 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		1.0 U	520 U	2.0 U	13 U	1.1 U	9.2 U	72 U	15 U	3.6 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Methylene Chloride	50	51000	100000	500000	1000000	50		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
MTBE	930	62000	100000	500000	1000000	930		4.4 U	0.84 J	0.58 J	1.0 J	4.3 U	0.29 J	1.1 J	0.52 J	0.95 J
o-Xylene	260	100000	100000	500000	1000000	1600		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Styrene	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		0.30 J	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Toluene	700	100000	100000	500000	1000000	700		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	0.27 J	7.1 U
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Trichloroethene	470	10000	21000	200000	400000	470		5.8	5.2 U	0.30 J	5.0 U	4.3 U	1.0 J	2 J	2.2 J	7.1 U
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NS	NS	NS	6000		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U
Vinyl Chloride	20	210	900	13000	27000	20		4.4 U	5.2 U	5.1 U	5.0 U	4.3 U	5.0 U	4.4 U	4.3 U	7.1 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 15

Near-Surface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL
							Location	SS-17
							Sample ID	SS-17_18_11152019
							Interval (inches)	18
							Date	11/15/2019
							Units	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		4.5 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		4.5 U
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		4.5 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		4.5 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		4.5 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.5 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		4.5 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		4.5 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		4.5 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		4.5 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		4.5 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		4.5 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		4.5 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		4.5 U
2-Butanone	NS	100000	100000	500000	1000000	120		4.5 U
2-Hexanone	NS	NS	NS	NS	NS	NS		4.5 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		4.5 U
Acetone	50	100000	100000	500000	1000000	50		4.5 U
Benzene	60	2900	4800	44000	89000	60		4.5 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		4.5 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		4.5 U
Bromoform	NS	NS	NS	NS	NS	NS		4.5 U
Bromomethane	NS	NS	NS	NS	NS	NS		4.5 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		4.5 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		4.5 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		4.5 U
Chloroethane	NS	NS	NS	NS	NS	NS		4.5 U
Chloroform	370	10000	49000	350000	700000	370		4.5 U
Chloromethane	NS	NS	NS	NS	NS	NS		4.5 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		4.5 U
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.5 U
Cyclohexane	NS	NS	NS	NS	NS	NS		4.5 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		4.5 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		4.5 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		4.5 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		4.5 U
M,P-XYLENE	260	100000	100000	500000	1000000	1600		9.0 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		4.5 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		4.5 U
Methylene Chloride	50	51000	100000	500000	1000000	50		4.5 U
MTBE	930	62000	100000	500000	1000000	930		4.5 U
o-Xylene	260	100000	100000	500000	1000000	1600		4.5 U
Styrene	NS	NS	NS	NS	NS	NS		4.5 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		4.5 U
Toluene	700	100000	100000	500000	1000000	700		4.5 U
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		4.5 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		4.5 U
Trichloroethene	470	10000	21000	200000	400000	470		4.5 U
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		4.5 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NS	NS	NS	6000		4.5 U
Vinyl Chloride	20	210	900	13000	27000	20		4.5 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^1	Residential Use SCOs (µg/Kg)^2	Restricted-Residential Use SCOs (µg/Kg)^3	Commercial Use SCOs (µg/Kg)^4	Industrial Use SCOs (µg/Kg)^5	Protection of Groundwater SCOs (µg/Kg)^6	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-01	SS-01	SS-01	SS-01	SS-02	SS-02	SS-02	SS-03	SS-03
							Sample ID	SS-01_0-2_11142019	FD-01_11142019	SS-01_2-12_11142019	SS-01_12-24_11142019	SS-02_0-2_11122019	SS-02_2-12_11122019	SS-02_12-24_11122019	SS-03_0-2_11142019	SS-03_2-12_11142019
							Interval (inches)	0-2	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/14/2019	11/14/2019	11/14/2019	11/14/2019	11/12/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019
							Units	µg/Kg	µg/kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
1,4-Dioxane	100	9800	13000	130000	250000	100		90 U	90 U	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Acetophenone	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Anthracene	100000	100000	100000	500000	1000000	1000000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Atrazine	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		2300 U	---	2100 U	2100 U	2500 U	2000 U	2100 U	2100 U	1900 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		200 J	---	410 U	410 U	330 J	390 U	410 U	410 U	380 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		210 J	---	410 U	410 U	340 J	390 U	410 U	410 U	380 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		250 J	---	160 J	410 U	440 J	390 U	410 U	410 U	380 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		160 J	---	410 U	410 U	260 J	390 U	410 U	410 U	380 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		660 U	---	620 U	620 U	720 U	600 U	620 U	630 U	570 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Caprolactam	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Carbazole	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Chrysene	1000	1000	3900	56000	110000	1000		230 J	---	410 U	410 U	370 J	390 U	410 U	410 U	380 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		500	---	180 J	410 U	720	200 J	410 U	410 U	380 U
Fluorene	30000	100000	100000	500000	1000000	386000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		160 J	---	410 U	410 U	250 J	390 U	410 U	410 U	380 U
Isophorone	NS	NS	NS	NS	NS	4400		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Naphthalene	12000	100000	100000	500000	1000000	12000		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Nitrobenzene	NS	15000	15000	69000	NS	170		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Pentachlorophenol	800	2400	6700	6700	55000	800		2300 U	---	2100 U	2100 U	2500 UJ	2000 UJ	2100 UJ	2100 U	1900 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		330 J	---	410 U	410 U	390 J	390 U	410 U	410 U	380 U
Phenol	330	100000	100000	500000	1000000	330		440 U	---	410 U	410 U	480 U	390 U	410 U	410 U	380 U
Pyrene	100000	100000	100000	500000	1000000	1000000		470	---	170 J	410 U	650	180 J	410 U	410 U	380 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-03	SS-03	FD-02	SS-04	SS-04	SS-04	SS-05	SS-05
							Sample ID	SS-03_6-12_11142019	SS-03_12-24_11142019	FD-02_11142019	SS-04_0-2_11152019	SS-04_2-12_11152019	SS-04_12-24_11152019	SS-05_0-2_11122019	SS-05_2-12_11122019
							Interval (inches)	6-12	12-24	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/14/2019	11/14/2019	11/14/2019	11/15/2019	11/15/2019	11/15/2019	11/12/2019	11/12/2019
							Units	µg/kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
1,4-Dioxane	100	9800	13000	130000	250000	100		78 U	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Acetophenone	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Anthracene	100000	100000	100000	500000	1000000	1000000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Atrazine	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 U	2200 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		---	370 U	370 U	130 J	410 U	400 U	560 U	420 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		---	370 U	370 U	180 J	410 U	400 U	560 U	420 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		---	560 U	560 U	650 U	620 U	610 U	840 U	640 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Caprolactam	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Carbazole	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Chrysene	1000	1000	3900	56000	110000	1000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		---	370 U	370 U	300 J	410 U	400 U	560 U	420 U
Fluorene	30000	100000	100000	500000	1000000	386000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Isophorone	NS	NS	NS	NS	NS	4400		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Naphthalene	12000	100000	100000	500000	1000000	12000		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Nitrobenzene	NS	15000	15000	69000	NS	170		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Pentachlorophenol	800	2400	6700	6700	55000	800		---	1900 U	1900 U	2200 U	2100 U	2100 U	2900 UJ	2200 UJ
Phenanthrene	100000	100000	100000	500000	1000000	1000000		---	370 U	370 U	160 J	410 U	400 U	560 U	420 U
Phenol	330	100000	100000	500000	1000000	330		---	370 U	370 U	430 U	410 U	400 U	560 U	420 U
Pyrene	100000	100000	100000	500000	1000000	1000000		---	370 U	370 U	280 J	410 U	400 U	560 U	420 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-05	SS-06	SS-06	SS-06	SS-07	SS-07	SS-07	SS-8	SS-8
							Sample ID	SS-05_12-24_11122019	SS-06_0-2_11122019	SS-06_2-12_11122019	SS-06_12-24_11122019	SS-07_0-2_11122019	SS-07_2-12_11122019	SS-07_12-24_11122019	SS-8_0-2_11132019	SS-8_2-12_11132019
							Interval (inches)	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		2000 U	2200 U	2000 U	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Acetophenone	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Anthracene	100000	100000	100000	500000	1000000	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Atrazine	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		2000 U	900 J	83 J	1900 U	2400 U	2200 U	2000 U	2300 U	2200 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		590 U	660 U	600 U	570 U	710 U	640 U	590 U	670 U	650 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Caprolactam	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Carbazole	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Chrysene	1000	1000	3900	56000	110000	1000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Fluorene	30000	100000	100000	500000	1000000	386000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Isophorone	NS	NS	NS	NS	NS	4400		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Naphthalene	12000	100000	100000	500000	1000000	12000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Nitrobenzene	NS	15000	15000	69000	NS	170		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Pentachlorophenol	800	2400	6700	6700	55000	800		2000 UJ	2200 UJ	2000 UJ	1900 UJ	2400 UJ	2200 UJ	2000 UJ	2300 UJ	2200 UJ
Phenanthrene	100000	100000	100000	500000	1000000	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Phenol	330	100000	100000	500000	1000000	330		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U
Pyrene	100000	100000	100000	500000	1000000	1000000		390 U	440 U	400 U	370 U	470 U	420 U	390 U	440 U	430 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^1	Residential Use SCOs (µg/Kg)^2	Restricted-Residential Use SCOs (µg/Kg)^3	Commercial Use SCOs (µg/Kg)^4	Industrial Use SCOs (µg/Kg)^5	Protection of Groundwater SCOs (µg/Kg)^6	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-8	SS-09	SS-09	SS-09	SS-10	SS-10	SS-10	SS-11	SS-11
							Sample ID	SS-08_12-24_11132019	SS-09_0-2_11132019	SS-09_2-12_11132019	SS-09_12-24_11132019	SS-10_0-2_11122019	SS-10_02-12_11122019	SS-10_12-24_11122019	SS-11_0-2_11142019	SS-11_2-12_11142019
							Interval (inches)	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/12/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Acetophenone	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Anthracene	100000	100000	100000	500000	1000000	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Atrazine	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		2100 U	2300 U	2100 U	2100 U	2500 U	2200 U	2100 U	2100 U	1900 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		630 U	670 U	610 U	600 U	720 U	640 U	610 U	610 U	560 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Caprolactam	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Carbazole	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Chrysene	1000	1000	3900	56000	110000	1000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Fluorene	30000	100000	100000	500000	1000000	386000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Isophorone	NS	NS	NS	NS	NS	4400		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Naphthalene	12000	100000	100000	500000	1000000	12000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Nitrobenzene	NS	15000	15000	69000	NS	170		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Pentachlorophenol	800	2400	6700	6700	55000	800		2100 UJ	2300 UJ	2100 UJ	2100 UJ	2500 UJ	2200 UJ	2100 UJ	2100 U	1900 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Phenol	330	100000	100000	500000	1000000	330		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U
Pyrene	100000	100000	100000	500000	1000000	1000000		410 U	440 U	400 U	400 U	480 U	420 U	400 U	400 U	370 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	INDUSTRIAL
							Location	SS-11	SS-12	SS-12	SS-12	FD-03	SS-13	SS-13	SS-13	SS-14
							Sample ID	SS-11_12-24_11142019	SS-12_0-2_11152019	SS-12_2-12_11152019	SS-12_12-24_11152019	FD-03_11152019	SS-13_0-2_11132019	SS-13_2-12_11132019	SS-13_12-24_11132019	SS-14_0-2_11142019
							Interval (inches)	12-24	0-2	2-12	12-24	12-24	0-2	2-12	12-24	0-2
							Date	11/14/2019	11/15/2019	11/15/2019	11/15/2019	11/15/2019	11/13/2019	11/13/2019	11/13/2019	11/14/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 R	680 U	680 R	760 U	690 U	510 U	450 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Acetophenone	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Anthracene	100000	100000	100000	500000	1000000	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Atrazine	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 U	2600 U	2300 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 R	680 U	680 R	760 U	690 U	510 U	450 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		550 U	1600 U	1200 U	1000 U	1000 U	1200 U	1100 U	770 U	680 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Caprolactam	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Carbazole	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Chrysene	1000	1000	3900	56000	110000	1000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Fluorene	30000	100000	100000	500000	1000000	386000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 R	680 U	680 R	760 U	690 U	510 U	450 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 R	680 U	680 R	760 U	690 U	510 U	450 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 R	680 U	680 R	760 U	690 U	510 U	450 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Isophorone	NS	NS	NS	NS	NS	4400		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Naphthalene	12000	100000	100000	500000	1000000	12000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Nitrobenzene	NS	15000	15000	69000	NS	170		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Pentachlorophenol	800	2400	6700	6700	55000	800		1900 U	5400 U	3900 U	3500 U	3500 U	3900 U	3600 UJ	2600 UJ	2300 UJ
Phenanthrene	100000	100000	100000	500000	1000000	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Phenol	330	100000	100000	500000	1000000	330		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U
Pyrene	100000	100000	100000	500000	1000000	1000000		360 U	1000 U	760 U	680 U	680 U	760 U	690 U	510 U	450 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 16

Near-Surface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-14	SS-14	SS-15	SS-15	SS-15	SS-16	SS-16	SS-16	FD-01	SS-17	SS-17	SS-17
							Sample ID	SS-14_2-12_11142019	SS-14_12-24_11142019	SS-15_0-2_11132019	SS-15_2-12_11132019	SS-15_12-24_11132019	SS-16_0-2_11132019	SS-16_2-12_11132019	SS-16_12-24_11132019	FD-01_11132019	SS-17_0-2_11152019	SS-17_2-12_11152019	SS-17_12-24_11152019
							Interval (inches)	2-12	12-24	0-2	2-12	12-24	0-2	2-12	12-24	12-24	0-2	2-12	12-24
							Date	11/14/2019	11/14/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/15/2019	11/15/2019	11/15/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	82 U	---	---	---	---	---	---	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
3- AND 4- METHYLPHENOL (TOTAL)	NS	34000	100000	500000	1000000	330		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
3,3-Dichlorobenzidine	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
4-Nitrophenol	NS	NS	NS	NS	NS	100		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
Acenaphthene	20000	100000	100000	500000	1000000	98000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Acenaphthylene	100000	100000	100000	500000	1000000	107000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Acetophenone	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Anthracene	100000	100000	100000	500000	1000000	1000000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Atrazine	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		2100 U	2100 U	9800 U	9400 U	9300 U	1900 U	1800 U	1800 U	1800 U	2200 U	2100 U	2000 U
Benzo[a]anthracene	1000	1000	1000	5600	11000	1000		410 U	400 U	820 J	930 J	1800 U	370 U	350 U	350 U	350 U	160 J	410 U	270 J
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000		410 U	400 U	1300 J	1600 J	720 J	370 U	350 U	350 U	350 U	430 U	410 U	280 J
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700		410 U	400 U	1700 J	1900	940 J	370 U	350 U	350 U	350 U	190 J	410 U	290 J
Benzo[g,h,i]perylene	100000	100000	100000	500000	1000000	1000000		410 U	400 U	1100 J	1100 J	560 J	370 U	350 U	350 U	350 U	430 U	410 U	180 J
Benzo[k]fluoranthene	800	1000	3900	56000	110000	1700		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Bis(2-Chloroethoxy)methane	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	435000		620 U	600 U	2900 U	2800 U	2700 U	560 U	530 U	530 U	530 U	640 U	620 U	600 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	122000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Caprolactam	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Carbazole	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Chrysene	1000	1000	3900	56000	110000	1000		410 U	400 U	1100 J	1200 J	660 J	370 U	350 U	350 U	350 U	170 J	410 U	260 J
Dibenzo[a,h]Anthracene	330	330	330	560	1100	1000000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Dibenzofuran	NS	NS	NS	NS	NS	6200		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Diethylphthalate	NS	NS	NS	NS	NS	7100		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Dimethylphthalate	NS	NS	NS	NS	NS	27000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	8100		2400	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	120000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Fluoranthene	100000	100000	100000	500000	1000000	1000000		410 U	400 U	1700 J	2000	1100 J	370 U	350 U	350 U	350 U	360 J	200 J	620
Fluorene	30000	100000	100000	500000	1000000	386000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Hexachlorobenzene	NS	NS	NS	NS	NS	1400		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200		410 U	400 U	1100 J	1200 J	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	190 J
Isophorone	NS	NS	NS	NS	NS	4400		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Naphthalene	12000	100000	100000	500000	1000000	12000		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Nitrobenzene	NS	15000	15000	69000	NS	170		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Pentachlorophenol	800	2400	6700	6700	55000	800		2100 U	2100 U	9800 UJ	9400 UJ	9300 UJ	1900 UJ	1800 UJ	1800 UJ	1800 UJ	2200 U	2100 U	2000 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		410 U	400 U	840 J	800 J	560 J	370 U	350 U	350 U	350 U	230 J	410 U	380 J
Phenol	330	100000	100000	500000	1000000	330		410 U	400 U	1900 U	1800 U	1800 U	370 U	350 U	350 U	350 U	430 U	410 U	390 U
Pyrene	100000	100000	100000	500000	1000000	1000000		410 U	400 U	1700 J	1900	1000 J	370 U	350 U	350 U	350 U	320 J	210 J	610

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
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[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
R - Rejected
--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-01	SS-01	SS-01	SS-02	SS-02	SS-02	SS-03	SS-03
							Sample ID	SS-01_0-2_11142019	SS-01_2-12_11142019	SS-01_12-24_11142019	SS-02_0-2_11122019	SS-02_2-12_11122019	SS-02_12-24_11122019	SS-03_0-2_11142019	SS-03_2-12_11142019
							Interval (inches)	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/14/2019	11/14/2019	11/14/2019	11/12/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	47 U	40 U	40 U	42 U	38 U
Aroclor-1221	NS	NS	NS	NS	NS	NS		89 U	84 U	83 U	96 U	81 U	81 U	84 U	77 U
Aroclor-1232	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	47 U	40 U	40 U	42 U	38 U
Aroclor-1242	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	47 U	40 U	40 U	42 U	38 U
Aroclor-1248	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	47 U	40 U	40 U	42 U	38 U
Aroclor-1254	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	47 U	40 U	40 U	42 U	38 U
Aroclor-1260	NS	NS	NS	NS	NS	NS		44 U	41 U	41 U	29 J	40 U	40 U	42 U	38 U
Total PCBs	100	1000	1000	1000	25000	3200		ND	ND	ND	29 J	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)^1	Residential Use SCOs (µg/Kg)^2	Restricted-Residential Use SCOs (µg/Kg)^3	Commercial Use SCOs (µg/Kg)^4	Industrial Use SCOs (µg/Kg)^5	Protection of Groundwater SCOs (µg/Kg)^6	INDUSTRIAL SS-03 SS-03_12-24_11142019 12-24 11/14/2019 µg/Kg	INDUSTRIAL SS-03 FD-02_11142019 12-24 11/14/2019 µg/Kg	RESIDENTIAL SS-04 SS-04_0-2_11152019 0-2 11/15/2019 µg/Kg	RESIDENTIAL SS-04 SS-04_2-12_11152019 2-12 11/15/2019 µg/Kg	RESIDENTIAL SS-04 SS-04_12-24_11152019 12-24 11/15/2019 µg/Kg	RESIDENTIAL SS-05 SS-05_0-2_11122019 0-2 11/12/2019 µg/Kg	RESIDENTIAL SS-05 SS-05_2-12_11122019 2-12 11/12/2019 µg/Kg	RESIDENTIAL SS-05 SS-05_12-24_11122019 12-24 11/12/2019 µg/Kg	RESIDENTIAL SS-06 SS-06_0-2_11122019 0-2 11/12/2019 µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Aroclor-1221	NS	NS	NS	NS	NS	NS	75 U	73 U	89 U	87 U	83 U	110 U	80 U	78 U	86 U
Aroclor-1232	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Aroclor-1242	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Aroclor-1248	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Aroclor-1254	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Aroclor-1260	NS	NS	NS	NS	NS	NS	37 U	36 U	44 U	43 U	41 U	53 U	40 U	39 U	43 U
Total PCBs	100	1000	1000	1000	25000	3200	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
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D - Concentration is a result of dilution
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--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	RESIDENTIAL SS-06 SS-06_2-12_11122019 2-12 11/12/2019 µg/Kg	RESIDENTIAL SS-06 SS-06_12-24_11122019 12-24 11/12/2019 µg/Kg	RESIDENTIAL SS-07 SS-07_0-2_11122019 0-2 11/12/2019 µg/Kg	RESIDENTIAL SS-07 SS-07_2-12_11122019 2-12 11/12/2019 µg/Kg	RESIDENTIAL SS-07 SS-07_12-24_11122019 12-24 11/12/2019 µg/Kg	RESIDENTIAL SS-8 SS-8_0-2_11132019 0-2 11/13/2019 µg/Kg	RESIDENTIAL SS-8 SS-8_2-12_11132019 2-12 11/13/2019 µg/Kg	RESIDENTIAL SS-8 SS-08_12-24_11132019 12-24 11/13/2019 µg/Kg	RESIDENTIAL SS-09 SS-09_0-2_11132019 0-2 11/13/2019 µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Aroclor-1221	NS	NS	NS	NS	NS	NS	79 U	77 U	88 U	82 U	79 U	97 U	88 U	86 U	88 U
Aroclor-1232	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Aroclor-1242	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Aroclor-1248	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Aroclor-1254	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Aroclor-1260	NS	NS	NS	NS	NS	NS	39 U	38 U	44 U	40 U	39 U	48 U	43 U	42 U	43 U
Total PCBs	100	1000	1000	1000	25000	3200	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	RESIDENTIAL SS-09 SS-09_2-12_11132019 2-12 11/13/2019 µg/Kg	RESIDENTIAL SS-09 SS-09_12-24_11132019 12-24 11/13/2019 µg/Kg	RESIDENTIAL SS-10 SS-10_0-2_11122019 0-2 11/12/2019 µg/Kg	RESIDENTIAL SS-10 SS-10_02-12_11122019 2-12 11/12/2019 µg/Kg	RESIDENTIAL SS-10 SS-10_12-24_11122019 12-24 11/12/2019 µg/Kg	RESIDENTIAL SS-11 SS-11_0-2_11142019 0-2 11/14/2019 µg/Kg	RESIDENTIAL SS-11 SS-11_2-12_11142019 2-12 11/14/2019 µg/Kg	RESIDENTIAL SS-11 SS-11_12-24_11142019 12-24 11/14/2019 µg/Kg	RESIDENTIAL SS-12 SS-12_0-2_11152019 0-2 11/15/2019 µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Aroclor-1221	NS	NS	NS	NS	NS	NS	89 U	81 U	91 U	86 U	81 U	84 U	75 U	74 U	190 U
Aroclor-1232	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Aroclor-1242	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Aroclor-1248	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Aroclor-1254	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Aroclor-1260	NS	NS	NS	NS	NS	NS	44 U	40 U	45 U	43 U	40 U	41 U	37 U	36 U	95 U
Total PCBs	100	1000	1000	1000	25000	3200	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	RESIDENTIAL SS-12 SS-12_2-12_11152019 2-12 11/15/2019 µg/Kg	RESIDENTIAL FD-03 FD-03_11152019 12.24 11/15/2019 µg/Kg	RESIDENTIAL SS-12 SS-12_12-24_11152019 12-24 11/15/2019 µg/Kg	RESIDENTIAL SS-13 SS-13_0-2_11132019 0-2 11/13/2019 µg/Kg	RESIDENTIAL SS-13 SS-13_2-12_11132019 2-12 11/13/2019 µg/Kg	RESIDENTIAL SS-13 SS-13_12-24_11132019 12-24 11/13/2019 µg/Kg	INDUSTRIAL SS-14 SS-14_0-2_11142019 0-2 11/14/2019 µg/Kg	INDUSTRIAL SS-14 SS-14_2-12_11142019 2-12 11/14/2019 µg/Kg	INDUSTRIAL SS-14 SS-14_12-24_11142019 12-24 11/14/2019 µg/Kg	INDUSTRIAL SS-15 SS-15_0-2_11132019 0-2 11/13/2019 µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Aroclor-1221	NS	NS	NS	NS	NS	NS	190 U	150 U	140 U	170 U	140 U	110 U	91 U	83 U	81 U	83 U
Aroclor-1232	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Aroclor-1242	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Aroclor-1248	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Aroclor-1254	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Aroclor-1260	NS	NS	NS	NS	NS	NS	92 U	72 U	71 U	85 U	67 U	56 U	45 U	41 U	40 U	41 U
Total PCBs	100	1000	1000	1000	25000	3200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 17

Near-Surface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	INDUSTRIAL SS-15 SS-15_2-12_11132019 2-12 11/13/2019 µg/Kg	INDUSTRIAL SS-15 SS-15_12-24_11132019 12-24 11/13/2019 µg/Kg	INDUSTRIAL SS-16 SS-16_0-2_11132019 0-2 11/13/2019 µg/Kg	INDUSTRIAL SS-16 SS-16_2-12_11132019 2-12 11/13/2019 µg/Kg	INDUSTRIAL SS-16 SS-16_12-24_11132019 12-24 11/13/2019 µg/Kg	INDUSTRIAL FD-01 FD-01_11132019 12-24 11/13/2019 µg/Kg	INDUSTRIAL SS-17 SS-17_0-2_11152019 0-2 11/15/2019 µg/Kg	INDUSTRIAL SS-17 SS-17_2-12_11152019 2-12 11/15/2019 µg/Kg	INDUSTRIAL SS-17 SS-17_12-24_11152019 12-24 11/15/2019 µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Aroclor-1221	NS	NS	NS	NS	NS	NS	77 U	80 U	79 U	72 U	71 U	73 U	87 U	84 U	83 U
Aroclor-1232	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Aroclor-1242	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Aroclor-1248	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Aroclor-1254	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Aroclor-1260	NS	NS	NS	NS	NS	NS	38 U	39 U	39 U	35 U	35 U	36 U	43 U	41 U	41 U
Total PCBs	100	1000	1000	1000	25000	3200	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-01	SS-01	SS-01	SS-02	SS-02	SS-02	SS-03	SS-03	SS-03
							Sample ID	SS-01_0-2_11142019	SS-01_2-12_11142019	SS-01_12-24_11142019	SS-02_0-2_11122019	SS-02_2-12_11122019	SS-02_12-24_11122019	SS-03_0-2_11142019	SS-03_2-12_11142019	SS-03_12-24_11142019
							Interval (ft)	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12	12-24
							Date	11/14/2019	11/14/2019	11/14/2019	11/12/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019	11/14/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		11800	12600	11700	12000	11900	10700	9450	9240	8640
Antimony	NS	NS	NS	NS	NS	NS		7.3 UN	7.2 UN	7.4 UN	8.4 U	6.8 U	6.9 U	7.6 UN	6.3 UN	6.6 UN
Arsenic	13	16	16	16	16	16		7.8 N	9.9 N	6.8 N	20.7	9.1	6.1	5 N	5.7 N	5.4 N
Barium	350	350	400	400	10000	820		74	74.2	73.1	69.8	58.7	49.5	43.9	42	43.1 J
Beryllium	7.2	14	72	590	2700	47		0.716	0.721	0.677	0.711	0.646	0.544	0.504	0.465	0.42
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.655	0.625	0.53 J	0.781	0.624	0.498 J	0.403 J	0.359 J	0.398 J
Calcium	NS	NS	NS	NS	NS	NS		5940	10500	14600	23700	28300	50900	42000	80600	69100 J
Chromium	30	36	180	1500	6800	NS		23.3	22.9	20	23.3	22.6	18	15.2	14.9	13.5
Cobalt	NS	NS	NS	NS	NS	NS		9	10.1	8.8	21	8.6	8	7.4	7	7.1
Copper	50	270	270	270	10000	1720		18.6	17.7	16.3	28.8	25.1	20.8	20.4	20.5	25.1 J
Iron	NS	NS	NS	NS	NS	NS		22300	24400	23200	24200	21700	19100	16900	17000	17600
Lead	63	400	400	1000	3900	450		32.3	27.4	21.5	39.1	25.4	14.8	18.7	12.4	11.2
Magnesium	NS	NS	NS	NS	NS	NS		7590	11000	12900	16800	20600	31900	30000	38700	41100
Manganese	1600	2000	2000	10000	10000	2000		787	841	871	770	663	613	508	528	838
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.093	0.093	0.084	0.091	0.067	0.066	0.062	0.055	0.034 J
Nickel	30	140	310	310	10000	130		18.8	20.6	18.4	28.6	19.7	17.2	17	15.7	20.9
Potassium	NS	NS	NS	NS	NS	NS		1530	1500	1280	1750	1410	1350	1480	1360	1230
Selenium	3.9	36	180	1500	6800	4		0.971 J	0.805 J	1.2 U	1.4 U	0.68 J	1.2 U	1.3 U	1.1 U	1.1 U
Silver	2	36	180	1500	6800	8.3		1.2 U	1.2 U	1.2 U	0.223 J	0.125 J	1.2 U	1.3 U	1.1 U	1.1 U
Sodium	NS	NS	NS	NS	NS	NS		121 U	120 U	123 U	139 U	63.3 J	89 J	78.5 J	106	115
Thallium	NS	NS	NS	NS	NS	NS		1.2 U	1.2 U	1.2 U	1.4 U	1.1 U	1.2 U	1.3 U	1.6	1.5
Vanadium	NS	NS	NS	NS	NS	NS		26.2	27.6	25.1	26.7	26.1	22.2	19.4	18.5	17.5
Zinc	109	2200	10000	10000	10000	2480		86.3 N	81.3 N	74 N	215	170	103	104 N	96.8 N	171 J
Cyanide, Total	27	27	27	27	10000	40		0.50 U	0.41 U	0.36 U	0.50	0.15 J	0.18 J	0.48 U	0.23 U	0.28 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)^{1}	Residential Use SCOs (mg/Kg)^{2}	Restricted-Residential Use SCOs (mg/Kg)^{3}	Commercial Use SCOs (mg/Kg)^{4}	Industrial Use SCOs (mg/Kg)^{5}	Protection of Groundwater SCOs (mg/Kg)^{6}	Site Zoning	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-03	SS-04	SS-04	SS-04	SS-05	SS-05	SS-05	SS-06	SS-06
							Sample ID	FD-02_11142019	SS-04_0-2_11152019	SS-04_2-12_11152019	SS-04_12-24_11152019	SS-05_0-2_11122019	SS-05_2-12_11122019	SS-05_12-24_11122019	SS-06_0-2_11122019	SS-06_2-12_11122019
							Interval (ft)	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/14/2019	11/15/2019	11/15/2019	11/15/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/12/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		6110	8220	7690	10400	8080	8740	12500	7700	8920
Antimony	NS	NS	NS	NS	NS	NS		6.2 U	7.7 U	7.1 U	7 U	8.8 UN	6.7 UN	6.4 UN	7 U	7.1 U
Arsenic	13	16	16	16	16	16		4	5.7	4.3	6.1	3.4	3.2	1 J	4.7	4.9
Barium	350	350	400	400	10000	820		24.4 J	50.9	48.6	61	76.6	56.5	91.2	37.2	39
Beryllium	7.2	14	72	590	2700	47		0.309	0.384 J	0.344 J	0.501	0.352 J	0.322 J	0.362	0.281 J	0.378
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.35 J	1.1	0.391 J	0.349 J	0.396 J	0.233 J	0.202 J	0.222 J	0.225 J
Calcium	NS	NS	NS	NS	NS	NS		170000 J	92800	49700	3630	4210	616	1030	639	118 U
Chromium	30	36	180	1500	6800	NS		10.2	16.1	9.8	13.7	10.7	11.5	21.9	9	11.6
Cobalt	NS	NS	NS	NS	NS	NS		4.7 J	6.6	5.2 J	7.7	4.9 J	5 J	7.3	6.1	8.7
Copper	50	270	270	270	10000	1720		18 J	53.3	19.1	36.5	13.8	10.8	6	13	22
Iron	NS	NS	NS	NS	NS	NS		11300	18600	12500	20600	10800	11600	14400	12300	14400
Lead	63	400	400	1000	3900	450		7.4	56.2	22.4	13.2	21.5	14.2	5.7	23.9	12.5
Magnesium	NS	NS	NS	NS	NS	NS		46700	36000	6830	5000	3510	3440	7660	2000	3420
Manganese	1600	2000	2000	10000	10000	2000		417	466	499	735	549	345	170	406	423
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.036	0.204	0.071	0.067	0.073	0.049	0.028 J	0.076	0.054
Nickel	30	140	310	310	10000	130		10.8	15.6	9.3	15	9.6	9.7	20.6	8.8	12.8
Potassium	NS	NS	NS	NS	NS	NS		1290	1580	835	993	1080	791	1210	556	897
Selenium	3.9	36	180	1500	6800	4		1 U	1.3 U	0.747 J	0.675 J	0.822 J	1.1 U	1.1 U	0.948 J	1.2 U
Silver	2	36	180	1500	6800	8.3		1 U	0.103 J	1.2 U	1.2 U	1.5 U	1.1 U	1.1 U	1.2 U	1.2 U
Sodium	NS	NS	NS	NS	NS	NS		150	125 J	119 U	116 U	147 U	111 U	106 U	117 U	118 U
Thallium	NS	NS	NS	NS	NS	NS		4.9	2.4	0.83 J	1.2 U	1.5 U	1.1 U	1.1 U	1.2 U	1.2 U
Vanadium	NS	NS	NS	NS	NS	NS		12.8	16.7	15.1	20	14.2	14.3	16.9	15.9	16.1
Zinc	109	2200	10000	10000	10000	2480		95.9 J	347	77.2	52.2	64.4	48.5	94.8	38.3	32.2
Cyanide, Total	27	27	27	27	10000	40		0.32 U	0.78 U	0.35 U	0.30 U	0.45	0.21 J	0.15 J	0.31 J	0.18 J

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-06	SS-07	SS-07	SS-07	SS-8	SS-8	SS-8	SS-09	SS-09
							Sample ID	SS-06_12-24_11122019	SS-07_0-2_11122019	SS-07_2-12_11122019	SS-07_12-24_11122019	SS-8_0-2_11132019	SS-8_2-12_11132019	SS-08_12-24_11132019	SS-09_0-2_11132019	SS-09_2-12_11132019
							Interval (ft)	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/12/2019	11/12/2019	11/12/2019	11/12/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		10300	9370	9650	10100	10400	11700	14400	9310	9330
Antimony	NS	NS	NS	NS	NS	NS		6.7 U	7.6 U	7.3 UN	6.8 UN	7.8 U	7.7 U	7.2 U	7.6 U	7 U
Arsenic	13	16	16	16	16	16		5.8	6.7	5	5.7	5.9	6.3	7.9	6.5	6.5
Barium	350	350	400	400	10000	820		45.7	62.3	57.1	51.4	76.3	90.3	121	67.2	70.1
Beryllium	7.2	14	72	590	2700	47		0.5	0.394	0.389	0.479	0.637	0.819	0.768	0.507	0.527
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.222 J	0.343 J	0.292 J	0.251 J	0.468 J	0.704	0.6	0.418 J	0.387 J
Calcium	NS	NS	NS	NS	NS	NS		898	1290	46.7 J	84.2 J	4900	4460	26400	2690	1660
Chromium	30	36	180	1500	6800	NS		15.3	11.9	11.9	14.6	16.7	18.7	25	14.2	14.7
Cobalt	NS	NS	NS	NS	NS	NS		11.7	8.4	8.6	10.1	8.6	10.3	10.1	7.7	7.9
Copper	50	270	270	270	10000	1720		46.3	18.7	17.4	30.9	26.7 N	31.6 N	31	23.3	23.1
Iron	NS	NS	NS	NS	NS	NS		20300	16800	16400	19800	18500	19000	24200	17200	17800
Lead	63	400	400	1000	3900	450		7.6	30.1	11.1	8.9	14.1	16	13.9	21.8	18.7
Magnesium	NS	NS	NS	NS	NS	NS		5610	3340	2980	4630	5620	5420	22000	4010	4080
Manganese	1600	2000	2000	10000	10000	2000		547	679	679	716	328	298	640	855	865
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.034 J	0.072	0.051	0.047	0.064	0.086	0.088	0.082	0.078
Nickel	30	140	310	310	10000	130		20.6	13	11.7	18.1	15.5	18.6	22.7	13.2	13.9
Potassium	NS	NS	NS	NS	NS	NS		1340	825	739	1010	1210	1160	2300	1230	1020
Selenium	3.9	36	180	1500	6800	4		1.1 J	1.3 U	12.2 U	0.912 J	1.3 U	1.2 J	1.2 U	0.886 J	0.75 J
Silver	2	36	180	1500	6800	8.3		1.1 U	1.3 U	1.2 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.2 U
Sodium	NS	NS	NS	NS	NS	NS		111 U	127 U	122 U	114 U	130 U	128 U	76.4 J	127 U	117 U
Thallium	NS	NS	NS	NS	NS	NS		1.1 U	1.3 U	1.2 U	1.1 U	1.3 U	1.3 U	1.2 U	1.3 U	1.2 U
Vanadium	NS	NS	NS	NS	NS	NS		17.6	19.5	18.7	18	21	23.4	28.8	20.2	20.2
Zinc	109	2200	10000	10000	10000	2480		40.2	47.4	37	38.1	121	143	108	62.7	58.9
Cyanide, Total	27	27	27	27	10000	40		0.16 J	0.38	0.26 J	0.12 J	0.34 U	0.27 U	0.29 U	0.58 U	0.35 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)^1	Residential Use SCOs (mg/Kg)^2	Restricted-Residential Use SCOs (mg/Kg)^3	Commercial Use SCOs (mg/Kg)^4	Industrial Use SCOs (mg/Kg)^5	Protection of Groundwater SCOs (mg/Kg)^6	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL
							Location	SS-09	SS-10	SS-10	SS-10	SS-11	SS-11	SS-11	SS-12	SS-12
							Sample ID	SS-09_12-24_11132019	SS-10_0-2_11122019	SS-10_02-12_11122019	SS-10_12-24_11122019	SS-11_0-2_11142019	SS-11_2-12_11142019	SS-11_12-24_11142019	SS-12_0-2_11152019	SS-12_2-12_11152019
							Interval (ft)	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2	2-12
							Date	11/13/2019	11/12/2019	11/12/2019	11/12/2019	11/14/2019	11/14/2019	11/14/2019	11/15/2019	11/15/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		13800	9940	11400	14700	9100	6740	5850	7520	10700
Antimony	NS	NS	NS	NS	NS	NS		6.8 U	7.5 UJ	7.1 UN	7.2 UN	7 UN	6.2 U	6.3 U	16.5 U	12.8 U
Arsenic	13	16	16	16	16	16		7.6	5.9	5.9	7.4	5.5 N	3.8	3.4	9	5.9
Barium	350	350	400	400	10000	820		76.4	51.5	57.8	59	26.5	16.9	14.2	57.9	37.7
Beryllium	7.2	14	72	590	2700	47		0.787	0.515	0.604	0.804	0.493	0.322	0.284 J	0.495 J	0.599 J
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.411 J	0.44 J	0.438 J	0.396 J	0.305 J	0.208 J	0.179 J	1.8	0.92 J
Calcium	NS	NS	NS	NS	NS	NS		10100	1650	3040	23700	31400	66400	81700	34400	26700
Chromium	30	36	180	1500	6800	NS		24.3	15.3	17.8	22.9	15.5	11.2	10	15.1	20.7
Cobalt	NS	NS	NS	NS	NS	NS		9.2	6.3	8	7.3	6.9	5.1 J	4.9 J	5.6 J	6.2 J
Copper	50	270	270	270	10000	1720		35.1	14.9	15	28.7	42.8	40.6	36.5	33.2	30.3
Iron	NS	NS	NS	NS	NS	NS		24600	16600	19300	25800	15600	11700	10200	12700	14900
Lead	63	400	400	1000	3900	450		12.6	29.3	17.4	11.8	14.4	5.6	5.2 J	74.1	33.7
Magnesium	NS	NS	NS	NS	NS	NS		12400	3880	5640	18600	19900	27900	28800	5570	8230
Manganese	1600	2000	2000	10000	10000	2000		792	364	430	596	367	294	269	349	198
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.067	0.09	0.093	0.07	0.059	0.035 J	0.028 J	0.303	0.2
Nickel	30	140	310	310	10000	130		22.3	13.7	20.8	22.7	17.1	12.1	10.6	14.6	20.9
Potassium	NS	NS	NS	NS	NS	NS		2050	917	1020	1650	1490	1340	1260	1560	1890
Selenium	3.9	36	180	1500	6800	4		0.867 J	12.6 U	1.2 U	1.2 U	1.2 U	1 U	1.1 U	2.1 J	1.4 J
Silver	2	36	180	1500	6800	8.3		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	1 U	1.1 U	2.8 U	2.1 U
Sodium	NS	NS	NS	NS	NS	NS		114 U	126 U	118 U	120 U	64.4 J	94.6 J	104 J	275 U	214 U
Thallium	NS	NS	NS	NS	NS	NS		1.1 U	1.3 U	1.2 U	1.2 U	1.2 U	1.6	10.5 U	2.8 U	2.1 U
Vanadium	NS	NS	NS	NS	NS	NS		28	22	23.5	28.1	16.7	12.4	11	17.3	20.6
Zinc	109	2200	10000	10000	10000	2480		80.5	54.8	56	55.8	47.1 N	30	30.4	171	110
Cyanide, Total	27	27	27	27	10000	40		0.3 U	0.39	0.26 J	0.12 J	0.35 U	0.23 U	0.24 U	1.24 U	0.97 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-12	SS-12	SS-13	SS-13	SS-13	SS-14	SS-14	SS-14	SS-15
							Sample ID	SS-12_12-24_11152019	FD-03_11152019	SS-13_0-2_11132019	SS-13_2-12_11132019	SS-13_12-24_11132019	SS-14_0-2_11142019	SS-14_2-12_11142019	SS-14_12-24_11142019	SS-15_0-2_11132019
							Interval (ft)	12-24	12-24	0-2	2-12	12-24	0-2	2-12	12-24	0-2
							Date	11/15/2019	11/15/2019	11/13/2019	11/13/2019	11/13/2019	11/14/2019	11/14/2019	11/14/2019	11/13/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		14500	15000	13400	16200	11000	11300	12000	10600	3660
Antimony	NS	NS	NS	NS	NS	NS		11.4 U	11.7 U	13 U	12.7 U	8.6 U	7.6 UN	7.2 UN	7.3 UN	6.4 U
Arsenic	13	16	16	16	16	16		6	6	7.7	7.4	4	6.5 N	6.4 N	6.3 N	10.6 U
Barium	350	350	400	400	10000	820		63.3	66.7	191	249	108	61	115	46.9	55.4
Beryllium	7.2	14	72	590	2700	47		0.818	0.801	0.93	1.3	0.729	0.617	0.668	0.556	0.201 J
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.627 J	0.586 J	0.627 J	0.552 J	0.171 J	0.491 J	0.561 J	0.387 J	0.466 J
Calcium	NS	NS	NS	NS	NS	NS		21200	23400	11800	10900	17600	16800	22000	56900	190000
Chromium	30	36	180	1500	6800	NS		27.4	27.8	26.7	39.7	27	17.4	18	16.4	17.7
Cobalt	NS	NS	NS	NS	NS	NS		8.3 J	9.5 J	8.6 J	8.9 J	6.3 J	8.5	8.5	7.2	3 J
Copper	50	270	270	270	10000	1720		30.9	31.1	38 N	65.7 N	43.4 N	17.9	15.9	18.5	25.9 N
Iron	NS	NS	NS	NS	NS	NS		19300	19300	20300	23500	15900	20200	19700	18800	7810
Lead	63	400	400	1000	3900	450		19.7	16.6	44.3	22.1	8.8	22.9	18.5	13.5	33.6
Magnesium	NS	NS	NS	NS	NS	NS		13800	14700	6750	7320	13600	12300	16800	38600	27400
Manganese	1600	2000	2000	10000	10000	2000		146	139	1560	2030	726	737	977	579	286
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.114	0.111	0.249	0.281	0.138	0.076	0.081	0.069	0.023 J
Nickel	30	140	310	310	10000	130		28.7	29.3	28	37.5	22.2	17.3	17.5	16.1	10.5
Potassium	NS	NS	NS	NS	NS	NS		2370	2350	1700	1720	1660	1280	1180	1310	977
Selenium	3.9	36	180	1500	6800	4		2.8	19.5 U	2.1 J	21.2 U	1.1 J	0.781 J	1.2 U	1.2 U	1.1 U
Silver	2	36	180	1500	6800	8.3		1.9 U	2 U	0.195 J	0.403 J	0.171 J	1.3 U	1.2 U	1.2 U	1.1 U
Sodium	NS	NS	NS	NS	NS	NS		131 J	152 J	162 J	294	184	126 U	119 U	97.8 J	176
Thallium	NS	NS	NS	NS	NS	NS		1.9 U	2 U	2.2 U	2.1 U	1.4 U	1.3 U	1.2 U	1.2 U	6.8
Vanadium	NS	NS	NS	NS	NS	NS		28.2	27.8	25.1	25.4	18.1	23.7	24.7	21.8	20.5
Zinc	109	2200	10000	10000	10000	2480		123	120	68.4	59.2	36.8	70.9 N	68.2 N	59.6 N	211
Cyanide, Total	27	27	27	27	10000	40		0.71 U	0.78 U	1.12	1.0	0.46 U	0.41 U	0.34 U	0.32 U	0.25 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 18

Near-Surface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-15	SS-15	SS-16	SS-16	SS-16	SS-16	SS-17	SS-17	SS-17
							Sample ID	SS-15_2-12_11132019	SS-15_12-24_11132019	SS-16_0-2_11132019	SS-16_2-12_11132019	SS-16_12-24_11132019	FD-01_11132019	SS-17_0-2_11152019	SS-17_2-12_11152019	SS-17_12-24_11152019
							Interval (ft)	2-12	12-24	0-2	2-12	12-24	12-24	0-2	2-12	12-24
							Date	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/13/2019	11/15/2019	11/15/2019	11/15/2019
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS		6120	6550	5750	6240	5030	5950	9780	9920	10600
Antimony	NS	NS	NS	NS	NS	NS		6.4 U	6.4 U	6.6 U	6 U	6 U	6.2 U	7 U	7 U	6.6 U
Arsenic	13	16	16	16	16	16		3.2	4.1	4.2	2.9	3	3.5	6.4	6.7	6.3
Barium	350	350	400	400	10000	820		49.2	49.9	23.3	20.5	15.3	20.4	56.3	58.2	51.3
Beryllium	7.2	14	72	590	2700	47		0.296 J	0.319	0.287 J	0.299	0.241 J	0.302 J	0.457	0.477	0.486
Cadmium	2.5	2.5	4.3	9.3	60	7.5		0.402 J	0.361 J	0.221 J	0.219 J	0.141 J	0.219 J	0.316 J	0.349 J	0.387 J
Calcium	NS	NS	NS	NS	NS	NS		192000	140000	168000	174000	194000	162000	10600	16400	43400
Chromium	30	36	180	1500	6800	NS		14.4	14.7	10.1	11.4	8.8	10.9	14	14.3	16.8
Cobalt	NS	NS	NS	NS	NS	NS		3.7 J	4.7 J	4.2 J	4.7 J	4.8 J	5 J	8.7	9.2	8.6
Copper	50	270	270	270	10000	1720		24.6 N	24.5 N	24.5 N	16.4 N	17.2 N	17.7	22.7	23.2	23.1
Iron	NS	NS	NS	NS	NS	NS		9520	11700	11900	10600	8730	9910	17800	18300	18500
Lead	63	400	400	1000	3900	450		47.8	38.4	9.8	8.3	5.4	7.6	19.2	19.4	65.8
Magnesium	NS	NS	NS	NS	NS	NS		30600	47700	67300	59900	64000	57300	9040	10700	23300
Manganese	1600	2000	2000	10000	10000	2000		272	297	338	335	224	301	675	710	633
Mercury	0.18	0.81	0.81	2.8	5.7	0.73		0.029 J	0.022 J	0.022 J	0.018 J	0.012 J	0.017 J	0.058	0.063	0.055
Nickel	30	140	310	310	10000	130		11.1	12.6	10.7	8.6	6.3	9.5	13.9	14.3	16.1
Potassium	NS	NS	NS	NS	NS	NS		1700	1490	1500	1780	1480	1640	1130	1100	1400
Selenium	3.9	36	180	1500	6800	4		1.1 U	1.1 U	1.1 U	0.997 U	1 U	1 U	1.2 U	1.2 U	1.1 U
Silver	2	36	180	1500	6800	8.3		1.1 U	1.1 U	1.1 U	0.997 U	1 U	1 U	1.2 U	1.2 U	1.1 U
Sodium	NS	NS	NS	NS	NS	NS		181	179	196	188	196	173	117 U	116 U	73.3 J
Thallium	NS	NS	NS	NS	NS	NS		7.3	4.8	5.9	6.4	6.9	5.9	1.2 U	1.2 U	1.1 U
Vanadium	NS	NS	NS	NS	NS	NS		25.6	21.5	12.4	12.9	10	12	19	19.3	20.2
Zinc	109	2200	10000	10000	10000	2480		204	166	46.8	41.9	42.1	46.2	61.4	65.5	77
Cyanide, Total	27	27	27	27	10000	40		0.24 U	0.26 U	0.07 J	0.26 U	0.05 J	0.29 U	0.46 U	0.36 U	0.29 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 19

Near-Surface Soil Analytical Data - Per- and Polyfluoroalkyl Substances

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[1]	Restricted-Residential Use SCOs (µg/Kg)[1]	Commercial Use SCOs (µg/Kg)[1]	Industrial Use SCOs (µg/Kg)[1]	Protection of Groundwater SCOs (µg/Kg)[1]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Location	SS-01	SS-01	SS-03	SS-14
							Sample ID	SS-01_0-2_11142019	FD-01_11142019	SS-03_6-12_11142019	SS-14_12-24_11142019
							Interval (ft)	0-2	0-2	6-12	12-24
							Date	11/14/2019	11/14/2019	11/14/2019	11/14/2019
							Units	ng/g	ng/g	ng/g	ng/g
2-(N-methyl perfluorooctanesulfonamido) acetic acid	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROBUTANESULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROBUTYRIC ACID (PFBA)	NS	NS	NS	NS	NS	NS		0.57 J	0.62 J	0.96 U	0.91 U
PERFLUORODECANE SULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUORODECANOIC ACID (PFDA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUORODODECANOIC ACID (PFDoA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROHEPTANE SULFONATE (PFHpS)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	NS	NS	NS	NS		0.19 J	1.3 U	0.96 U	0.91 U
PERFLUOROHEXANESULFONIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROHEXANOIC ACID (PFHxA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUORONONANOIC ACID	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
Perfluorooctane Sulfonamide (FOSA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROOCTANE SULFONIC ACID (PFOS)	0.88	8.8	44	440	440	3.7		1.0	1.1 J	0.28 J	0.30 J
Perfluorooctanoic acid (PFOA)	0.66	6.6	33	500	600	1.1		0.60 J	0.63 J	0.16 J	0.21 J
PERFLUOROPENTANOIC ACID (PFPeA)	NS	NS	NS	NS	NS	NS		0.29 J	1.3 U	0.96 U	0.91 U
PERFLUOROTETRADECANOIC ACID (PFTeA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROTRIDECANOIC ACID (PFTriA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
PERFLUOROUNDECANOIC ACID (PFUnA)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	NS	NS	NS	NS	NS	NS		0.99 U	1.3 U	0.96 U	0.91 U

Notes:

[1] *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs* (NYSDEC, January 2021)

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 20

Subsurface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning Study Area Location Sample ID Interval (ft) Date Units	INDUSTRIAL Eastern Building SB-MIP-1 SB-MIP-1-8-10-013120 8-10 1/31/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-1 SB-MIP-1-23-25-013120 23-25 1/31/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-3 SB-MIP-3-7-9-013020 7-9 1/30/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-3 SB-MIP-3-22-24-013020 22-24 1/30/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-4 SB-MIP-4-3-5-013120 3-5 1/31/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-4 SB-MIP-4-23-25-013120 23-25 1/31/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-5 SB-MIP-5-3-5-013020 3-5 1/30/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-5 SB-MIP-5-20-22-013020 20-22 1/30/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-6 SB-MIP-6-8-10-013120 8-10 1/31/2020 µg/Kg	INDUSTRIAL Eastern Building SB-MIP-6 SBMIP-6-23-25-013120 23-25 1/31/2020 µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		2.6 UJ	2.8 UJ	3.0 U	3.1 U	2.8 UJ	2.5 UJ	4.4 U	3100 U	2.6 UJ	3.0 UJ
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	0.22 J
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 UJ	3100 UJ	2.6 U	3.0 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
2-Butanone	NS	100000	100000	500000	1000000	120		1.3 J	2.8 U	2.3 J	7.1	1.4 J	4.6	4.3 J	3100 U	2.6 U	3.0 U
2-Hexanone	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Acetone	50	100000	100000	500000	1000000	50		41 U	12 U	79 U	710 U	46 U	410 U	160 U	3100 U	400 U	18 U
Benzene	60	2900	4800	44000	89000	60		0.15 J	2.8 U	0.21 J	0.23 J	0.14 J	2.5 U	0.24 J	3100 U	0.18 J	3.0 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Bromoform	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Bromomethane	NS	NS	NS	NS	NS	NS		2.6 UJ	2.8 UJ	3.0 UJ	3.1 UJ	2.8 UJ	2.5 UJ	4.4 UJ	3100 U	2.6 UJ	3.0 UJ
Carbon disulfide	NS	100000	NS	NS	NS	2700		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	0.30 J	4.4 U	3100 U	2.6 U	3.0 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	14
Chlorobenzene	1100	100000	100000	500000	1000000	1100		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Chloroethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Chloroform	370	10000	49000	350000	700000	370		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	0.52 J
Chloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	0.15 J
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Cyclohexane	NS	NS	NS	NS	NS	NS		0.28 J	2.8 U	3.0 U	0.43 J	0.26 J	2.5 U	4.4 U	3100 U	0.26 J	0.35 J
Dibromochloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
m,p-Xylene	260	100000	100000	500000	1000000	1600		5.2 U	5.7 U	6.1 U	0.26 J	5.6 U	5.0 U	8.8 U	6300 U	5.3 U	6.0 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		6.4 U	3.7 U	15 U	380 U	1.3 U	190 U	30 U	3100 U	290 U	4.2 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		0.41 J	2.8 U	0.29 J	0.62 J	0.37 J	2.5 U	0.32 J	3100 U	0.43 J	0.32 J
Methylene Chloride	50	51000	100000	500000	1000000	50		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
MTBE	930	62000	100000	500000	1000000	930		0.15 J	2.8 U	0.18 J	0.47 J	0.29 J	0.33 J	0.44 J	3100 U	2.6 U	3.0 U
o-Xylene	260	100000	100000	500000	1000000	1600		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Styrene	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	0.23 J
Toluene	700	100000	100000	500000	1000000	700		0.36 J	0.12 J	1.1 J	16 DJ	0.37 J	2.5 U	2.1 J	3100 U	0.42 J	0.44 J
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Trichloroethene	470	10000	21000	200000	400000	470		62	82	89	670 D **	64	3.1	74	11000 **	420 D	24000 D **
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NL	NL	NS	6000		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U
Vinyl Chloride	20	210	900	13000	27000	20		2.6 U	2.8 U	3.0 U	3.1 U	2.8 U	2.5 U	4.4 U	3100 U	2.6 U	3.0 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

** - Exceeds Protection of Groundwater SCO
NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed
* - Field duplicate of SB-20-5-9-11

Table 20

Subsurface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building
							Location	SB-20-1	SB-20-2	SB-20-3	SB-20-4	SB-20-6	SB-20-7	FD-1	SB-20-8	SB-20-9	SB-20-10
							Sample ID	SB-20-1-8-10-012920	SB-20-2-8-10-020320	SB-20-3-10-12-012720	SB-20-4-3-5-012920	SB-20-6-11-13-012720	SB-20-7-3-5-012820	FD-1-012820	SB-20-8-7-9-012820	SB-20-9-3-5-012820	SB-20-10-6-10-012720
							Interval (ft)	8-10	8-10	10-12	3-5	11-13	3-5	3-5	7-9	3-5	6-10
							Date	1/29/2020	2/3/2020	1/27/2020	1/29/2020	1/27/2020	1/28/2020	1/28/2020	1/28/2020	1/28/2020	1/27/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		2.6 U	2.5 UJ	300 U	3.0 U	2.9 UJ	3.3 UJ	3.7 UJ	4.4 UJ	3.3 UJ	3.2 UJ
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
2-Butanone	NS	100000	100000	500000	1000000	120		2.6 U	2.5 U	300 U	2.0 J	2.9 U	3.3 U	1.6 J	4.4 U	1.6 J	1.3 J
2-Hexanone	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Acetone	50	100000	100000	500000	1000000	50		21 U	14 U	310 U	54 U	23 U	16 U	30 U	28 U	54 U	35 U
Benzene	60	2900	4800	44000	89000	60		0.87 J	0.12 J	300 U	0.16 J	0.16 J	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Bromoform	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Bromomethane	NS	NS	NS	NS	NS	NS		2.6 UJ	2.5 UJ	300 U	3.0 UJ	2.9 UJ	3.3 UJ	3.7 UJ	4.4 UJ	3.3 UJ	3.2 UJ
Carbon disulfide	NS	100000	NS	NS	NS	2700		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Chloroethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Chloroform	370	10000	49000	350000	700000	370		2.6 U	0.20 J	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Chloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Cyclohexane	NS	NS	NS	NS	NS	NS		1.0 J	0.17 J	300 U	3.0 U	0.28 J	3.3 U	3.7 U	4.4 U	3.3 U	0.22 J
Dibromochloromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		0.13 J	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
m,p-Xylene	260	100000	100000	500000	1000000	1600		0.64 J	5.0 U	610 U	6.0 U	5.7 U	6.7 U	7.4 U	8.9 U	6.6 U	6.5 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		7.7 U	3.4 U	730 U	1.2 U	0.66 U	3.3 U	5.3 U	8.9 U	14 U	9.0 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		1.9 J	0.29 J	300 U	0.23 J	0.47 J	3.3 U	0.34 J	4.4 U	3.3 U	0.44 J
Methylene Chloride	50	51000	100000	500000	1000000	50		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
MTBE	930	62000	100000	500000	1000000	930		2.6 U	2.5 U	300 U	0.20 J	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
o-Xylene	260	100000	100000	500000	1000000	1600		0.13 J	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Styrene	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		0.22 J	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Toluene	700	100000	100000	500000	1000000	700		1.8 J	0.32 J	300 U	0.37 J	0.58 J	0.36 J	0.57 J	0.65 J	3.3 U	0.60 J
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Trichloroethene	470	10000	21000	200000	400000	470		2.2 J	4.7	130 J	0.38 J	20	5.7	5.6	4.4 U	3.3 U	22
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NL	NL	NS	6000		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U
Vinyl Chloride	20	210	900	13000	27000	20		2.6 U	2.5 U	300 U	3.0 U	2.9 U	3.3 U	3.7 U	4.4 U	3.3 U	3.2 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

** - Exceeds Protection of Groundwater SCO
NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed
* - Field duplicate of SB-20-5-9-11

Table 20

Subsurface Soil Analytical Data - Volatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL
							Study Area	Western Building	Western Building	Western Building	Former Fuel Oil UST	Former Gasoline UST	PCB/PAH/VOC	PCB/PAH/VOC
							Location	SB-20-11	SB-20-12	SB-20-13	SB-20-14	FD-1*	SB-20-15	SB-20-16
							Sample ID	SB-20-11-3-5-012920	SB-20-12-6-10-012920	SB-20-13-8-10-012820	SB-20-14-7-9-013020	FD-1-020320	SB-20-15-2-4-020320	SB-20-16-9-12-020320
							Interval (ft)	3-5	6-10	8-10	7-9	9-11	2-4	9-12
							Date	1/29/2020	1/29/2020	1/28/2020	1/30/2020	2/3/2020	2/3/2020	2/3/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1,1-Trichloroethane	680	100000	100000	500000	1000000	680		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,1,2,2-Tetrachloroethane	NS	35000	NS	NS	NS	600		3.0 U	3.4 U	3.7 UJ	3.6 U	2.1 UJ	3.0 UJ	9100 U
1,1,2-Trichloroethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,1-Dichloroethane	270	19000	26000	240000	480000	270		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,1-Dichloroethene	330	100000	100000	500000	1000000	330		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2,3-Trichlorobenzene	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2,4-Trichlorobenzene	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2-Dibromo-3-chloropropane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2-Dibromoethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2-Dichlorobenzene	1100	100000	100000	500000	1000000	1100		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,2-Dichloroethane	20	2300	3100	30000	60000	20		3.0 U	3.4 U	3.7 U	3.6 UJ	2.1 U	3.0 U	9100 U
1,2-Dichloropropane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,3-Dichlorobenzene	2400	17000	49000	280000	560000	2400		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
1,4-Dichlorobenzene	1800	9800	13000	130000	250000	1800		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
2-Butanone	NS	100000	100000	500000	1000000	120		3.0 U	1.9 J	2.9 J	1.7 J	2.1 U	3.0 U	9100 U
2-Hexanone	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
4-Methyl-2-Pentanone	NS	NS	NS	NS	NS	1000		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Acetone	50	100000	100000	500000	1000000	50		23 U	60 U	110 U	20 U	500 U	4.9 U	9100 U
Benzene	60	2900	4800	44000	89000	60		0.13 J	0.30 J	3.7 U	3.6 U	130 DJ **	3.0 U	9100 U
Bromochloromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Bromodichloromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Bromoform	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Bromomethane	NS	NS	NS	NS	NS	NS		3.0 UJ	3.4 UJ	3.7 UJ	3.6 UJ	2.1 UJ	3.0 UJ	9100 U
Carbon disulfide	NS	100000	NS	NS	NS	2700		3.0 U	3.4 U	3.7 U	0.25 J	1.1 J	3.0 U	9100 U
Carbon Tetrachloride	760	1400	2400	22000	44000	760		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Chlorobenzene	1100	100000	100000	500000	1000000	1100		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Chloroethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Chloroform	370	10000	49000	350000	700000	370		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Chloromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
cis-1,2-Dichloroethene	250	59000	100000	500000	1000000	250		3.0 U	3.4 U	3.7 U	3.6 U	0.29 J	3.0 U	7600 J **
Cis-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Cyclohexane	NS	NS	NS	NS	NS	NS		3.0 U	0.24 J	3.7 U	0.19 J	1400 D	3.0 U	9100 U
Dibromochloromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Dichlorodifluoromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Ethylbenzene	1000	30000	41000	390000	780000	1000		3.0 U	3.4 U	3.7 U	3.6 U	1400 D **	3.0 U	9100 U
Isopropylbenzene	NS	100000	NS	NS	NS	2300		3.0 U	3.4 U	3.7 U	3.6 U	55	3.0 U	9100 U
m,p-Xylene	260	100000	100000	500000	1000000	1600		6.0 U	6.8 U	7.3 U	7.2 U	5200 D **	6.0 U	18000 U
Methyl Acetate	NS	NS	NS	NS	NS	NS		3.0 U	19 U	1.0 U	0.91 U	10 U	3.0 U	9100 U
Methylcyclohexane	NS	NS	NS	NS	NS	NS		3.0 U	0.32 J	3.7 U	0.23 J	700 D	3.0 U	9100 U
Methylene Chloride	50	51000	100000	500000	1000000	50		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
MTBE	930	62000	100000	500000	1000000	930		3.0 U	3.4 U	0.42 J	3.6 U	2.1 U	3.0 U	9100 U
o-Xylene	260	100000	100000	500000	1000000	1600		3.0 U	3.4 U	3.7 U	3.6 U	2100 D **	3.0 U	9100 U
Styrene	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Tetrachloroethene	1300	5500	19000	150000	300000	1300		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Toluene	700	100000	100000	500000	1000000	700		0.20 J	1.5 J	0.25 J	0.58 J	2500 D **	3.0 U	9100 U
trans-1,2-Dichloroethene	190	100000	100000	500000	1000000	190		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Trans-1,3-Dichloropropene	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Trichloroethene	470	10000	21000	200000	400000	470		0.21 J	1.2 J	0.55 J	0.46 J	2.7	2.4 J	230000 **
Trichlorofluoromethane	NS	NS	NS	NS	NS	NS		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Ethane, 1,1,2-trichloro-1,2,2-trifluoro	NL	100000	NL	NL	NS	6000		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U
Vinyl Chloride	20	210	900	13000	27000	20		3.0 U	3.4 U	3.7 U	3.6 U	2.1 U	3.0 U	9100 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

** - Exceeds Protection of Groundwater SCO
NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed
* - Field duplicate of SB-20-5-9-11

Table 21

Subsurface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building
							Location	SB-20-1	SB-20-2	SB-20-3	SB-20-4	SB-20-6	SB-20-7	SB-20-7	SB-20-8	SB-20-9	SB-20-10	SB-20-11	SB-20-12
							Sample ID	SB-20-1-8-10-012920	SB-20-2-8-10-020320	SB-20-3-10-12-012720	SB-20-4-3-5-012920	SB-20-6-11-13-012720	SB-20-7-3-5-012820	FD-1-013120	SB-20-8-7-9-012820	SB-20-9-3-5-012820	SB-20-10-6-10-012720	SB-20-11-3-5-012920	SB-20-12-6-10-012920
							Interval (ft)	8-10	8-10	10-12	3-5	11-13	3-5	3-5	7-9	3-5	6-10	3-5	6-10
							Date	1/29/2020	2/3/2020	1/27/2020	1/29/2020	1/27/2020	1/28/2020	1/31/2020	1/28/2020	1/28/2020	1/27/2020	1/29/2020	1/29/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	---	---	---	---	73 U	---	---	---	---
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2-Chlorophenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2-Methylphenol	NC	100000	100000	500000	1000000	330		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
2-Nitroaniline	NS	NS	NS	NS	NS	400		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
2-Nitrophenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
3,3-Dichlorobenzidine	NS	34000	100000	500000	1000000	330		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
3-Nitroaniline	NS	NS	NS	NS	NS	NS		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
4-Chloroaniline	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
4-Nitroaniline	NS	NS	NS	NS	NS	NS		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
4-Nitrophenol	NS	NS	NS	NS	NS	NS		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
Acenaphthene	NS	NS	NS	NS	NS	100		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Acenaphthylene	20000	100000	100000	500000	1000000	98000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Acetophenone	100000	100000	100000	500000	1000000	107000		330 U	330 U	700 U	160 J	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Anthracene	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Atrazine	100000	100000	100000	500000	1000000	1000000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Benzaldehyde	NS	NS	NS	NS	NS	NS		1700 U	1700 U	3600 U	1700 U	1800 U	1800 U	1800 U	1800 U	1700 U	1800 U	1800 U	1900 U
Benzo[a]anthracene	NS	NS	NS	NS	NS	NS		330 U	330 U	400 J	330 U	350 U	140 J	350 U	360 U	330 U	340 U	350 U	370 U
Benzo[a]pyrene	1000	1000	1000	5600	11000	1000		330 U	330 U	350 J	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Benzo[b]fluoranthene	1000	1000	1000	1000	1100	22000		330 U	330 U	420 J	330 U	350 U	150 J	350 U	360 U	330 U	340 U	350 U	370 U
Benzo[g,h,i]perylene	1000	1000	1000	5600	11000	1700		330 U	330 U	240 J	330 U	350 U	97 J	350 U	360 U	330 U	340 U	350 U	370 U
Benzo[k]fluoranthene	100000	100000	100000	500000	1000000	1000000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Bis(2-Chloroethoxy)methane	800	1000	3900	56000	110000	1700		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS		500 U	500 U	1100 U	500 U	530 U	530 U	540 U	540 U	510 U	520 U	530 U	550 U
Butylbenzylphthalate	NS	NS	NS	NS	NS	435000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Caprolactam	NS	NS	NS	NS	NS	122000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Carbazole	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Chrysene	NS	NS	NS	NS	NS	NS		330 U	330 U	380 J	330 U	350 U	140 J	350 U	360 U	330 U	340 U	350 U	370 U
Dibenzo[a,h]Anthracene	1000	1000	3900	56000	110000	1000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Dibenzofuran	330	330	330	560	1100	1000000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Diethylphthalate	NS	NS	NS	NS	NS	6200		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Dimethylphthalate	NS	NS	NS	NS	NS	7100		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Di-n-butylphthalate	NS	NS	NS	NS	NS	27000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Di-n-octylphthalate	NS	NS	NS	NS	NS	8100		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Fluoranthene	NS	NS	NS	NS	NS	120000		330 U	330 U	890	330 U	350 U	300 J	210 J	360 U	330 U	340 U	150 J	370 U
Fluorene	100000	100000	100000	500000	1000000	1000000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Hexachlorobenzene	30000	100000	100000	500000	1000000	386000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Hexachlorobutadiene	NS	NS	NS	NS	NS	1400		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Hexachloroethane	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Indeno[1,2,3-cd]pyrene	NS	NS	NS	NS	NS	NS		330 U	330 U	260 J	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Isophorone	500	500	500	5600	11000	8200		330 U	330 U	220 J	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
m-Cresol & p-Cresol	NS	NS	NS	NS	NS	4400		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Naphthalene	12000	100000	100000	500000	1000000	12000		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Nitrobenzene	NS	15000	15000	69000	NS	170		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Pentachlorophenol	800	2400	6700	6700	55000	800		1700 UJ	1700 UJ	3600 U	1700 UJ	1800 UJ	1800 U	1800 U	1800 U	1700 U	1800 UJ	1800 UJ	1900 U
Phenanthrene	100000	100000	100000	500000	1000000	1000000		330 U	330 U	660 J	330 U	350 U	110 J	130 J	360 U	330 U	340 U	350 U	370 U
Phenol	330	100000	100000	500000	1000000	330		330 U	330 U	700 U	330 U	350 U	350 U	350 U	360 U	330 U	340 U	350 U	370 U
Pyrene	100000	100000	100000	500000	1000000	1000000		330 U	330 U	720	330 U	350 U	320 J	180 J	360 U	330 U	340 U	350 U	370 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[65] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
R - Rejected
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 21

Subsurface Soil Analytical Data - Semivolatile Orgainc Compounds

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	INDUSTRIAL	INDUSTRIAL
							Study Area	Western Building	Former Fuel Oil UST	PCB/PAH/VOC	PCB/PAH/VOC	Eastern Building	Eastern Building
							Location	SB-20-13	SB-20-14	SB-20-15	SB-20-16	SB-MIP-6	SB-MIP-6
							Sample ID	SB-20-13-8-10-012820	SB-20-14-7-9-013020	SB-20-15-2-4-020320	SB-20-16-9-12-020320	SB-MIP-6-8-10-013120	FD-1-013120
							Interval (ft)	8-10	7-9	2-4	9-12	8-10	8-10
							Date	1/28/2020	1/30/2020	2/3/2020	2/3/2020	1/31/2020	1/31/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
1,1'-Biphenyl	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
1,2,4,5-Tetrachlorobenzene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
1,4-Dioxane	100	9800	13000	130000	250000	100		---	---	---	74 U	72 U	71 U
2,3,4,6-Tetrachlorophenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2,4,5-Trichlorophenol	NS	NS	NS	NS	NS	100		410 U	350 U	390 U	350 U	---	---
2,4,6-Trichlorophenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2,4-Dichlorophenol	NS	NS	NS	NS	NS	400		410 U	350 U	390 U	350 U	---	---
2,4-Dimethylphenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2,4-Dinitrophenol	NS	NS	NS	NS	NS	200		2100 U	1800 U	2000 U	1800 R	---	---
2,4-Dinitrotoluene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2,6-Dinitrotoluene	NS	NS	NS	NS	NS	1000		410 U	350 U	390 U	350 U	---	---
2-Chloronaphthalene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2-Chlorophenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
2-Methylnaphthalene	NS	NS	NS	NS	NS	36400		410 U	350 U	390 U	350 U	---	---
2-Methylphenol	NC	100000	100000	500000	1000000	330		410 U	350 U	390 U	350 U	---	---
2-Nitroaniline	NS	NS	NS	NS	NS	400		2100 U	1800 U	2000 U	1800 U	---	---
2-Nitrophenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
3,3-Dichlorobenzidine	NS	34000	100000	500000	1000000	330		410 U	350 U	390 U	350 U	---	---
3-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	1800 U	2000 U	1800 U	---	---
4,6-Dinitro-2-methylphenol	NS	NS	NS	NS	NS	NS		2100 U	1800 U	2000 U	1800 R	---	---
4-Bromophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
4-Chloro-3-methylphenol	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
4-Chloroaniline	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
4-Chlorophenyl-phenylether	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
4-Nitroaniline	NS	NS	NS	NS	NS	NS		2100 U	1800 U	2000 U	1800 U	---	---
4-Nitrophenol	NS	NS	NS	NS	NS	NS		2100 U	1800 U	2000 U	1800 U	---	---
Acenaphthene	NS	NS	NS	NS	NS	100		410 U	350 U	390 U	350 U	---	---
Acenaphthylene	20000	100000	100000	500000	1000000	98000		410 U	350 U	390 U	350 U	---	---
Acetophenone	100000	100000	100000	500000	1000000	107000		410 U	350 U	390 U	350 U	---	---
Anthracene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Atrazine	100000	100000	100000	500000	1000000	1000000		410 U	350 U	390 U	350 U	---	---
Benzaldehyde	NS	NS	NS	NS	NS	NS		2100 U	1800 U	2000 U	1800 U	---	---
Benzo[a]anthracene	NS	NS	NS	NS	NS	NS		410 U	350 U	180 J	350 U	---	---
Benzo[a]pyrene	1000	1000	1000	5600	11000	1000		410 U	350 U	170 J	350 U	---	---
Benzo[b]fluoranthene	1000	1000	1000	1000	1100	22000		410 U	350 U	220 J	350 U	---	---
Benzo[g,h,i]perylene	1000	1000	1000	5600	11000	1700		410 U	350 U	390 U	350 U	---	---
Benzo[k]fluoranthene	100000	100000	100000	500000	1000000	1000000		410 U	350 U	390 U	350 U	---	---
Bis(2-Chloroethoxy)methane	800	1000	3900	56000	110000	1700		410 U	350 U	390 U	350 U	---	---
Bis(2-Chloroethyl)Ether	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Bis(2-Chloroisopropyl)ether	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Bis(2-Ethylhexyl)phthalate	NS	NS	NS	NS	NS	NS		610 U	530 U	590 U	540 U	---	---
Butylbenzylphthalate	NS	NS	NS	NS	NS	435000		410 U	350 U	390 U	350 U	---	---
Caprolactam	NS	NS	NS	NS	NS	122000		410 U	350 U	390 U	350 U	---	---
Carbazole	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Chrysene	NS	NS	NS	NS	NS	NS		410 U	350 U	170 J	350 U	---	---
Dibenzo[a,h]Anthracene	1000	1000	3900	56000	110000	1000		410 U	350 U	390 U	350 U	---	---
Dibenzofuran	330	330	330	560	1100	1000000		410 U	350 U	390 U	350 U	---	---
Diethylphthalate	NS	NS	NS	NS	NS	6200		410 U	350 U	390 U	350 U	---	---
Dimethylphthalate	NS	NS	NS	NS	NS	7100		410 U	350 U	390 U	350 U	---	---
Di-n-butylphthalate	NS	NS	NS	NS	NS	27000		410 U	350 U	390 U	350 U	---	---
Di-n-octylphthalate	NS	NS	NS	NS	NS	8100		410 U	350 U	390 U	350 U	---	---
Fluoranthene	NS	NS	NS	NS	NS	120000		410 U	350 U	420	350 U	---	---
Fluorene	100000	100000	100000	500000	1000000	1000000		410 U	350 U	390 U	350 U	---	---
Hexachlorobenzene	30000	100000	100000	500000	1000000	386000		410 U	350 U	390 U	350 U	---	---
Hexachlorobutadiene	NS	NS	NS	NS	NS	1400		410 U	350 U	390 U	350 U	---	---
Hexachlorocyclopentadiene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Hexachloroethane	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Indeno[1,2,3-cd]pyrene	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Isophorone	500	500	500	5600	11000	8200		410 U	350 U	390 U	350 U	---	---
m-Cresol & p-Cresol	NS	NS	NS	NS	NS	4400		410 U	350 U	390 U	350 U	---	---
Naphthalene	12000	100000	100000	500000	1000000	12000		410 U	350 U	390 U	350 U	---	---
Nitrobenzene	NS	15000	15000	69000	NS	170		410 U	350 U	390 U	350 U	---	---
N-Nitroso-Di-N-Propylamine	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
N-Nitrosodiphenylamine	NS	NS	NS	NS	NS	NS		410 U	350 U	390 U	350 U	---	---
Pentachlorophenol	800	2400	6700	6700	55000	800		2100 U	1800 U	2000 UJ	1800 UJ	---	---
Phenanthrene	100000	100000	100000	500000	1000000	1000000		410 U	350 U	260 J	350 U	---	---
Phenol	330	100000	100000	500000	1000000	330		410 U	350 U	390 U	350 U	---	---
Pyrene	100000	100000	100000	500000	1000000	1000000		410 U	350 U	390 J	350 U	---	---

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[65] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
R - Rejected
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 22

Subsurface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building
							Location	SB-20-1	SB-20-2	SB-20-3	SB-20-4	SB-20-6	SB-20-7	FD-1	SB-20-8
							Sample ID	SB-20-1-8-10-012920	SB-20-2-8-10-020320	SB-20-3-10-12-012720	SB-20-4-3-5-012920	SB-20-6-11-13-012720	SB-20-7-3-5-012820	FD-1-012820	SB-20-8-7-9-012820
							Interval (ft)	8-10	8-10	10-12	3-5	11-13	3-5	3-5	7-9
							Date	1/29/2020	2/3/2020	1/27/2020	1/29/2020	1/27/2020	1/28/2020	1/28/2020	1/28/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	35 U	36 U	36 U
Aroclor-1221	NS	NS	NS	NS	NS	NS		69 U	68 U	70 U	69 U	71 U	72 U	72 U	73 U
Aroclor-1232	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	35 U	36 U	36 U
Aroclor-1242	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	35 U	36 U	36 U
Aroclor-1248	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	35 U	36 U	36 U
Aroclor-1254	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	67	36 U	36 U
Aroclor-1260	NS	NS	NS	NS	NS	NS		34 U	33 U	35 U	34 U	35 U	45	36 U	36 U
Total PCBs	100	1000	1000	1000	25000	3200		ND	ND	ND	ND	ND	112	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

RAMBOLL

Table 22

Subsurface Soil Analytical Data - Polychlorinated Biphenyls

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[2]	Restricted-Residential Use SCOs (µg/Kg)[3]	Commercial Use SCOs (µg/Kg)[4]	Industrial Use SCOs (µg/Kg)[5]	Protection of Groundwater SCOs (µg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Western Building	PCB/PAH/VOC	PCB/PAH/VOC
							Location	SB-20-9	SB-20-10	SB-20-11	SB-20-12	SB-20-13	SB-20-15	SB-20-16
							Sample ID	SB-20-9-3-5-012820	SB-20-10-6-10-012720	SB-20-11-3-5-012920	SB-20-12-6-10-012920	SB-20-13-8-10-012820	SB-20-15-2-4-020320	SB-20-16-9-12-020320
							Interval (ft)	3-5	6-10	3-5	6-10	8-10	2-4	9-12
							Date	1/28/2020	1/27/2020	1/29/2020	1/29/2020	1/28/2020	2/3/2020	2/3/2020
							Units	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Aroclor-1016	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Aroclor-1221	NS	NS	NS	NS	NS	NS		69 U	71 U	73 U	74 U	81 U	82 U	74 U
Aroclor-1232	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Aroclor-1242	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Aroclor-1248	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Aroclor-1254	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Aroclor-1260	NS	NS	NS	NS	NS	NS		34 U	35 U	36 U	36 U	40 U	40 U	36 U
Total PCBs	100	1000	1000	1000	25000	3200		ND	ND	ND	ND	ND	ND	ND

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 23

Subsurface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Former Gasoline UST	Western Building	Western Building	Western Building
							Location	SB-20-1	SB-20-2	SB-20-3	SB-20-4	SB-20-5	SB-20-6	SB-20-7	FD-1
							Sample ID	SB-20-1-8-10-012920	SB-20-2-8-10-020320	SB-20-3-10-12-012720	SB-20-4-3-5-012920	SB-20-5-9-11-020320	SB-20-6-11-13-012720	SB-20-7-3-5-012820	FD-1-012820
							Interval (ft)	8-10	8-10	10-12	3-5	5-9	11-13	3-5	3-5
							Date	1/29/2020	2/3/2020	1/27/2020	1/29/2020	2/3/2020	1/27/2020	1/28/2020	1/28/2020
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS	NS	6600	5630	5240 E	5930		4930 E	5760	7570
Antimony	NS	NS	NS	NS	NS	NS	NS	6.2 UN	6.2 UN	6.2 U	6.3 UN		6.2 U	6 U	6.5 U
Arsenic	13	16	16	16	16	16	16	3.9	2.8 N	2.9	3.1	---	3.2	3.1	3.7
Barium	350	350	400	400	10000	820	10000	22.8	64.1	26.7	29.4	---	19.2	23.1	26.5
Beryllium	7.2	14	72	590	2700	47	2700	0.323	0.249 J	0.247 J	0.302 J	---	0.259 J	0.302	0.379
Cadmium	2.5	2.5	4.3	9.3	60	7.5	60	0.156 J	0.717	0.33 J	0.198 J	---	0.269 J	0.382 J	0.423 J
Calcium	NS	NS	NS	NS	NS	NS	NS	200000	200000	191000	106000	---	164000	143000	134000
Chromium	30	36	180	1500	6800	NS	6800	12.3	13.6	10.8	10.1	---	9.4	10.4	13.9
Cobalt	NS	NS	NS	NS	NS	NS	NS	5.2 J	3.4 J	4.5 J	4.9 J	---	4.2 J	4.5 J	6.1
Copper	50	270	270	270	10000	1720	10000	21.8 N	14.6	14.9	17 N	---	16.1	14.6	15.1
Iron	NS	NS	NS	NS	NS	NS	NS	12300	9640	10800	11300	---	10400	12400	14900
Lead	63	400	400	1000	3900	450	3900	4.9 J	5.6	6.4	6.1	11.5	4.5 J	6.8	7.9
Magnesium	NS	NS	NS	NS	NS	NS	NS	73500	66700	66500	44200		55700	68700	56200
Manganese	1600	2000	2000	10000	10000	2000	10000	273	289	291	363	---	284	351	406
Mercury	0.18	0.81	0.81	2.8	5.7	0.73	5.7	0.015 J	0.013 J	0.05	0.027 J	---	0.015 J	0.08	0.056
Nickel	30	140	310	310	10000	130	10000	10.6	9.4	10.5	8.8	---	10.9	11.2	15.5
Potassium	NS	NS	NS	NS	NS	NS	NS	1950 NE	1650	1530 E	1330 NE	---	1430 E	1360	1750
Selenium	3.9	36	180	1500	6800	4	6800	1 U	1 U	1 U	1 U	---	1 U	1 U	1.1 U
Silver	2	36	180	1500	6800	8.3	6800	1 U	1 U	1 U	1 U	---	1 U	1 U	1.1 U
Sodium	NS	NS	NS	NS	NS	NS	NS	226	201	248	153	---	181	211	206
Thallium	NS	NS	NS	NS	NS	NS	NS	6.5	5.6	6.1	3.2	---	4.3	4.1	3.2
Vanadium	NS	NS	NS	NS	NS	NS	NS	13	10.3	12.1	12.4	---	10.8	12.4	16
Zinc	109	2200	10000	10000	10000	2480	10000	43.1	118	42.2	44.6	---	32.5	46.1	54.5
Cyanide, Total	27	27	27	27	10000	40	10000	0.22 U	0.24 U	0.21 U	0.28 U	---	0.30 U	0.26 U	0.25 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 23

Subsurface Soil Analytical Data - Metals and Cyanide

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (mg/Kg)[1]	Residential Use SCOs (mg/Kg)[2]	Restricted-Residential Use SCOs (mg/Kg)[3]	Commercial Use SCOs (mg/Kg)[4]	Industrial Use SCOs (mg/Kg)[5]	Protection of Groundwater SCOs (mg/Kg)[6]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL	RESIDENTIAL
							Study Area	Western Building	Western Building	Western Building	Western Building	Western Building	Western Building	PCB/PAH/VOC	PCB/PAH/VOC
							Location	SB-20-8	SB-20-9	SB-20-10	SB-20-11	SB-20-12	SB-20-13	SB-20-15	SB-20-16
							Sample ID	SB-20-8-7-9-012820	SB-20-9-3-5-012820	SB-20-10-6-10-012720	SB-20-11-3-5-012920	SB-20-12-6-10-012920	SB-20-13-8-10-012820	SB-20-15-2-4-020320	SB-20-16-9-12-020320
							Interval (ft)	7-9	3-5	6-10	3-5	6-10	8-10	2-4	9-12
							Date	1/28/2020	1/28/2020	1/27/2020	1/29/2020	1/29/2020	1/28/2020	2/3/2020	2/3/2020
							Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	NS	NS	NS	NS	NS	NS	NS	6680	6230	5630 E	3620	8060	10800	9220	7070
Antimony	NS	NS	NS	NS	NS	NS	NS	6.4 U	5.7 U	6.2 U	5.9 UN	6 UJ	6.8 U	7.1 UN	6.1 UJ
Arsenic	13	16	16	16	16	16	16	3.1	3.1	2.4	2.9	4.6	5.1	4.9 N	4 N
Barium	350	350	400	400	10000	820	10000	22.2	20.4	17.6	12.2	30.5	44	72.2	92.9
Beryllium	7.2	14	72	590	2700	47	2700	0.353	0.331	0.277 J	0.187 J	0.407	0.599	0.435	0.306
Cadmium	2.5	2.5	4.3	9.3	60	7.5	60	0.375 J	0.331 J	0.267 J	0.158 J	0.308 J	0.61	0.59 U	0.51 U
Calcium	NS	NS	NS	NS	NS	NS	NS	145000	144000	165000	157000	179000	95800	24100	67600
Chromium	30	36	180	1500	6800	NS	6800	12.9	12	10.3	7.1	14.4	18.7	14.9	11.4
Cobalt	NS	NS	NS	NS	NS	NS	NS	4.7 J	4.9	4.4 J	3.7 J	5.8	7.6	7.4	6.9
Copper	50	270	270	270	10000	1720	10000	14.2	14.6	12.9	15.4 N	17.8 N	24.8	26.8	13.4
Iron	NS	NS	NS	NS	NS	NS	NS	13000	12000	10600	7280	16300	21400	16800	14900
Lead	63	400	400	1000	3900	450	3900	7.1	6.1	4.3 J	9.1	8.1	10.2	15.2	5.0 J
Magnesium	NS	NS	NS	NS	NS	NS	NS	81700	58500	76800	61700	71900	46100	14600	36200
Manganese	1600	2000	2000	10000	10000	2000	10000	356	335	277	263	483	541	444	362
Mercury	0.18	0.81	0.81	2.8	5.7	0.73	5.7	0.101	0.031 J	0.019 J	0.014 J	0.077	0.042	0.07	0.015 J
Nickel	30	140	310	310	10000	130	10000	12.9	12.6	10.9	5.7	12.8	18.8	14	14.8
Potassium	NS	NS	NS	NS	NS	NS	NS	1700	1810	1650 J	1210 NE	1670 J-	1760	1380	1990
Selenium	3.9	36	180	1500	6800	4	6800	1.1 U	0.946 U	1 U	0.985 U	0.994 U	1.1 U	1.2 U	1 U
Silver	2	36	180	1500	6800	8.3	6800	1.1 U	0.946 U	1 U	0.985 U	0.994 U	1.1 U	1.2 U	1 U
Sodium	NS	NS	NS	NS	NS	NS	NS	249	181	213	197	245	194	64.1 J	130
Thallium	NS	NS	NS	NS	NS	NS	NS	4.1	4.4	5	5.2	5.3	11.3 U	1.2 U	10.2 U
Vanadium	NS	NS	NS	NS	NS	NS	NS	14.4	13	11	9.7	17.4	22.3	18.3	13.3
Zinc	109	2200	10000	10000	10000	2480	10000	41.4	40.5	30	36.6	47.6	67.2	100	29.6
Cyanide, Total	27	27	27	27	10000	40	10000	0.28 U	0.24 U	0.28 U	0.25 U	0.26 U	0.28 U	0.31 U	0.28 U

Notes:

[1] 6 NYCRR Part 375, Table 375-6.8 (a) Unrestricted Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[2] 6 NYCRR Part 375, Table 375-6.8 (a): Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[3] 6 NYCRR Part 375, Table 375-6.8 (a): Restricted-Residential Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[4] 6 NYCRR Part 375, Table 375-6.8 (a): Commercial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[5] 6 NYCRR Part 375, Table 375-6.8 (a): Industrial Use Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

[6] 6 NYCRR Part 375, Table 375-6.8 (a): Protection of Groundwater Soil Cleanup Objectives, December 14, 2006/
CP-51 Supplemental Soil Cleanup Objectives, October 21, 2010

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCOs
🟦	Exceeds Unrestricted, Residential, and Restricted-Residential SCOs
🟪	Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs
🟩	Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified
U - Not detected
J - Estimated value
D - Concentration is a result of dilution
N - Matrix spike recovery outside laboratory limits
--- Not Analyzed

Table 24

Subsurface Soil Analytical Data - Per- and Polyfluoroalkyl Substances

Former Accurate Die Casting Site
Fayetteville, NY

Chemical Name	Unrestricted Use SCOs (µg/Kg)[1]	Residential Use SCOs (µg/Kg)[1]	Restricted-Residential Use SCOs (µg/Kg)[1]	Commercial Use SCOs (µg/Kg)[1]	Industrial Use SCOs (µg/Kg)[1]	Protection of Groundwater SCOs (µg/Kg)[1]	Site Zoning	INDUSTRIAL	INDUSTRIAL	INDUSTRIAL	RESIDENTIAL
							Study Area	Eastern Building	Eastern Building	Western building	PCB/PAH/VOC
							Location	SB-MIP-6	SB-MIP-6	SB-20-8	SB-20-16
							Sample ID	SB-MIP-6-8-10-013120	FD-1-013120	SB-20-8-7-9-012820	SB-20-16-9-12-020320
							Interval (ft)	8-10	8-10	7-9	9-12
							Date	1/31/2020	1/31/2020	1/28/2020	2/3/2020
							Units	ng/g	ng/g	ng/g	ng/g
2-(N-methyl perfluorooctanesulfonamido) acetic acid	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
N-Ethyl-N-((heptadecafluorooctyl)sulphonyl) glycine	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROBUTANESULFONIC ACID	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROBUTYRIC ACID (PFBA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUORODECANE SULFONIC ACID	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUORODECANOIC ACID (PFDA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUORODODECANOIC ACID (PFDoA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUOROHEPTANE SULFONATE (PFHpS)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
Perfluoroheptanoic Acid (PFHpA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROHEXANESULFONIC ACID	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROHEXANOIC ACID (PFHxA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUORONONANOIC ACID	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
Perfluorooctane Sulfonamide (FOSA)	NS	NS	NS	NS	NS	NS		1.0 U	0.077 J	0.73 U	0.12 J
PERFLUOROOCTANE SULFONIC ACID (PFOS)	0.88	8.8	44	440	440	3.7		1.0 U	0.98 U	0.73 U	1.0 U
Perfluorooctanoic acid (PFOA)	0.66	6.6	33	500	600	1.1		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROPENTANOIC ACID (PFPeA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUOROTETRADECANOIC ACID (PFTeA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
PERFLUOROTRIDECANOIC ACID (PFTriA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.80 U	1.0 U
PERFLUOROUNDECANOIC ACID (PFUnA)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE (8:2)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.0 U
SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE (6:2)	NS	NS	NS	NS	NS	NS		1.0 U	0.98 U	0.73 U	1.1

Notes

[1] *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances Under NYSDEC's Part 375 Remedial Programs* (NYSDEC, January 2021)

🟥 Exceeds Unrestricted SCO

🟧 Exceeds Unrestricted and Residential SCOs

🟦 Exceeds Unrestricted, Residential, and Restricted-Residential SCOs

🟪 Exceeds Unrestricted, Residential, Restricted-Residential, and Commercial SCOs

🟩 Exceeds Unrestricted, Residential, Restricted-Residential, Commercial, and Industrial SCOs

NS - Not Specified

U - Not detected

J - Estimated value

N - Matrix spike recovery outside laboratory limits

--- Not Analyzed

Table 25
Groundwater Analytical Data - VOC, SVOC, Inorganics, PCB, Pesticides-Herbicides
Former Accurate Die Casting Site
Fayeteville, NY

Compound Name	Location	MW-02	MW-05 (FD)	MW-05	MW-11	MW-12	MW-13	MW-15
	Sample Name	MW-2-022224	FD-01-030124	MW-5-030124	MW-11-030124	MW-12-022124	MW-13-022024	MW-15-022124
	Sample Date	2/22/2024	3/1/2024	3/1/2024	3/1/2024	2/21/2024	2/20/2024	2/21/2024
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	NYS Class GA[1]							
VOLATILE ORGANIC COMPOUNDS (VOCs) in µg/L								
1,1-Dichloroethene	5	1.0 U	10 U	1.0 U	10 U	1.0 U	1.0 U	0.53 J
Acetone	50	10 U	100 U	10 U	100 U	10 U	9.3 J	10 U
Cis-1,2-Dichloroethylene	**5**	1.0 U	10 U	0.83 J	10 U	1.0 U	1.0 U	1.0 U
Cyclohexane	NC	1.0 U	10 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	**5**	1.0 U	10 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	NC	1.0 U	10 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
Tetrachloroethylene (PCE)	5	1.0 UT	10 U	1.8	10 U	1.0 U	1.0 U	1.0 U
Toluene	**5**	1.0 U	10 U	1.0 U	10 U	1.0 U	1.0 U	1.0 U
Trichloroethylene (TCE)	**5**	1.0 U	43	47	570 J	11	200	17
Xylenes (total)	**5**	2.0 U	20 U	2.0 U	20 U	2.0 U	2.0 U	2.0 U
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) in µg/L								
Di-n-butylphthalate	50	5.2 U	5.0 U	5.0 U	5.0 U	NA	NA	5.0 U
INORGANICS in mg/L								
Aluminum	NC	0.20 U	1.4 J	0.81 J	0.20 U	47.9	NA	0.25
Arsenic	0.025	0.015 U	0.015 U	0.015 U	0.015 U	0.025	NA	0.015 U
Barium	**1**	0.12	0.19	0.18	0.23	2.1	NA	0.13
Beryllium	0.003	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0020	NA	0.0020 U
Cadmium	0.005	0.0020 U	0.0020 U	0.0020 U	0.0020 U	0.0012 J	NA	0.00053 J
Calcium	NC	84.0	117	115	100	600	NA	123
Chromium	**0.05**	0.0040 U	0.31	0.22	0.0036 J	1.0	NA	0.20
Cobalt	NC	0.0040 U	0.0058	0.0040	0.0040 U	0.054	NA	0.00086 J
Copper	0.2	0.010 U	0.011	0.0074 J	0.010 U	0.16	NA	0.0093 J
Iron	**0.3**	0.049 J	3.4 J	2.1 J	0.025 J	70.4	NA	0.96
Lead	**0.025**	0.010 U	0.0037 J	0.010 U	0.010 U	0.049	NA	0.010 U
Magnesium	**35**	24.5	30.5	29.7	44.3	218	NA	63.8
Manganese	**0.3**	0.25 B	0.081 J	0.053 J	0.0030	2.1	NA	0.012
Mercury	0.0007	0.00020 U	0.00020 U	0.00020 U	0.00020 U	0.00015 J	NA	0.00020 U
Nickel	**0.1**	0.010 U	0.029	0.020	0.010 U	1.0	NA	0.017
Potassium	NC	0.49 J	1.4	1.2	1.7	17.5	NA	2.9
Sodium	**20**	2.6	4.2	4.0	50.1	40.4	NA	182
Vanadium	NC	0.0050 U	0.0029 J	0.0017 J	0.0050 U	0.081	NA	0.0050 U
Zinc	2	0.010 U	0.0072 J	0.0038 J	0.010 U	0.16	NA	0.0023 J
POLYCHLORINATED BYPHENYLS (PCBs)								
NONE DETECTED								
PESTICIDES AND HERBICIDES in µg/L								
4-4-DDT	0.2	0.052 U	0.050 UT	0.050 UT	0.023 J+	0.057 U	NA	0.050 U
b-BHC	0.04	0.052 U	0.050 U	0.050 U	0.050 UT	0.057 U	NA	0.050 U
Methoxychlor	35	0.052 U	0.050 U	0.050 U	0.050 U	0.057 U	NA	0.050 U
y-Chlordane	NC	0.052 U	0.050 U	0.050 U	0.050 U	0.017 J	NA	0.050 U
Dichlorprop	NC	0.48 U	0.48 U	0.48 U	0.48 U	0.48 U	NA	0.48 U

Notes:

[1] 6-CRR-NY Part 703, Surface Water and Groundwater
Quality Standards and Groundwater Effluent Limitations
Values, Revised June 1998

NC - no criterion established

NA - analysis could not be completed due to low volume produced by well

U - constituent not detected

J - concentration estimated

+ - result biased high due to laboratory control sample out of range

T - MS or MSD exceeded control limits

B - constituent detected in method blank

▨ Exceeds Class GA Standdard

Table 25
Groundwater Analytical Data - VOC, SVOC, Inorganics, PCB, Pesticides-Herbicides
Former Accurate Die Casting Site
Fayeteville, NY

Compound Name	Location	MW-17	MW-18	MW-22	MW-23	MW-24	MW-25	MW-26	MW-27
	Sample Name	MW-17-022224	MW-18-022024	MW-22-022224	MW-23-022124	MW-24-022024	MW-25-022224	MW-26-022224	MW-27-022124
	Sample Date	2/22/2024	2/20/2024	2/22/2024	2/21/2024	2/20/2024	2/22/2024	2/22/2024	2/21/2024
	Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	NYS Class GA[1]								
VOLATILE ORGANIC COMPOUNDS (VOCs) in µg/L									
1,1-Dichloroethene	5	2.0 U	10 U	1.0 U	1.0 U	5.0 U	2.0 U	1.0 U	100 UT
Acetone	50	20 U	100 U	10 U	10 U	50 U	6.0 J	10 U	1000 UT
Cis-1,2-Dichloroethylene	**5**	29	120	21	1.0 U	12	120	51	100 UT
Cyclohexane	NC	2.0 U	10 U	1.0 U	1.0 U	5.0 U	2.0 U	1.0 U	220 T
Ethylbenzene	**5**	2.0 U	10 U	1.0 U	1.0 U	5.0 U	2.0 U	1.0 U	980 T
Methylcyclohexane	NC	2.0 U	10 U	1.0 U	1.0 U	5.0 U	2.0 U	1.0 U	98 JT
Tetrachloroethylene (PCE)	5	2.5	10 U	1.0 UT	1.0 U	5.0 U	2.0 UT	1.0 UT	100 UT
Toluene	**5**	2.0 U	10 U	1.0 U	1.0 U	5.0 U	4.8	2.8	2100 T
Trichloroethylene (TCE)	**5**	86	290	11	1.0 U	130	4.4	37	100 UT
Xylenes (total)	**5**	4.0 U	20 U	2.0 U	2.0 U	10 U	4.0 U	2.0 U	5300 T
SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) in µg/L									
Di-n-butylphthalate	50	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.4 U	0.39 J	NA
INORGANICS in mg/L									
Aluminum	NC	0.20 U	0.20 U	0.20 U	0.20 U	NA	2.8	3.3	NA
Arsenic	0.025	0.015 U	0.015 U	0.015 U	0.015 U	NA	0.015 U	0.015 U	NA
Barium	**1**	0.063	0.085	0.060	0.075	NA	0.065	0.058	NA
Beryllium	0.003	0.0020 U	0.0020 U	0.0020 U	0.0020 U	NA	0.0020 U	0.0020 U	NA
Cadmium	0.005	0.0020 U	0.0020 U	0.0020 U	0.0020 U	NA	0.0020 U	0.0020 U	NA
Calcium	NC	103	85.0	74.5	84.9	NA	107	77.7	NA
Chromium	**0.05**	0.0040 U	0.0040 U	0.0040 U	0.0040 U	NA	0.0048	0.0049	NA
Cobalt	NC	0.0040 U	0.0040 U	0.0040 U	0.0040 U	NA	0.00099 J	0.0030 J	NA
Copper	0.2	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.011 B	0.010 U	NA
Iron	**0.3**	0.080	0.050 U	0.036 J	0.099	NA	2.8	1.8	NA
Lead	**0.025**	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0058 J	0.010 U	NA
Magnesium	**35**	30.7	29.6	21.5	43.6	NA	52.7	31.8	NA
Manganese	**0.3**	0.0058 B	0.0030 U	0.013 B	0.0026 J	NA	0.21 B	0.61 B	NA
Mercury	0.0007	0.00020 U	0.00020 U	0.00020 U	0.00020 U	NA	0.00020 U	0.00020 U	NA
Nickel	**0.1**	0.010 U	0.010 U	0.010 U	0.010 U	NA	0.0042 J	0.0054 J	NA
Potassium	NC	0.40 J	0.31 J	0.24 J	1.8	NA	1.9	2.0	NA
Sodium	**20**	11.0	2.1	18.8	34.3	NA	5.6	6.4	NA
Vanadium	NC	0.0050 U	0.0050 U	0.0050 U	0.0050 U	NA	0.0044 J	0.0044 J	NA
Zinc	2	0.010 U	0.010 U	0.010 U	0.0039 J	NA	0.010 U	0.010 U	NA
POLYCHLORINATED BYPHENYLS (PCBs)									
NONE DETECTED									
PESTICIDES AND HERBICIDES in µg/L									
4-4-DDT	0.2	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.052 U	0.063 U	NA
b-BHC	0.04	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.052 U	0.035 J	NA
Methoxychlor	35	0.050 U	0.050 U	0.050 U	0.039 J	NA	0.052 U	0.063 U	NA
y-Chlordane	NC	0.050 U	0.050 U	0.050 U	0.050 U	NA	0.052 U	0.063 U	NA
Dichlorprop	NC	0.50 U	0.48 U	0.51 U	0.48 U	NA	0.18 J	0.52 U	NA

Notes:

[1] 6-CRR-NY Part 703, Surface Water and Groundwater
Quality Standards and Groundwater Effluent Limitations
Values, Revised June 1998

NC - no criterion established

NA - analysis could not be completed due to low volume produced by well

U - constituent not detected

J - concentration estimated

+ - result biased high due to laboratory control sample out of range

T - MS or MSD exceeded control limits

B - constituent detected in method blank

▨ Exceeds Class GA Standdard

Table 26
Soil Vapor Analytical Data - VOC
Former Accurate Die Casting Site
Fayeteville, NY

Compound Name	Location	SV-01	SV-01	SV-02	SV-03	SV-04	SV-05
	Sample Name	SV-01-072424	SV-01-101524	SV-02-082924	SV-03-072424	SV-04-072424	SV-05-072424
	Sample Date	7/24/2024	10/15/2024	8/29/2024	7/24/2024	7/24/2024	7/24/2024
	Units	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3	ug/m3
1,1,1-Trichloroethane*		**0.51 J**	**0.46 J**	1.1 U	1.1 U	1.1 U	1.1 U
1,1,2-Trichloro-1,2,2-Trifluoroethene		1.5 U	**0.59 J**	1.5 U	**0.45 J**	**0.4 J**	**0.45 J**
1,2,4-Trimethylbenzene*		**1.5**	**3**	0.98 U	0.98 U	**0.48 J**	**0.9 J**
1,3,5-Trimethylbenzene*		**0.31 J**	**0.5 J**	0.98 U	0.98 U	0.98 U	0.98 U
1,3-Butadiene		0.44 U	0.44 U	0.44 U	0.44 U	0.44 U	0.44 U
1,4-Dioxane (P-Dioxane)		18 U	18 U	18 U	18 U	18 U	**0.56 J**
2,2,4-Trimethylpentane (isooctane)		**1**	**0.18 J**	0.93 U	0.93 U	**1.2**	**1.1**
2-Hexanone		2 U	2 U	2 U	2 U	2 U	2 U
4-Ethyltoluene		**0.26 J**	**0.56 J**	0.98 U	0.98 U	0.98 U	0.98 U
4-Isopropyltoluene		1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acetone		**6.9 J**	**19**	**24**	12 U	12 U	12 U
Benzene*		**1.2**	**0.46 J**	**0.3 J**	**0.39 J**	**0.74**	**0.77**
Butane		**22**	**0.56 J**	**0.66 J**	**19**	**24**	**23**
Carbon disulfide		**0.46 J**	1.6 U	**2.3**	1.6 U	**4.9**	1.6 U
Carbon tetrachloride*		**0.49**	**0.52**	**0.27**	0.22 U	**0.16 J**	**0.16 J**
Chlorodifluoromethane		**1.2 J**	**1.3 J**	**1.9**	**0.8 J**	1.8 U	**0.51 J**
Chloroform		**5.2**	**3.3**	0.98 U	0.98 U	0.98 U	0.98 U
Chloromethane		1 U	**0.39 J**	**1.6**	1 U	1 U	1 U
Cis-1,2-Dichloroethylene*		**110**	**39**	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane*		**0.7**	0.69 U	0.69 U	**0.49 J**	**0.69**	**0.76**
Dichlorodifluoromethane		**1.2 J**	**2.2 J**	**2.3 J**	**1.4 J**	**1.3 J**	**1.4 J**
Ethylbenzene*		**0.6 J**	**0.46 J**	0.87 U	0.87 U	0.87 U	**0.42 J**
Heptane*		**1.2**	**0.43 J**	0.82 U	0.82 U	**1.2**	**1.3**
Hexane*		**3.7**	**0.49 J**	1.8 U	**1.5 J**	**4**	**4.4**
Isopropylbenzene (Cumene)		0.98 U	**0.27 J**	0.98 U	0.98 U	0.98 U	0.98 U
M,P-Xylenes*		**2.5**	**1.8 J**	2.2 U	2.2 U	**1.1 J**	**1.7 J**
Methyl Ethyl Ketone (2-Butanone)		1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U
Naphthalene*		2.6 U	2.6 UJ	2.6 UJ	2.6 U	2.6 U	2.6 U
n-Propylbenzene		0.98 U	**0.36 J**	0.98 U	0.98 U	0.98 U	0.98 U
O-Xylene (1,2-Dimethylbenzene)*		**0.97**	**0.78 J**	0.87 U	0.87 U	**0.47 J**	**0.65 J**
Styrene		0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
Tetrachloroethylene(PCE)*		**1.8**	**1.2 J**	**0.23 J**	1.4 U	**0.67 J**	1.4 U
Toluene*		**3.5**	**1.3**	**0.78**	**0.46 J**	**2**	**2.7**
Trans-1,2-Dichloroethene		**12**	**6.4**	**1.3**	0.79 U	0.79 U	0.79 U
Trichloroethylene (TCE)*		**1400**	**920**	0.2 U	0.2 U	**5.8**	0.2 U
Trichlorofluoromethane		**0.88 J**	**1.2**	**1.1**	**0.97 J**	**0.9 J**	**0.95 J**

Notes:

U - constituent not detected

J - concentration estimated

Bold - detected compound

* - Compound listed in Matrices A through F of *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* , NYSDOH, October 2006 (with updates).

Table 26
Soil Vapor Analytical Data - VOC
Former Accurate Die Casting Site
Fayeteville, NY

Compound Name	**Location**	**SV-06**	**SV-07**	**SV-08**	**SV-09**	**SV-09**	**SV-10**
	Sample Name	**SV-06-072424**	**SV-07-072424**	**SV-08-072424**	**DUP-072424**	**SV-09-072424**	**SV-10-072424**
	Sample Date	**7/24/2024**	**7/24/2024**	**7/24/2024**	**7/24/2024**	**7/24/2024**	**7/24/2024**
	Units	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**	**ug/m3**
1,1,1-Trichloroethane*		1.1 U	1.1 U	1.1 U	**0.53 J**	**0.56 J**	1.1 U
1,1,2-Trichloro-1,2,2-Trifluoroethene		1.5 U	**0.5 J**	**0.41 J**	**0.45 J**	**0.51 J**	**0.59 J**
1,2,4-Trimethylbenzene*		**0.86 J**	**1.2**	**15**	**1.1**	**2.2**	**4.3**
1,3,5-Trimethylbenzene*		0.98 U	**0.32 J**	**3.8**	0.98 U	0.98 U	**0.9 J**
1,3-Butadiene		0.44 U	0.44 U	0.44 U	**0.19 J**	**0.18 J**	0.44 U
1,4-Dioxane (P-Dioxane)		18 U	18 U	18 U	18 U	18 U	18 U
2,2,4-Trimethylpentane (isooctane)		**0.88 J**	**3.5**	**1.4**	**3.2**	**3.2**	**1.7**
2-Hexanone		2 U	2 U	2 U	2 U	**1.5 J**	2 U
4-Ethyltoluene		0.98 U	0.98 U	**3.8**	0.98 U	0.98 U	**0.94 J**
4-Isopropyltoluene		1.1 U	1.1 U	**0.48 J**	1.1 U	**0.95 J**	1.1 U
Acetone		**4.2 J**	**13**	**6.4 J**	**61 J**	**140 J**	**5.8 J**
Benzene*		**0.74**	**1.5**	**2.1**	**2**	**1.9**	**2.6**
Butane		**19**	**32**	**23**	**89**	**78**	**23**
Carbon disulfide		1.6 U	1.6 U	**3**	1.6 U	**0.99 J**	1.6 U
Carbon tetrachloride*		**0.25**	0.22 U	**0.15 J**	**2.9**	**3.1**	0.22 U
Chlorodifluoromethane		**1.4 J**	**1.4 J**	**1.8**	**0.62 J**	**0.82 J**	**0.41 J**
Chloroform		0.98 U	0.98 U	**0.8 J**	**2.4**	**2.6**	**0.23 J**
Chloromethane		**0.44 J**	**0.42 J**	**0.53 J**	**0.58 J**	**0.59 J**	1 U
Cis-1,2-Dichloroethylene*		0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane*		**0.64 J**	**1.6**	**0.89**	**2.3**	**2.2**	**0.91**
Dichlorodifluoromethane		**1.5 J**	**1.3 J**	**1.4 J**	**1.3 J**	**1.3 J**	**1.1 J**
Ethylbenzene*		**0.42 J**	**0.64 J**	**6.9**	**0.88**	**0.62 J**	**1.6**
Heptane*		**1.2**	**2.4**	**2.2**	**3.9**	**3.8**	**2**
Hexane*		**3.6**	**7.5**	**4.9**	**14**	**13**	**5**
Isopropylbenzene (Cumene)		0.98 U	0.98 U	**1.1**	0.98 U	0.98 U	0.98 U
M,P-Xylenes*		**1.8 J**	**2.5**	**34**	**2.9**	**2.9**	**7**
Methyl Ethyl Ketone (2-Butanone)		1.5 U	1.5 U	1.5 U	**2.9**	**4.5**	1.5 U
Naphthalene*		2.6 U	2.6 U	2.6 U	**8.1 J**	2.6 UJ	2.6 U
n-Propylbenzene		0.98 U	0.98 U	**2.2**	0.98 U	0.98 U	**0.51 J**
O-Xylene (1,2-Dimethylbenzene)*		**0.62 J**	**0.99**	**12**	**0.95**	**1.1**	**2.8**
Styrene		0.85 U	0.85 U	0.85 U	**0.63 J**	**1.7**	0.85 U
Tetrachloroethylene(PCE)*		1.4 U	**1.7**	**0.2 J**	**0.32 J**	**0.26 J**	**0.32 J**
Toluene*		**2.7**	**4.4**	**25**	**5.9**	**4.9**	**8.3**
Trans-1,2-Dichloroethene		0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
Trichloroethylene (TCE)*		0.2 U	**44**	0.2 U	0.2 U	0.2 U	**24**
Trichlorofluoromethane		**0.95 J**	**1 J**	**1.1 J**	**1 J**	**1.1**	**1.2**

Notes:

U - constituent not detected

J - concentration estimated

Bold - detected compound

* - Compound listed in Matrices A through F of *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* , NYSDOH, October 2006 (with updates).

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 5/28/1992	Groundwater Elevation (ft) 6/26/1992	Groundwater Elevation (ft) 8/7/1992	Groundwater Elevation (ft) 9/26/1994	Groundwater Elevation (ft) 9/27/1994	Groundwater Elevation (ft) 10/18/1994	Groundwater Elevation (ft) 11/2/1994	Groundwater Elevation (ft) 11/17/1994	Groundwater Elevation (ft) 11/30/1994	Groundwater Elevation (ft) 12/15/1994
MW-01	1104843.44	976192.32	549.76	549.95	547.87	DRY	DRY	528.34	---	---	DRY	---	---	---	---
MW-02	1105426.57	975984.05	543.33	543.53	540.63	531.86	531.46	532.97	531.75	531.93	528.77	---	---	---	---
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	509.34	512.39	509.85	508.5	508.54	508.08	---	---	---	---
MW-06	1105794.17	976433.99	528.08	528.18	526.63	509.2	509.19	509.16	508.21	508.22	507.75	---	---	---	---
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	503.18	503.14	503.06	502.49	502.56	502.14	---	---	---	---
MW-08	1105629.6	976047.85	540.47	540.6	538.17	515.07	515.07	515.52	510.28	510.34	509.68	---	---	---	---
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509.13	509.18	510.5	508.24	508.26	507.75	---	---	---	---
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	510.05	510.89	510.59	---	---	504.92	503.97	504.09	503.84	504.09
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	511.04	512.4	512.36	507.11	507.09	506.17	---	505.38	504.29	505.33
MW-12	1105719.88	976672.75	542.47	542.67	540.78	510.57	509.07	511.1	508.1	508.12	507.64	---	---	---	---
MW-13	1105257.99	976396.06	547.63	547.85	547.68	DRY	529.55	529.85	---	---	527.63	531.85	527.14	527.14	529.85
MW-14	1105284.83	976328.01	547.4	547.64	547.63	521.89	525.85	528.32	---	---	532.96	526.9	527.32	527.32	526.98
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	---	---	---	---	---	502.06	---	---	---	---
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	---	---	---	---	---	510.32	---	---	---	---
MW-17	1105850.8	976233.22	517.79	518.24	515.42	---	---	---	503.16	503.16	502.63	---	---	---	---
MW-18	1105838.93	975914.39	526.94	527.21	525.24	---	---	---	---	---	---	---	---	---	---
MW-19	1105982.23	975936.53	519.96	520.47	518.33	---	---	---	---	---	---	---	---	---	---
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	---	---	---	---	---	---	---	---	---	---
MW-22	1105943.52	975829.97	522.16	522.35	520.3	---	---	---	---	---	---	---	---	---	---
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	---	---	---	---	---	---	---	---	---	---
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	---	---	---	508.25	508.26	507.79	---	---	---	---
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	---	---	---	508.03	508.04	507.57	---	---	---	---
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	---	---	---	505.48	505.49	506.82	---	---	---	---
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	---	---	---	---	---	---	---	---	---	---
SUMP	1105973.54	976003.16	---	518.61	516.68	---	---	---	---	---	---	---	495.51	495.68	495.85

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 12/27/1994	Groundwater Elevation (ft) 1/13/1995	Groundwater Elevation (ft) 1/25/1995	Groundwater Elevation (ft) 2/9/1995	Groundwater Elevation (ft) 2/23/1995	Groundwater Elevation (ft) 3/9/1995	Groundwater Elevation (ft) 4/26/1995	Groundwater Elevation (ft) 7/25/1995	Groundwater Elevation (ft) 10/17/1995	Groundwater Elevation (ft) 2/5/1996
MW-01	1104843.44	976192.32	549.76	549.95	547.87	---	---	---	---	---	---	DRY	DRY	DRY	525.71
MW-02	1105426.57	975984.05	543.33	543.53	540.63	---	---	---	---	---	---	531.93	531.07	532.87	532.69
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	---	---	---	---	---	---	508.97	507.41	---	509.89
MW-06	1105794.17	976433.99	528.08	528.18	526.63	---	---	---	---	---	---	---	507.22	506.8	509.56
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	---	---	---	---	---	---	503.1	501.86	501.3	503.75
MW-08	1105629.6	976047.85	540.47	540.6	538.17	---	---	---	---	---	---	512.1	508.51	509.45	515.3
MW-09	1105573.2	976639.49	552.70	553.05	551.12	---	---	---	---	---	---	508.77	507.23	506.83	509.62
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	503.92	503.84	503.85	503.42	503.26	503.92	506.39	503.5	503.51	510.9
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	505.25	504.33	504.33	504.83	504.33	505.25	507.56	504.42	504.01	511.33
MW-12	1105719.88	976672.75	542.47	542.67	540.78	---	---	---	---	---	---	508.63	507.09	506.68	509.44
MW-13	1105257.99	976396.06	547.63	547.85	547.68	527.27	527.18	526.76	526.77	526.68	526.6	DRY	DRY	DRY	---
MW-14	1105284.83	976328.01	547.4	547.64	547.63	527.32	527.4	527.23	525.73	526.32	526.9	527.39	527.39	527.5	526.69
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	---	---	---	---	---	---	503.3	500.19	499.06	507.83
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	---	---	---	---	---	---	512.51	508.06	506.71	515.79
MW-17	1105850.8	976233.22	517.79	518.24	515.42	---	---	---	---	---	---	507.57	506.26	DRY	508.84
MW-18	1105838.93	975914.39	526.94	527.21	525.24	---	---	---	---	---	---	---	---	---	---
MW-19	1105982.23	975936.53	519.96	520.47	518.33	---	---	---	---	---	---	---	---	---	---
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	---	---	---	---	---	---	---	---	---	---
MW-22	1105943.52	975829.97	522.16	522.35	520.3	---	---	---	---	---	---	---	---	---	---
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	---	---	---	---	---	---	---	---	---	---
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	---	---	---	---	---	---	---	507.27	506.85	509.61
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	---	---	---	---	---	---	508.56	507.05	506.65	509.38
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	---	---	---	---	---	---	507.74	506.2	505.71	508.24
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	---	---	---	---	---	---	---	---	504.68	512.43
SUMP	1105973.54	976003.16	---	518.61	516.68	495.51	495.68	495.68	---	---	---	495.77	495.93	572.45	495.35

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 2/7/1996	Groundwater Elevation (ft) 2/15/1996	Groundwater Elevation (ft) 2/16/1996	Groundwater Elevation (ft) 2/20/1996	Groundwater Elevation (ft) 2/22/1996	Groundwater Elevation (ft) 2/29/1996	Groundwater Elevation (ft) 3/7/1996	Groundwater Elevation (ft) 3/21/1996	Groundwater Elevation (ft) 4/4/1996	Groundwater Elevation (ft) 4/10/1996
MW-01	1104843.44	976192.32	549.76	549.95	547.87	525.29	523.95	DRY	DRY	DRY	524.01	523.82	525.99	DRY	DRY
MW-02	1105426.57	975984.05	543.33	543.53	540.63	532.52	532.06	531.99	531.8	531.97	532.32	532.15	532.89	532.33	532.33
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	---	509.43	509.36	509.13	509.03	508.77	508.36	507.48	506.95	506.77
MW-06	1105794.17	976433.99	528.08	528.18	526.63	509.14	509.11	508.81	508.5	508.45	508.15	507.66	506.72	506.18	505.98
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	503.26	503.62	503.11	503.04	503.17	503.05	502.91	502.88	502.76	502.74
MW-08	1105629.6	976047.85	540.47	540.6	538.17	515.09	514.62	514.53	514.16	514.11	513.81	513.37	513.45	512.79	512.52
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509.37	509.15	509.02	---	---	508.38	507.89	506.97	506.45	506.26
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	508.78	511.01	509.32	508.86	508.81	508.54	508.33	507.97	507.71	507.62
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	509.07	511.37	509.58	509.05	508.99	508.69	508.48	508.08	507.8	507.71
MW-12	1105719.88	976672.75	542.47	542.67	540.78	509.16	508.98	508.83	508.54	508.49	508.19	507.7	506.77	506.26	506.07
MW-13	1105257.99	976396.06	547.63	547.85	547.68	528.91	528.84	528.83	528.81	528.8	528.79	528.7	528.61	528.53	528.5
MW-14	1105284.83	976328.01	547.4	547.64	547.63	---	527.06	527.07	527.13	527.16	527.22	527.23	527.27	527.3	527.33
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	507.96	508.38	508.22	508.15	508.15	508.05	507.99	507.73	507.66	507.63
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	515.82	515.55	515.44	515.22	515.17	515.04	514.82	514.64	514.64	514.55
MW-17	1105850.8	976233.22	517.79	518.24	515.42	508.72	508.3	508.25	508.07	508.19	507.97	507.83	507.85	507.82	507.69
MW-18	1105838.93	975914.39	526.94	527.21	525.24	---	---	---	---	---	---	---	---	---	---
MW-19	1105982.23	975936.53	519.96	520.47	518.33	---	---	---	---	---	---	---	---	---	---
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	---	---	---	---	---	---	---	---	---	---
MW-22	1105943.52	975829.97	522.16	522.35	520.3	---	---	---	---	---	---	---	---	---	---
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	---	---	---	---	---	---	---	---	---	---
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	509.3	509.15	508.97	508.68	508.62	508.32	507.83	506.9	506.36	506.16
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	508.98	508.94	508.65	508.34	508.29	508.01	507.51	506.58	506.07	505.87
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	503.64	507.82	503.31	503	502.95	502.65	502.18	501.36	500.84	500.63
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	508.61	512.46	509.3	---	508.6	508.26	508.04	507.58	507.26	507.15
SUMP	1105973.54	976003.16	---	518.61	516.68	495.36	495.32	495.31	495.31	495.98	495.58	495.33	495.55	495.37	495.67

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 4/18/1996	Groundwater Elevation (ft) 5/2/1996	Groundwater Elevation (ft) 6/6/1996	Groundwater Elevation (ft) 7/16/1996	Groundwater Elevation (ft) 9/5/1996	Groundwater Elevation (ft) 10/21/1996	Groundwater Elevation (ft) 11/19/1996	Groundwater Elevation (ft) 1/16/1997	Groundwater Elevation (ft) 2/4/1997	Groundwater Elevation (ft) 4/15/1997
MW-01	1104843.44	976192.32	549.76	549.95	547.87	DRY	526.38	DRY	DRY	DRY	DRY	525.25	523.8	---	524.29
MW-02	1105426.57	975984.05	543.33	543.53	540.63	533.51	534	531.82	531.97	531.22	531.83	532.87	532.21	---	532.46
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	506.83	507.34	509.17	507.61	504.96	504.03	505.12	507.78	---	508.46
MW-06	1105794.17	976433.99	528.08	528.18	526.63	506.11	506.87	508.61	506.83	503.65	502.41	504.31	507.09	---	508.04
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	502.91	503.34	503.61	502.54	501.03	499.81	501.27	502.87	---	503.29
MW-08	1105629.6	976047.85	540.47	540.6	538.17	512.77	514.12	515.76	513.19	507.74	508.25	512.3	513.36	---	513.84
MW-09	1105573.2	976639.49	552.70	553.05	551.12	506.4	507.13	508.85	507.05	504.05	502.91	505.31	507.32	---	508.27
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	507.51	508.62	511.15	508.01	502.78	---	503.85	508.51	---	507.01
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	507.64	509.05	511.38	508.23	503.42	501.58	504.55	508.85	---	507.29
MW-12	1105719.88	976672.75	542.47	542.67	540.78	506.19	506.92	508.66	506.87	503.81	502.63	504.51	507.14	---	508.05
MW-13	1105257.99	976396.06	547.63	547.85	547.68	528.45	528.37	528.21	528.28	528.08	528	529.61	529.42	---	529.26
MW-14	1105284.83	976328.01	547.4	547.64	547.63	524.92	526.07	527.34	527.44	527.37	527.39	---	527.37	---	527.31
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	507.43	508.46	511.21	507.83	503.42	500.17	500.58	507.42	---	508.42
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	514.49	515.67	517.05	514.22	511.96	---	---	514.78	---	515.54
MW-17	1105850.8	976233.22	517.79	518.24	515.42	507.85	508.5	507.77	507.01	506.44	504.51	506.57	507.88	---	508.19
MW-18	1105838.93	975914.39	526.94	527.21	525.24	---	---	521.6	520.97	519.46	519.42	---	521.96	72.78	522.25
MW-19	1105982.23	975936.53	519.96	520.47	518.33	---	---	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	ABANDONED	---	---	---	---	---	---	DRY	50.26	DRY	DRY	DRY	DRY	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	---	---	---	---	---	---	---	---	63.69	512.47
MW-22	1105943.52	975829.97	522.16	522.35	520.3	---	---	---	---	---	---	---	---	63.69	516.74
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	---	---	---	---	---	---	---	---	---	486.29
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	506.29	507.03	---	507	---	502.59	504.52	507.26	---	508.2
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	505.98	506.72	59.77	506.65	503.58	502.21	503.93	506.91	---	507.81
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	500.71	501.29	53.82	500.54	496.65	490.4	495.93	499.34	---	498.9
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	507.04	508.26	62.56	507.77	---	490.65	504.02	---	---	504.32
SUMP	1105973.54	976003.16	---	518.61	516.68	496.57	496.44	495.41	495.46	495.24	495.53	495.45	495.39	----	495.62

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 7/8/1997	Groundwater Elevation (ft) 10/22/1997	Groundwater Elevation (ft) 1/29/1998	Groundwater Elevation (ft) 4/15/1998	Groundwater Elevation (ft) 10/20/1998	Groundwater Elevation (ft) 4/28/1999	Groundwater Elevation (ft) 10/19/1999	Groundwater Elevation (ft) 4/6/2000	Groundwater Elevation (ft) 11/7/2000	Groundwater Elevation (ft) 7/3/2001
MW-01	1104843.44	976192.32	549.76	549.95	547.87	DRY	DRY	DRY	DRY	DRY	DRY	DRY	529.57	DRY	526.11
MW-02	1105426.57	975984.05	543.33	543.53	540.63	---	531.49	532.12	532.17	532.19	532.03	533.09	535.23	---	532.98
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	507.79	506.97	509.49	---	---	508.54	503.98	509.15	508.46	509.55
MW-06	1105794.17	976433.99	528.08	528.18	526.63	507.28	506.67	509.16	509.27	508.39	507.81	502.04	509.06	508.1	504.57
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	501.52	499.22	501.49	502.41	500.35	503.16	500.32	503.46	DRY	501.93
MW-08	1105629.6	976047.85	540.47	540.6	538.17	510.34	507.59	513.67	515.86	508.55	512.9	511.06	515.1	510.14	514.32
MW-09	1105573.2	976639.49	552.70	553.05	551.12	507.43	506.67	509.18	509.23	508.38	508.35	502.92	509.29	508.09	509.18
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	502.34	499.65	504.68	---	500.78	506.87	500.22	506.5	501.63	506.12
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	503.9	501.2	505.45	510.43	502.68	507.06	502.01	508.09	503.36	507.85
MW-12	1105719.88	976672.75	542.47	542.67	540.78	507.25	506.54	509	509.13	508.22	507.86	502.42	509.04	507.95	60.63
MW-13	1105257.99	976396.06	547.63	547.85	547.68	528.77	528.46	527.8	527.6	527.24	527.01	529.68	529.82	529.46	528.88
MW-14	1105284.83	976328.01	547.4	547.64	547.63	527.33	527.36	527.56	527.56	527.42	527.32	527.45	527.38	527.53	526.52
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	505.22	499.07	504.93	510.69	501.17	507.53	499.54	507.4	502.91	507.57
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	513.08	507.1	514.36	516.68	510.49	514.64	508.46	515.57	512.22	514.79
MW-17	1105850.8	976233.22	517.79	518.24	515.42	506.88	DRY	508.25	508.06	506.48	507.31	506.02	508.83	506.88	507.1
MW-18	1105838.93	975914.39	526.94	527.21	525.24	519.99	518.36	522.15	521.94	519.39	521.11	519.43	523.73	520.26	520.74
MW-19	1105982.23	975936.53	519.96	520.47	518.33	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	---	511.66	512.55	512.27	511.96	512.04	511.42	513.15	511.32	511.26
MW-22	1105943.52	975829.97	522.16	522.35	520.3	516.17	514.78	517.33	517.21	516.65	516.87	516.51	517.34	515.24	516.95
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	484.19	480.87	483.53	486.53	482.15	485.34	481.06	485.27	482.55	484.79
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	507.39	506.7	509.19	509.3	508.39	507.99	502.34	509.2	508.13	---
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	507.02	506.33	508.9	509.02	508.14	507.71	501.39	508.85	507.84	---
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	491.94	490.63	491.73	481.2	480.96	503.29	---	499.33	489.48	---
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	492.7	491.52	501.37	508.57	492.96	505.37	---	503.15	491.49	---
SUMP	1105973.54	976003.16	---	518.61	516.68	495.69	495.43	495.57	495.64	495.88	495.94	---	499.17	495.59	496.01

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

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System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

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Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 11/8/2001	Groundwater Elevation (ft) 4/3/2002	Groundwater Elevation (ft) 10/9/2002	Groundwater Elevation (ft) 12/28/2004	Groundwater Elevation (ft) 4/8/2005	Groundwater Elevation (ft) 5/8/2005	Groundwater Elevation (ft) 11/9/2005	Groundwater Elevation (ft) 4/21/2006	Groundwater Elevation (ft) 1/2/2007	Groundwater Elevation (ft) 11/29/2007
MW-01	1104843.44	976192.32	549.76	549.95	547.87	525.52	526.07	549.76	525.35	528.74	528.74	526.92	527.31	525.35	528.68
MW-02	1105426.57	975984.05	543.33	543.53	540.63	532.32	532.93	532.25	532.32	533.66	533.66	532.75	533.79	532.23	534.25
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	508.73	509.43	507.05	509.42	510.39	510.39	509.45	509.51	509.28	510.25
MW-06	1105794.17	976433.99	528.08	528.18	526.63	508.37	509.12	508.54	509.05	510.15	510.15	509.06	519.05	508.98	509.2
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	500.51	53.59	500.93	502.7	503.94	503.94	---	503.18	502.63	501.55
MW-08	1105629.6	976047.85	540.47	540.6	538.17	509.61	512.85	509.42	511.93	516.52	516.52	512.83	513.91	511.93	515.55
MW-09	1105573.2	976639.49	552.70	553.05	551.12	508.35	509.14	508.52	509.03	510.21	510.21	509.07	509.03	509.03	509.22
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	501.5	504.97	503.47	503.76	509.28	509.28	504.66	507.65	506.52	504.91
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	503.43	505.89	503.47	505.24	509.59	509.59	504.75	507.54	506.51	504.42
MW-12	1105719.88	976672.75	542.47	542.67	540.78	59.87	508.97	---	508.87	510	510	508.91	508.87	508.8	509.05
MW-13	1105257.99	976396.06	547.63	547.85	547.68	529.03	527.58	528.55	532.41	528.97	528.97	529.53	528.73	528.37	527.61
MW-14	1105284.83	976328.01	547.4	547.64	547.63	527.55	527.26	529.65	528.5	531.47	531.47	529.55	529.49	529.43	536.02
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	502.11	507.62	502.99	506.37	510.12	510.12	504.46	508.46	507.85	502.94
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	512.23	514.9	512.15	514.29	517.4	517.4	514	514.96	514.77	512.64
MW-17	1105850.8	976233.22	517.79	518.24	515.42	506.57	507.79	506.13	507.46	509.34	509.34	507.46	507.32	507.55	507.01
MW-18	1105838.93	975914.39	526.94	527.21	525.24	520.01	522.4	518.49	521.53	523.26	523.26	520.98	521.19	521.85	521.49
MW-19	1105982.23	975936.53	519.96	520.47	518.33	DRY	DRY	DRY	DRY	---	DRY	DRY	DRY	---	DRY
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	511.31	512.12	510.55	511.27	512.65	512.65	511.35	510.97	511.36	511.85
MW-22	1105943.52	975829.97	522.16	522.35	520.3	516.97	517.53	516.06	512.23	517.47	517.47	517.5	517.12	517.41	517.76
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	481.83	484.26	482.21	485.07	487.9	487.9	484.01	486.3	485.2	483.4
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	508.39	509.14	508.56	509.09	510.17	510.17	509.07	509.06	509.04	509.22
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	508.16	508.86	508.33	508.91	509.96	509.96	508.9	508.87	508.77	509.04
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	485.08	485.13	483.48	---	---	---	---	---	---	---
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	491.6	498.48	492.76	---	---	---	---	---	---	---
SUMP	1105973.54	976003.16	---	518.61	516.68	495.73	495.81	495.62	---	---	---	---	---	---	---

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 5/8/2008	Groundwater Elevation (ft) 11/21/2008	Groundwater Elevation (ft) 4/22/2009	Groundwater Elevation (ft) 11/20/2009	Groundwater Elevation (ft) 4/30/2010	Groundwater Elevation (ft) 11/17/2010	Groundwater Elevation (ft) 5/12/2011	Groundwater Elevation (ft) 11/29/2011	Groundwater Elevation (ft) 5/22/2012	Groundwater Elevation (ft) 11/28/2012
MW-01	1104843.44	976192.32	549.76	549.95	547.87	528.71	528.76	529.34	528.14	529.38	528.52	529.36	524.62	523.72	523.71
MW-02	1105426.57	975984.05	543.33	543.53	540.63	---	---	531.91	531.89	531.78	532.25	NM	532.63	532.01	532.05
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	509.35	508.87	509.49	508.95	509.33	509.25	510.95	509.29	509.17	508.65
MW-06	1105794.17	976433.99	528.08	528.18	526.63	508.98	508.68	509.16	508.73	509.04	508.96	NM	508.96	508.86	508.48
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	501.53	---	504.69	501.47	502.63	501.53	502.43	501.77	501.91	500.83
MW-08	1105629.6	976047.85	540.47	540.6	538.17	515.51	515.57	515.19	510.62	514.63	513.39	NM	511.69	511.13	509.62
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509	509.2	509.16	508.7	509.04	508.94	510.57	508.92	508.86	508.43
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	509.95	501.69	509.23	502.67	507.87	507.67	515.27	504.63	504.31	501.37
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	509.02	501.12	508.1	501.68	506.65	506.54	513.55	503.26	502.9	500.28
MW-12	1105719.88	976672.75	542.47	542.67	540.78	508.83	508.52	509	508.57	508.89	508.77	510.35	508.79	508.71	508.31
MW-13	1105257.99	976396.06	547.63	547.85	547.68	527.16	DRY	DRY	526.95	Dry	Dry	Dry	Dry	Dry	Dry
MW-14	1105284.83	976328.01	547.4	547.64	547.63	529.52	529.37	529.5	529.45	529.4	529.55	528.52	529.48	529.42	529.32
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	510.48	501.44	510.33	503.29	508.99	508.69	511.15	506.47	506.19	500.69
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	516.43	511.68	516.5	512.76	515.42	515.06	523.45	513.48	513.46	509.68
MW-17	1105850.8	976233.22	517.79	518.24	515.42	507.51	506.45	507.91	506.93	507.51	507.44	508.81	507.51	507.47	502.99
MW-18	1105838.93	975914.39	526.94	527.21	525.24	521.35	520.5	521.73	520.56	521.18	521.6	521.91	521.7	521.12	519.48
MW-19	1105982.23	975936.53	519.96	520.47	518.33	DRY	DRY	DRY	DRY	DRY	Dry	Dry	Dry	Dry	Dry
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	511.38	511.38	511.36	511.16	511.04	512.04	511.09	511.58	510.85	509.3
MW-22	1105943.52	975829.97	522.16	522.35	520.3	517.42	517.33	517.26	517.11	517.08	517.7	517.26	517.56	517.12	517.16
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	483.34	483.4	487.72	483.64	486.96	486.66	490.8	485.54	485.98	482.58
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	---	---	---	---	Dry
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	509.01	508.68	509.18	508.72	509.06	508.96	510.54	508.96	508.89	508.48
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	508.8	508.49	508.98	508.54	508.86	508.78	510.29	508.79	508.7	508.3
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	---	---	---	---	---	---	---	---	---	482.14
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	---	---	---	---	---	---	---	---	---	491.96
SUMP	1105973.54	976003.16	---	518.61	516.68	---	---	---	---	---	---	---	---	---	---

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 4/18/2013	Groundwater Elevation (ft) 10/1/2013	Groundwater Elevation (ft) 4/16/2014	Groundwater Elevation (ft) 9/18/2014	Groundwater Elevation (ft) 3/31/2015	Groundwater Elevation (ft) 9/16/2015	Groundwater Elevation (ft) 3/22/2016	Groundwater Elevation (ft) 10/4/2016	Groundwater Elevation (ft) 4/26/2017	Groundwater Elevation (ft) 10/25/2017
MW-01	1104843.44	976192.32	549.76	549.95	547.87	527.08	523.71	525.94	523.72	528.91	523.72	524.94	Dry	526.16	Dry
MW-02	1105426.57	975984.05	543.33	543.53	540.63	533.33	532.01	533.83	531.71	533.83	531.71	532.91	532.03	533.31	531.87
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	509.71	509.01	510.37	508.87	508.85	508.69	509.49	508.33	510.5	508.55
MW-06	1105794.17	976433.99	528.08	528.18	526.63	509.68	508.74	510.05	508.64	508.72	508.58	509.16	508.22	510.04	508.44
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	502.71	501.73	503.41	500.88	501.87	500.83	502.89	500.81	503.69	500.78
MW-08	1105629.6	976047.85	540.47	540.6	538.17	514.29	511.35	517.07	510.01	512.62	510.05	515.13	508.47	518.43	509.23
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509.38	508.72	510.1	508.64	508.68	508.55	509.14	508.16	510.08	508.4
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	507.57	504.29	510.81	503.63	503.15	503.75	508.67	501.67	513.13	502.61
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	506.18	502.80	509.2	502.24	501.85	502.25	507.14	500.36	511.3	501.2
MW-12	1105719.88	976672.75	542.47	542.67	540.78	481.59	508.57	509.89	508.49	508.55	508.42	508.99	508.03	509.91	508.25
MW-13	1105257.99	976396.06	547.63	547.85	547.68	Dry	526.93	528.87	528.23	527.67	527.23	526.97	526.93	DRY	DRY
MW-14	1105284.83	976328.01	547.4	547.64	547.63	529.32	529.6	529.58	529.66	531.58	529.98	529.84	529.48	529.54	529.52
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	508.71	506.24	511.89	504.93	503.65	505.27	509.91	501.13	514.79	502.51
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	515.8	513.4	518.14	512.84	512.85	512.94	516.1	510.15	520.64	511.25
MW-17	1105850.8	976233.22	517.79	518.24	515.42	508.43	506.79	508.91	506.63	507.25	506.55	508.19	Dry	508.49	506.21
MW-18	1105838.93	975914.39	526.94	527.21	525.24	522.92	519.72	523.48	519.42	522.28	518.88	522.24	518.04	522.58	518.56
MW-19	1105982.23	975936.53	519.96	520.47	518.33	Dry	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	Dry
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	511.65	509.64	512.44	509.28	512.16	509.3	511.46	Dry	511.48	Dry
MW-22	1105943.52	975829.97	522.16	522.35	520.3	517.12	515.21	516.86	515.62	517	515.74	516.96	514.4	517.81	517.2
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	487.18	485.44	488.96	484.8	484.7	485.12	487.94	483.1	490.35	484.1
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	Dry	---	---	---	---	---	---	---	---	---
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	509.38	508.76	510.08	508.66	508.72	508.58	509.16	508.19	510.06	508.44
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	509.19	508.56	509.82	508.46	508.52	508.4	508.96	508.02	509.84	508.24
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	483.48	482.98	483.48	483.48	482.53	482.74	482.13	483.92	484.08	483.56
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	503.36	492.65	507.57	492.81	493.43	492.17	504.99	492.57	510.05	493.31
SUMP	1105973.54	976003.16	---	518.61	516.68	---	---	---	---	---	---	---	---	---	---

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

Groundwater elevations shown in the table were updated accordingly

MW-25, MW-26, and MW-27 installed during the SRI (2024)

Table 27
Groundwater Elevation Summary Table
Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 4/24/2018	Groundwater Elevation (ft) 10/4/2018	Groundwater Elevation (ft) 4/11/2019[1]	Groundwater Elevation (ft) 10/22/2019	Groundwater Elevation (ft) 4/15/2020	Groundwater Elevation (ft) 10/22/2020	Groundwater Elevation (ft) 4/20/2021	Groundwater Elevation (ft) 10/21/2021	Groundwater Elevation (ft) 4/28/2022	Groundwater Elevation (ft) 10/27/2022
MW-01	1104843.44	976192.32	549.76	549.95	547.87	524.74	DRY	523.71	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-02	1105426.57	975984.05	543.33	543.53	540.63	532.59	532.97	532.37	533.25	532.35	532.59	532.28	534.01	532.57	531.83
MW-03	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	509.73	508.73	509.31	509.07	509.29	508.55	509	509.73	509.61	508.31
MW-06	1105794.17	976433.99	528.08	528.18	526.63	509.32	508.56	509.06	508.82	509.04	508.48	508.86	509.52	509.26	508.26
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	503.13	501.29	502.93	500.93	501.91	501.33	501.81	502.07	502.17	501.53
MW-08	1105629.6	976047.85	540.47	540.6	538.17	516.61	510.81	513.45	510.57	513.39	509.57	510.85	511.42	515.65	509.13
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509.32	508.52	509.06	508.78	509	508.44	508.84	509.55	509.25	508.22
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	510.65	503.31	507.47	504.25	507.25	502.91	504.19	506.09	509.51	501.99
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	508.95	501.8	505.98	502.74	505.66	501.42	502.62	503.44	507.86	500.60
MW-12	1105719.88	976672.75	542.47	542.67	540.78	509.15	508.37	508.89	508.63	508.85	508.31	508.67	509.37	509.07	508.09
MW-13	1105257.99	976396.06	547.63	547.85	547.68	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-14	1105284.83	976328.01	547.4	547.64	547.63	529.34	529.56	529.96	529.48	529.16	529.4	528.96	529.35	529.4	529.34
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	512.19	503.37	509.27	505.07	509.09	503.14	505.33	507.51	510.99	501.43
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	517.78	512.24	515.22	512.86	514.94	511.9	513.42	514.95	516.7	510.38
MW-17	1105850.8	976233.22	517.79	518.24	515.42	507.89	506.33	507.51	506.39	507.47	506.19	507.39	507.34	507.93	503.87
MW-18	1105838.93	975914.39	526.94	527.21	525.24	522.14	519.34	521.86	519.96	521.74	518.62	521.48	521.7	521.96	518.52
MW-19	1105982.23	975936.53	519.96	520.47	518.33	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	496.32	DRY
MW-20	ABANDONED	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	511.24	DRY	511.3	DRY	517.28	DRY	510.78	511.56	510.64	DRY
MW-22	1105943.52	975829.97	522.16	522.35	520.3	518.1	517.8	518.56	518.16	518.51	517.56	518.9	518.7	518.46	514.36
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	489.06	484.36	487.9	484.18	488	484.6	485.8	486.36	489.1	483.72
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	---	---	---	DRY	---	DRY	---	DRY
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	---	---	---	---	---	---	---	---
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	---	---	---	---	---	---	---	---
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	---	---	---	---	---	---	---	---
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	509.34	508.56	509.08	508.82	509.04	508.46	508.86	509.54	509.26	508.24
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	509.06	508.36	508.86	508.6	508.82	508.28	508.66	509.32	509.04	508.06
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	482.94	482.78	481.68	483.33	483.88	482.98	483.56	482.72	481.78	482.88
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	507.21	493.51	501.56	494.06	500.09	493.77	494.39	495.16	494	480.62
SUMP	1105973.54	976003.16	---	518.61	516.68	---	---	---	---	---	---	---	---	---	---

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

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System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by

MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

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Former Accurate Die Casting Site
Fayetteville, New York

Well ID	Northing	Easting	PVC Casing Elevation (ft)	Well Casing Elevation (ft)	Ground Elevation (ft)	Groundwater Elevation (ft) 4/19/2023	Groundwater Elevation (ft) 10/24/2023	Groundwater Elevation (ft) 2/20/2024	Groundwater Elevation (ft) 10/22/2024
MW-01	1104843.44	976192.32	549.76	549.95	547.87	DRY	DRY	DRY	DRY
MW-02	1105426.57	975984.05	543.33	543.53	540.63	532.39	532.47	531.86	532.39
MW-03	ABANDONED	---	---	---	---	---	;---	---	---
MW-04	ABANDONED	---	---	---	---	---	---	---	---
MW-05	1105640.93	976420.81	539.05	539.34	536.76	509.97	508.55	509.39	508.65
MW-06	1105794.17	976433.99	528.08	528.18	526.63	509.63	508.5	509.14	508.56
MW-07 (B)	1105851.91	976654.97	526.93	527.2	524.48	502.33	501.09	DRY	500.89
MW-08	1105629.6	976047.85	540.47	540.6	538.17	515.43	509.57	513.55	510.33
MW-09	1105573.2	976639.49	552.70	553.05	551.12	509.64	508.45	509.15	508.54
MW-10 (B)	1105359.74	976361.79	546.17	547.02	547.08	508.75	503.02	516.54	503.67
MW-11 (B)	1105449.51	976343.75	542.50	542.60	540.73	507.14	501.44	504.81	502.08
MW-12	1105719.88	976672.75	542.47	542.67	540.78	509.47	508.31	508.99	508.39
MW-13	1105257.99	976396.06	547.63	547.85	547.68	DRY	536.69	DRY	DRY
MW-14	1105284.83	976328.01	547.4	547.64	547.63	529	529.2	528.91	529.25
MW-15 (B)	1104982.042	975961.99	547.49	547.7	544.74	510.37	503.21	508.66	503.93
MW-16 (B)	1104918.31	976295.91	549.5	549.72	547.03	516.48	511.74	516	512.38
MW-17	1105850.8	976233.22	517.79	518.24	515.42	508.37	506.47	507.77	506.75
MW-18	1105838.93	975914.39	526.94	527.21	525.24	522.06	518.84	521.37	518.86
MW-19	1105982.23	975936.53	519.96	520.47	518.33	481.81	DRY	496.23	DRY
MW-20	ABANDONED	---	---	---	---	---	---	---	---
MW-21	1105979.68	975940.84	520.6	520.74	518.45	510.96	DRY	510.76	DRY
MW-22	1105943.52	975829.97	522.16	522.35	520.3	518.56	517.71	518.27	515.96
MW-23 (B)	1105618.13	976048.07	540.3	540.61	538.46	488.75	484.78	487.46	483.45
MW-24*	1106025.492	975934.26	519.35	519.72	517.31	---	---	DRY	DRY
MW-25	1106069.06	975743.39	523.22	524.16	520.62	---	---	516.04	510.34
MW-26	1105848.33	975664.91	530.93	531.34	528.16	---	---	523.42	DRY
MW-27	1105169.06	975953.68	542.37	542.8	542.8	---	---	535.07	535.22
PZ-01	1105766.07	976484.56	532.64	532.89	531.15	509.64	508.5	---	508.58
PZ-02	1105798.77	976341.66	531.74	531.86	529.38	509.4	508.3	---	508.38
RW-01**	1105783.51	976425.72	528.88	528.88	526.9	483.72	482.88	---	483.06
RW-02 (B)	1105408.81	976338.07	543.81	543.81	540.25	492.88	481.68	---	492.11
SUMP	1105973.54	976003.16	---	518.61	516.68	---	---	---	---

Notes:

--- Water level not monitored, (B)-Bedrock groundwater monitoring well,

* - Measurement relative to top of well casing. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

System shutdown 02/15/96; System restored 02/20/96.

System start-up 02/06/96; MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97. Monitoring well, recovery well, and sump re-survey on April 2024

** - Groundwater elevations are representative of combined pumping head of both screened intervals.

Site wells (PVC, well casing, and ground elevations) were re-survey in April 2024 using NAD83 and NAVD88 Datum.

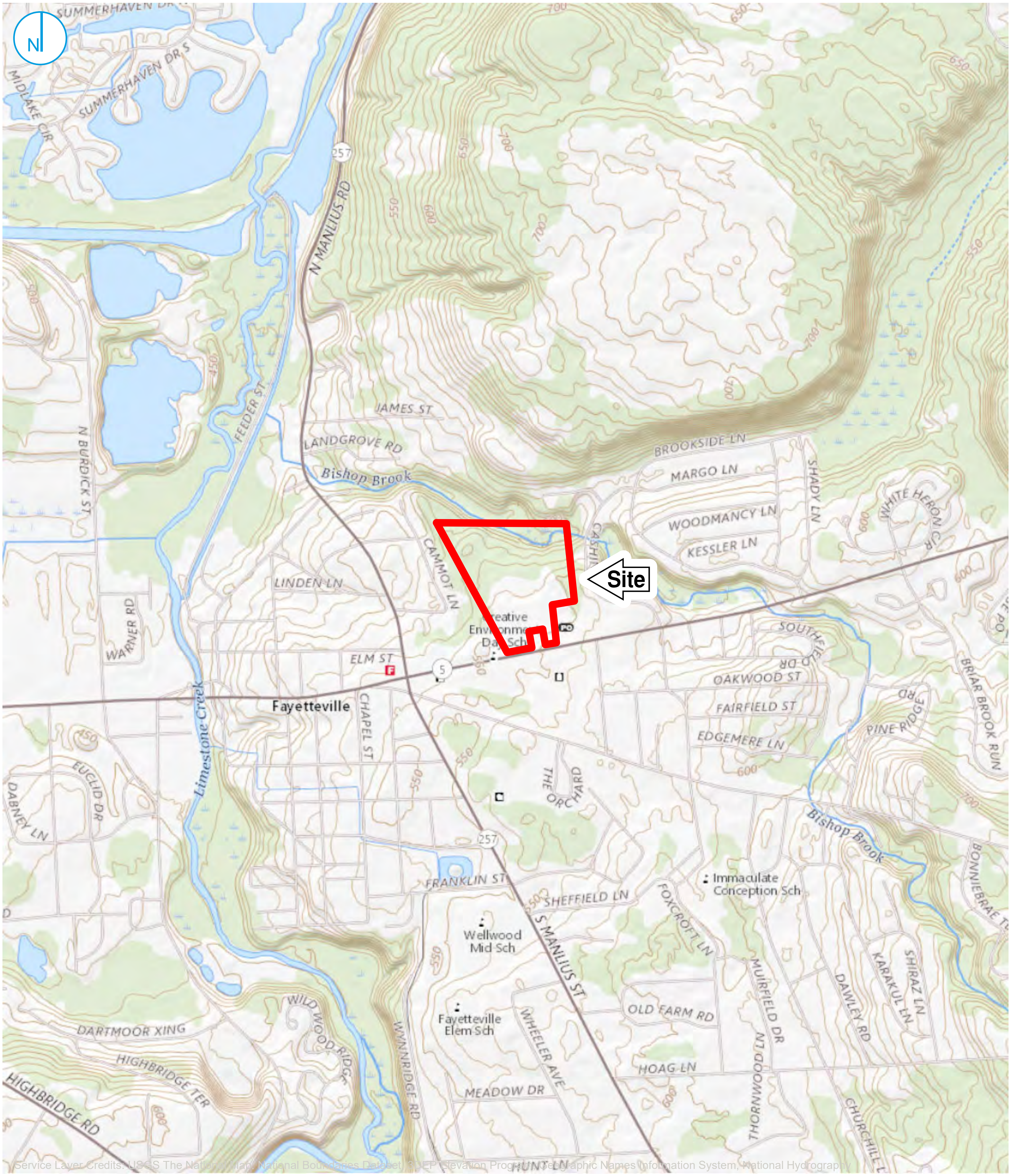
Groundwater elevations shown in the table were updated accordingly

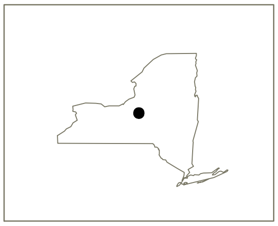
MW-25, MW-26, and MW-27 installed during the SRI (2024)

Figures

C:\Users\newtonjm\Pictures\WorkingFromHome\AccurateDie\RI_60243\MXD\SITE_LOCATION.mxd

PROJECT: 25179.60243 | DATED: 5/11/2020 | DESIGNER: NEWTONJM





KEY MAP

🟥 PROPERTY LINE (*approximate*)

SITE LOCATION

FIGURE 01

Map Scale: 1:1:24,000;
Map Center: 76°0'2"W 43°1'57"N

0 1,000 2,000
Feet

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 25179.60243 | DATED: 3/3/2021 | DESIGNER: NEWTONJM

REMEDIAL AREAS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 02

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

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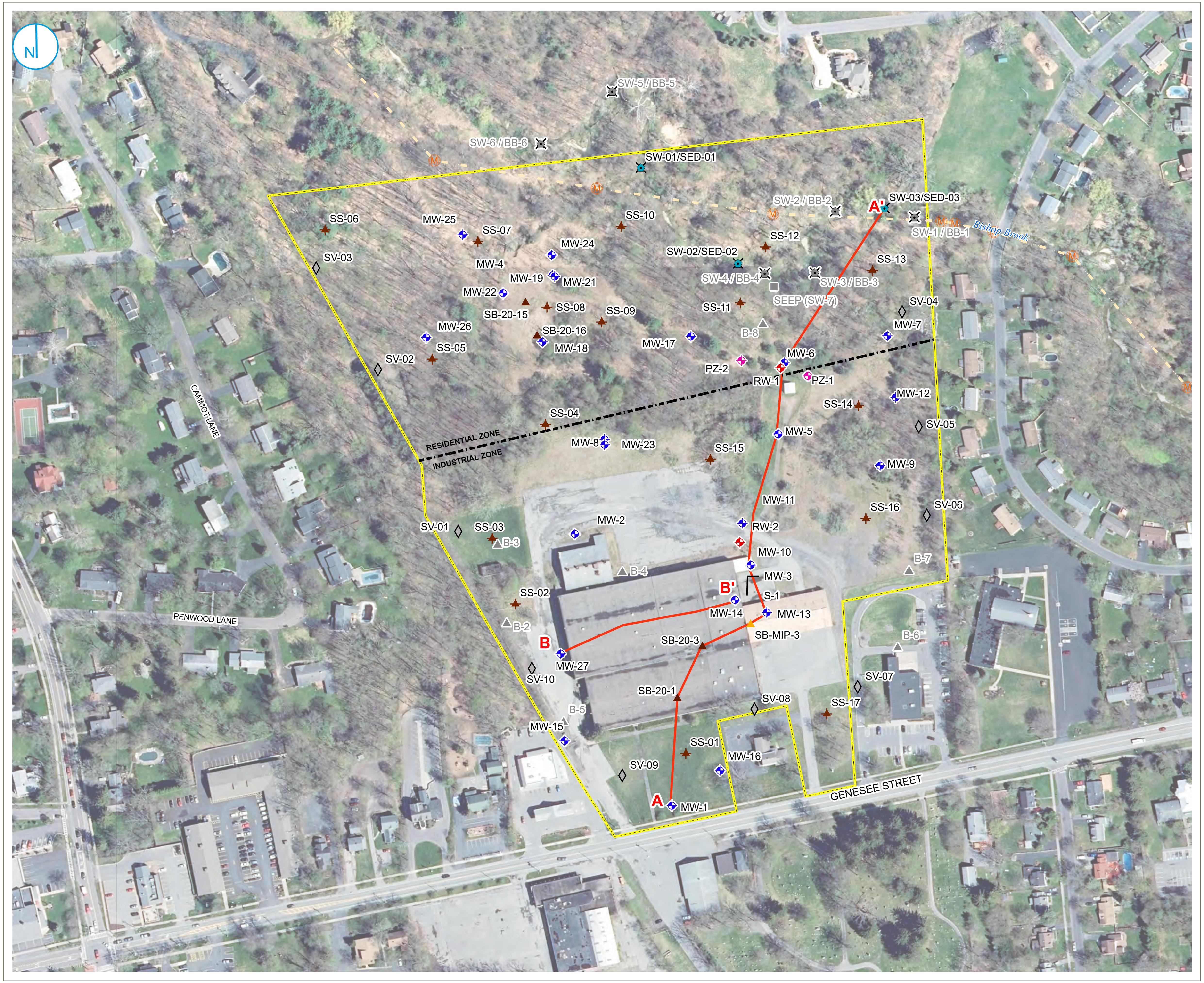

- ◆ MONITORING WELL
- ◆ PIEZOMETER
- ◆ RECOVERY WELL
- ▲ SOIL BORING AND MIP
- ▲ SOIL BORING
- ✦ SURFACE SOIL SAMPLE
- ☒ SURFACE WATER / SEDIMENT SAMPLE
- Ⓜ SEWER LINE MANHOLE (APPROXIMATE)
- ╌ SEWER LINE (APPROXIMATE)
- ━ PROFILE
- ▭ ONONDAGA COUNTY PARCEL BOUNDARY 2014

2006 SOIL VAPOR EVALUTATION (Locations Are Approximate)

- ◇ SOIL VAPOR SAMPLE LOCATION

1993 RI SAMPLING LOCATIONS (Locations Are Approximate)

- △ SOIL BORING
- ☒ SURFACE WATER SAMPLE / SEDIMENT SAMPLE
- ■ APPROXIMATE SEEP SAMPLE LOCATION

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

0 200 Feet

SITE SAMPLE LOCATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
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FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 03

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 25179.60243 | DATED: 3/14/2025 | DESIGNER: CMEES

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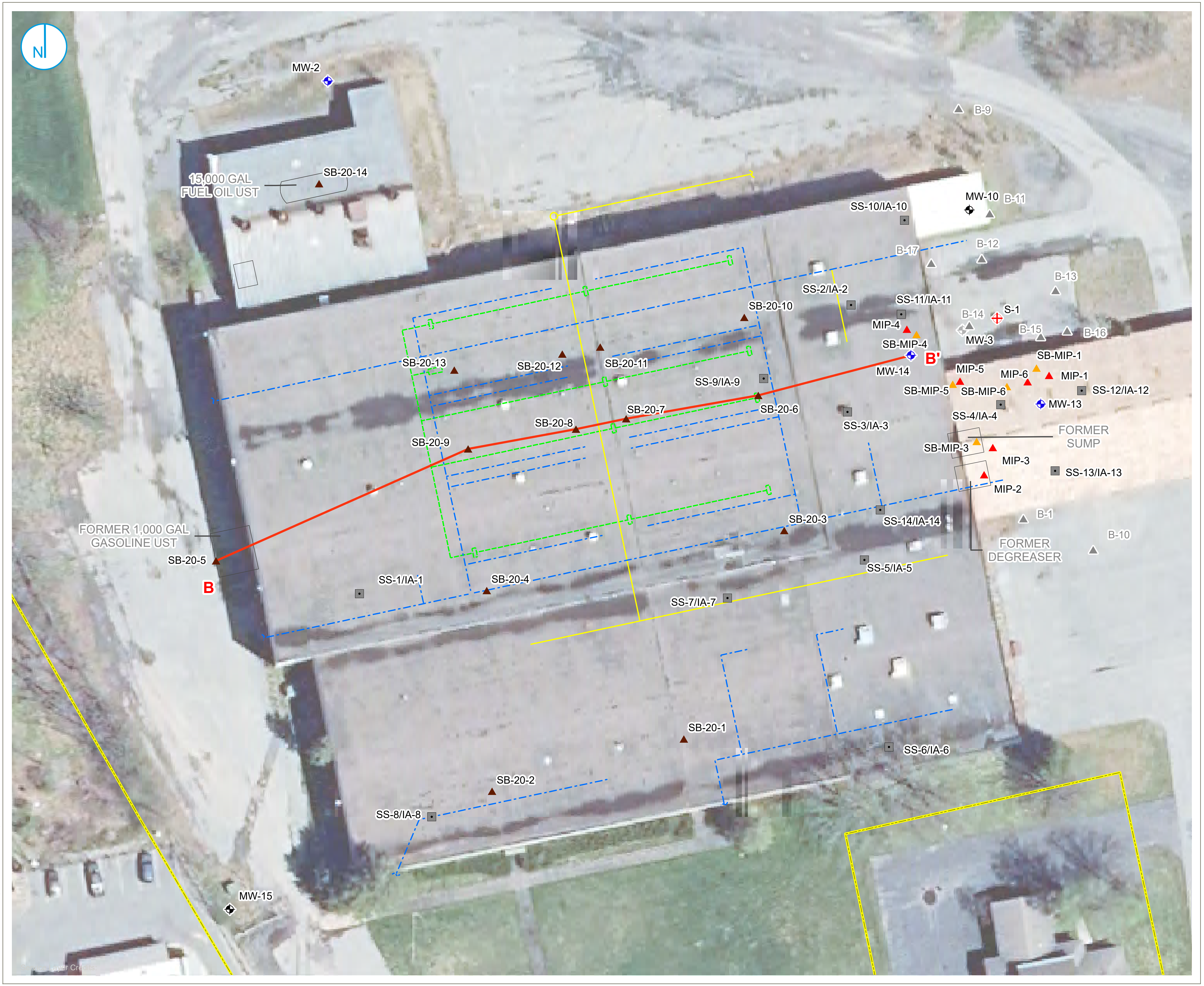

▲ MIP
▲ SOIL BORING AND MIP
▲ SOIL BORING
⊕ ABANDONED OVERBURDEN MONITORING WELL
⊕ BEDROCK MONITORING WELL
⊕ OVERBURDEN MONITORING WELL
⊕ PIEZOMETER
⊕ RECOVERY WELL
Ⓜ SEWER LINE MANHOLE (APPROXIMATE)
— SEWER LINE (APPROXIMATE)
— PROFILE
- - - DIE COOLING & RETURN
— SANITARY SEWER
-·- STORM SEWER
☐ ONONDAGA COUNTY PARCEL BOUNDARY 2014

2006 SOIL VAPOR EVALUTATION (Locations Are Approximate)
▣ SUB-SLAB AND INDOOR AIR SAMPLE

1993 RI SAMPLING LOCATIONS (Locations Are Approximate)
▲ SOIL BORING

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

0 50 Feet

BUILDING AREA SAMPLE LOCATIONS

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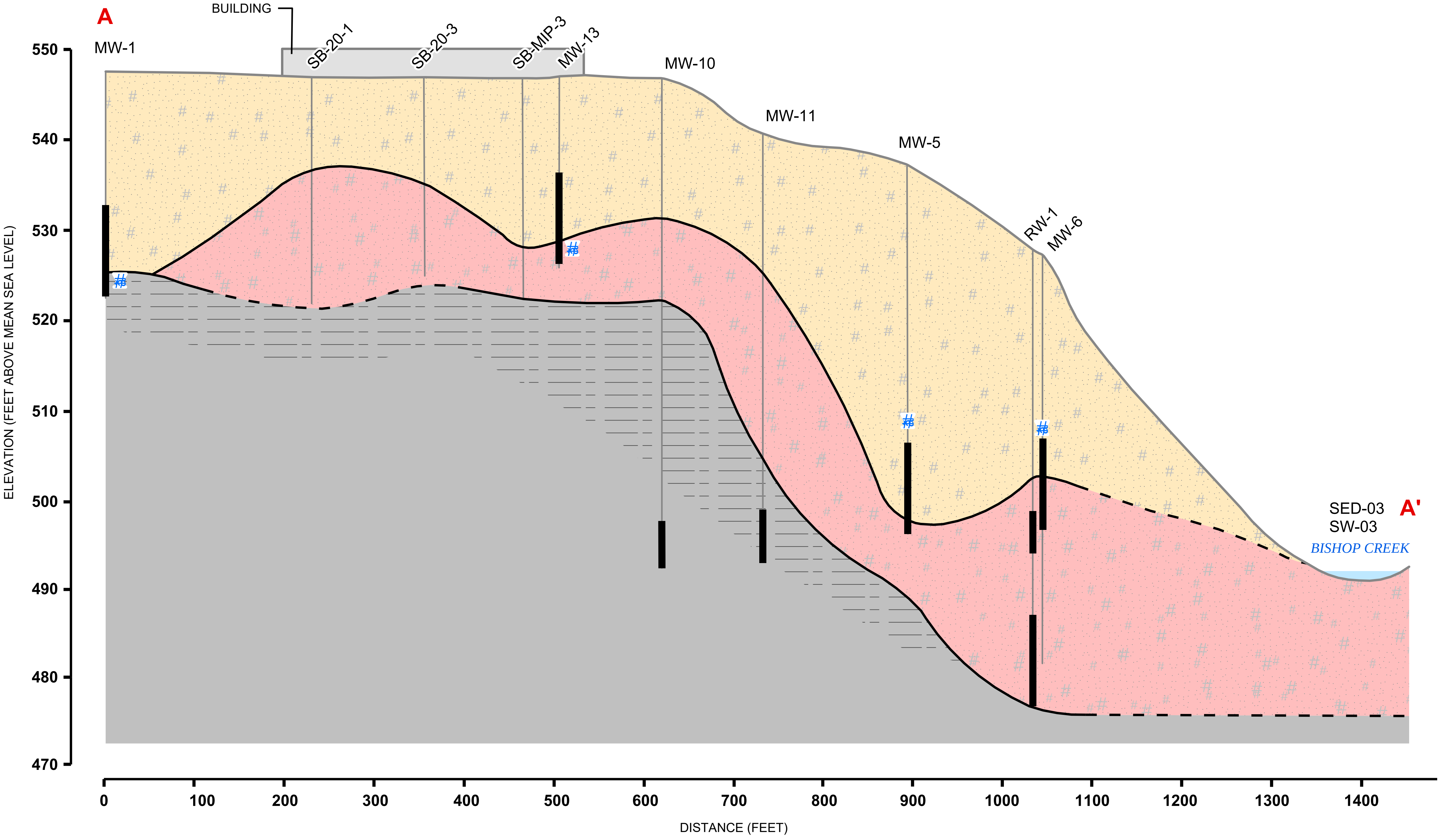
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 04

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 25179.60243 | DATED: 3/1/2021 | DESIGNER: NEWTONJM



🟨 SILT, SAND AND GRAVEL (ABLATION TILL)

🟥 DENSE CLAY, SILT, SAND AND GRAVEL (LODGEMENT TILL)

▨ SHALE AND SHALEY DOLOSTONE (BEDROCK)

▌ SCREEN INTERVAL

DEPTH TO WATER (FT BGS)

Notes
Vertical Exaggeration = 10x

GEOLOGIC PROFILE A-A'

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 05

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

Service Layer Credits:

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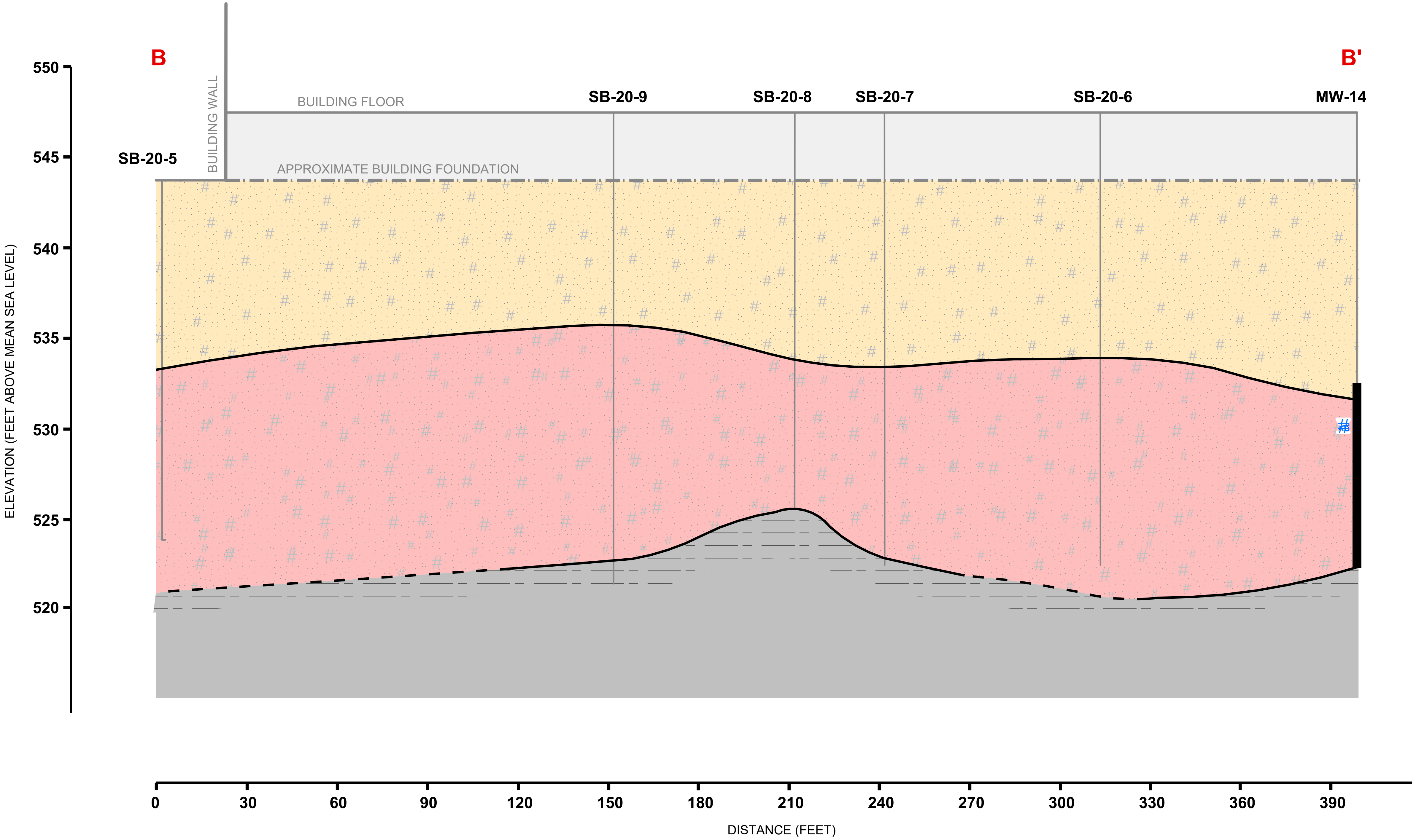


⬜ BUILDING FOUNDATION
🟨 SILT, SAND AND GRAVEL (ABLATION TILL)
🟥 DENSE CLAY, SILT, SAND AND GRAVEL (LODGEMENT TILL)
▨ SHALE AND SHALEY DOLOSTONE (BEDROCK)

▮ SCREEN INTERVAL

DEPTH TO WATER (FT BGS)

Notes
Vertical Exaggeration = 6x

GEOLOGIC PROFILE B-B'

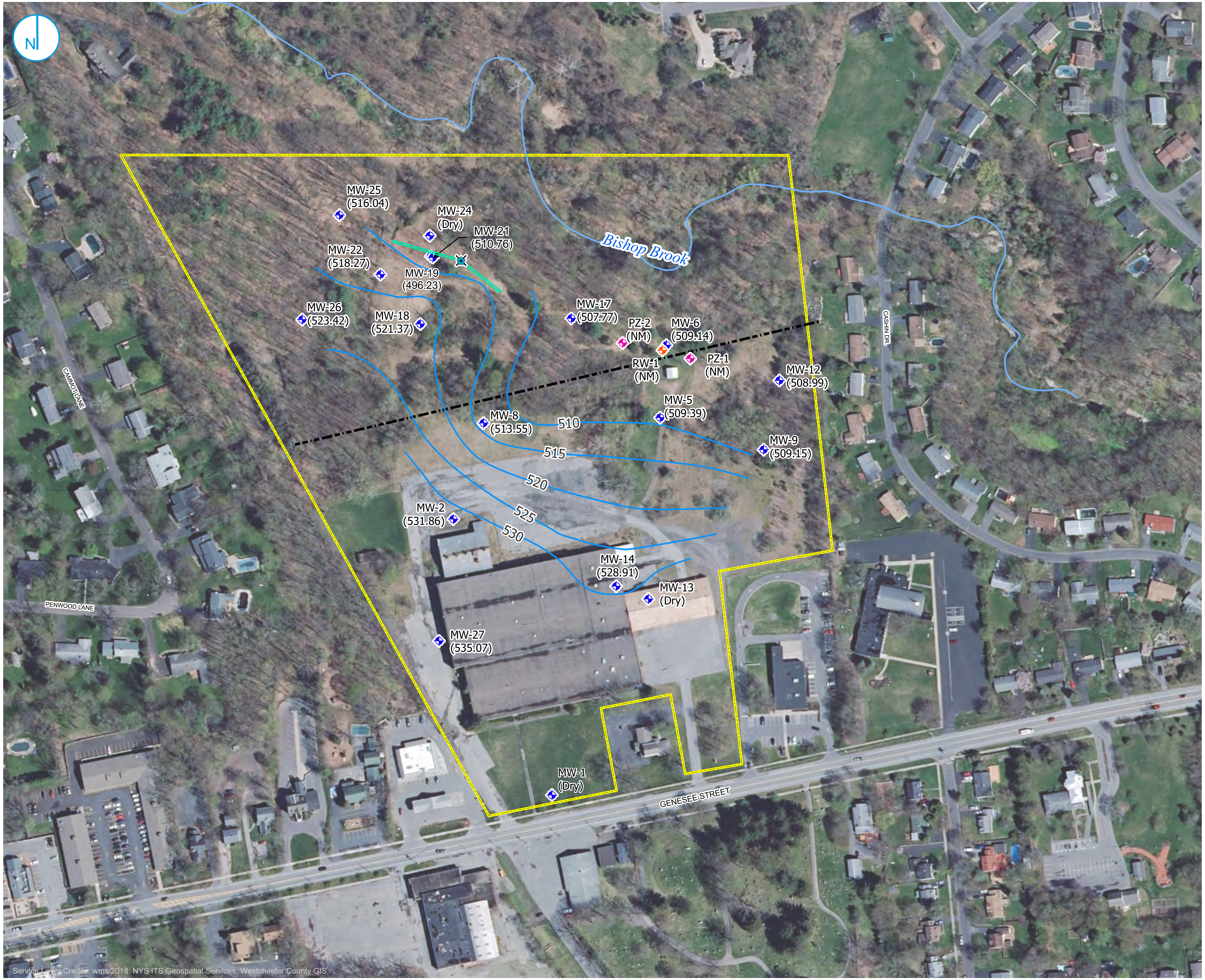
FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 06

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

PROJECT: 25179.60243 | DATED: 3/17/2025 | DESIGNER: NEWTONJM

Service Layer Credits:



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PROJECT: 1940108980 | DATED: 3/14/2025 | DESIGNER: CMEES

— OVERBURDEN CONTOURS

◆ MONITORING WELL

◆ PIEZOMETER

◆ RECOVERY WELL

⊠ GROUNDWATER COLLECTION MANHOLE

▭ GROUNDWATER COLLECTION TRENCH

▭ PROPERTY LINE (approximate)

(508.39) GROUNDWATER ELEVATIONS

510 - GROUNDWATER CONTOUR

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

Contours measured at 5 foot intervals.

NM is Not Measured.

0 100 200
Feet

OVERBURDEN GROUNDWATER ELEVATIONS
(02/24/2024)

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESSEE STREET
FAYETEVILLE, NEW YORK
SITE NO. C734052

FIGURE 07

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

C:\Users\CMEES\OneDrive - Ramboll\Documents\ArcGIS\Projects\Accurate_Die_SRI\Accurate_Die_SRI.aprx

― BEDROCK CONTOURS
◆ MONITORING WELL
◆ RECOVERY WELL
▭ PROPERTY LINE (approximate)

(60.38) GRPUNDWATER ELEVATION (MSL)

60 GROUNDWATER CONTOUR

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

Contours measured at 5 foot intervals.

NM is Not Measured.

0 100 200
Feet

BEDROCK GROUNDWATER ELEVATIONS
(02/24/2024)

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 08

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

PROJECT: 25179.60243 | DATED: 3/10/2025 | DESIGNER: CMEES

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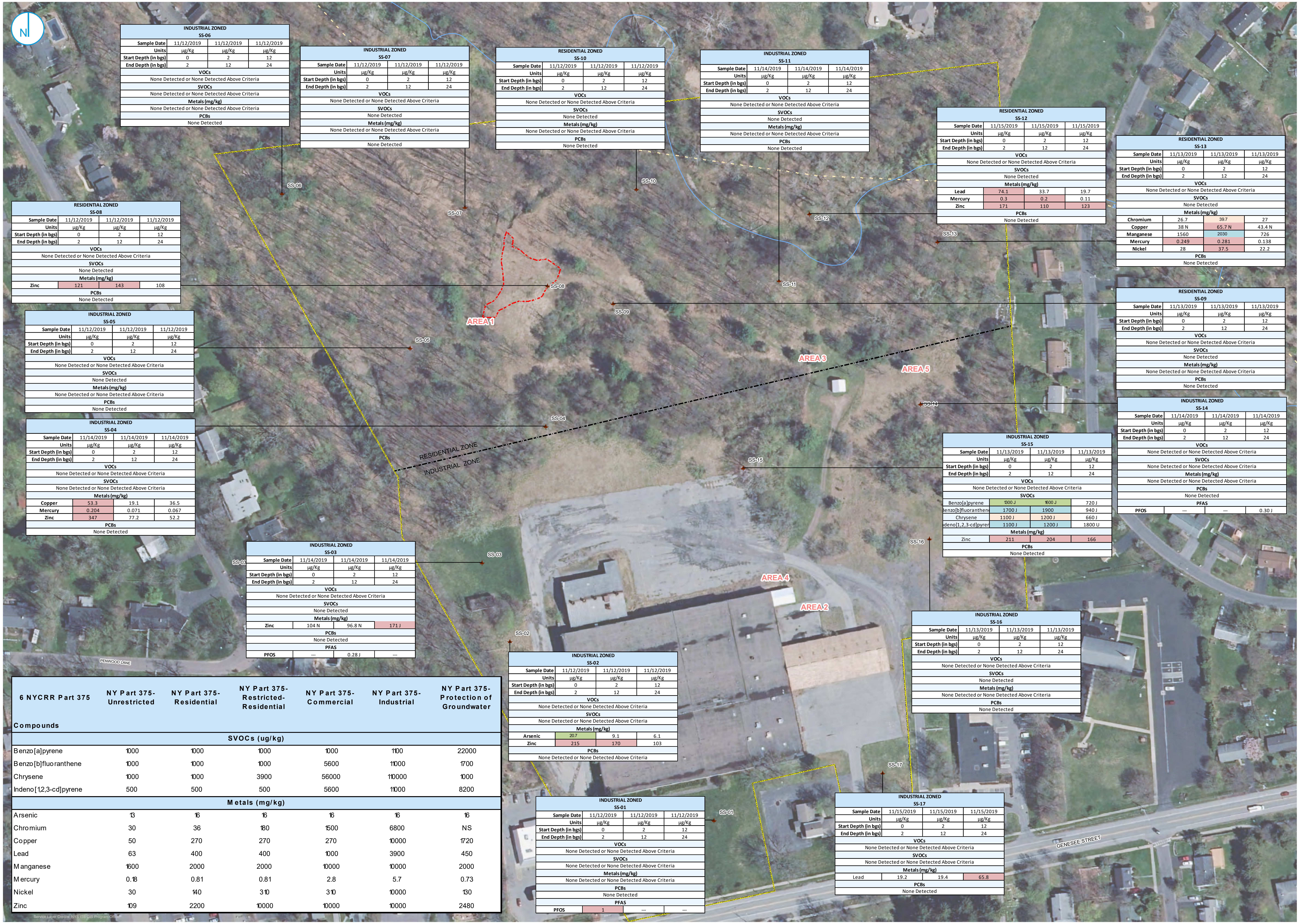


INDUSTRIAL ZONED
SS-06

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-07

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

RESIDENTIAL ZONED
SS-10

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-11

Sample Date	11/14/2019	11/14/2019	11/14/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

RESIDENTIAL ZONED
SS-12

Sample Date	11/15/2019	11/15/2019	11/15/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
Lead	74.1	33.7	19.7
Mercury	0.3	0.2	0.11
Zinc	171	110	123
PCBs			
None Detected			

RESIDENTIAL ZONED
SS-13

Sample Date	11/13/2019	11/13/2019	11/13/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
Chromium	26.7	39.7	27
Copper	38 N	65.7 N	43.4 N
Manganese	1560	2030	726
Mercury	0.249	0.281	0.138
Nickel	28	37.5	22.2
PCBs			
None Detected			

RESIDENTIAL ZONED
SS-08

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
Zinc	121	143	108
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-05

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

RESIDENTIAL ZONED
SS-09

Sample Date	11/13/2019	11/13/2019	11/13/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-04

Sample Date	11/14/2019	11/14/2019	11/14/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
Copper	53.3	19.1	36.5
Mercury	0.204	0.071	0.067
Zinc	347	77.2	52.2
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-14

Sample Date	11/14/2019	11/14/2019	11/14/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			
PFAS			
PFOS	---	---	0.30 J

INDUSTRIAL ZONED
SS-15

Sample Date	11/13/2019	11/13/2019	11/13/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
Benzo[a]pyrene	1300 J	1600 J	720 J
enzo[b]fluoranthene	1700 J	1900	940 J
Chrysene	1100 J	1200 J	660 J
ndeno[1,2,3-cd]pyren	1100 J	1200 J	1800 U
Metals (mg/kg)			
Zinc	211	204	166
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-03

Sample Date	11/14/2019	11/14/2019	11/14/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
Zinc	104 N	96.8 N	171 J
PCBs			
None Detected			
PFAS			
PFOS	---	0.28 J	---

INDUSTRIAL ZONED
SS-16

Sample Date	11/13/2019	11/13/2019	11/13/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			

INDUSTRIAL ZONED
SS-02

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
Arsenic	20.7	9.1	6.1
Zinc	215	170	103
PCBs			
None Detected or None Detected Above Criteria			

6 NYCRR Part 375 Compounds	NY Part 375-Unrestricted	NY Part 375-Residential	NY Part 375-Restricted-Residential	NY Part 375-Commercial	NY Part 375-Industrial	NY Part 375-Protection of Groundwater
SVOCs (ug/kg)						
Benzo[a]pyrene	1000	1000	1000	1000	1100	22000
Benzo[b]fluoranthene	1000	1000	1000	5600	11000	1700
Chrysene	1000	1000	3900	56000	110000	1000
Indeno[1,2,3-cd]pyrene	500	500	500	5600	11000	8200
Metals (mg/kg)						
Arsenic	13	16	16	16	16	16
Chromium	30	36	180	1500	6800	NS
Copper	50	270	270	270	10000	1720
Lead	63	400	400	1000	3900	450
Manganese	1600	2000	2000	10000	10000	2000
Mercury	0.18	0.81	0.81	2.8	5.7	0.73
Nickel	30	140	310	310	10000	130
Zinc	109	2200	10000	10000	10000	2480

INDUSTRIAL ZONED
SS-01

Sample Date	11/12/2019	11/12/2019	11/12/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
None Detected or None Detected Above Criteria			
PCBs			
None Detected			
PFAS			
PFOS	1	---	---

INDUSTRIAL ZONED
SS-17

Sample Date	11/15/2019	11/15/2019	11/15/2019
Units	µg/Kg	µg/Kg	µg/Kg
Start Depth (in bgs)	0	2	12
End Depth (in bgs)	2	12	24
VOCs			
None Detected or None Detected Above Criteria			
SVOCs			
None Detected or None Detected Above Criteria			
Metals (mg/kg)			
Lead	19.2	19.4	65.8
PCBs			
None Detected			

Service Layer Credits: NYS ITS GIS Program Office

PROJECT: 25179.60243 | DATED: 3/3/2021 | DESIGNER: NEWTONJM

✦	SURFACE SOIL SAMPLE
▭	FORMER OIL SPILL AREA (GEOREFERENCED FROM SITE PLAN, JANUARY 1997)
—	SEWER LINE (APPROXIMATE)
▭	ONONDAGA COUNTY PARCEL BOUNDARY 2014

🟥	Exceeds Unrestricted SCO
🟧	Exceeds Unrestricted and Residential SCO
🟦	Exceeds Unrestricted, Residential, and Restricted Residential Use SCO
🟪	Exceeds Unrestricted, Residential, Restricted Residential, and Commercial SCO
🟩	Exceeds Unrestricted, Residential, Restricted Residential, Commercial, and Industrial SCO

Notes
U - Not Detected
J - Estimated Value
D - Concentration is a Result of Dilution
N - Matrix Spike Recovery Outside Laboratory Limits

0 40 80 Feet

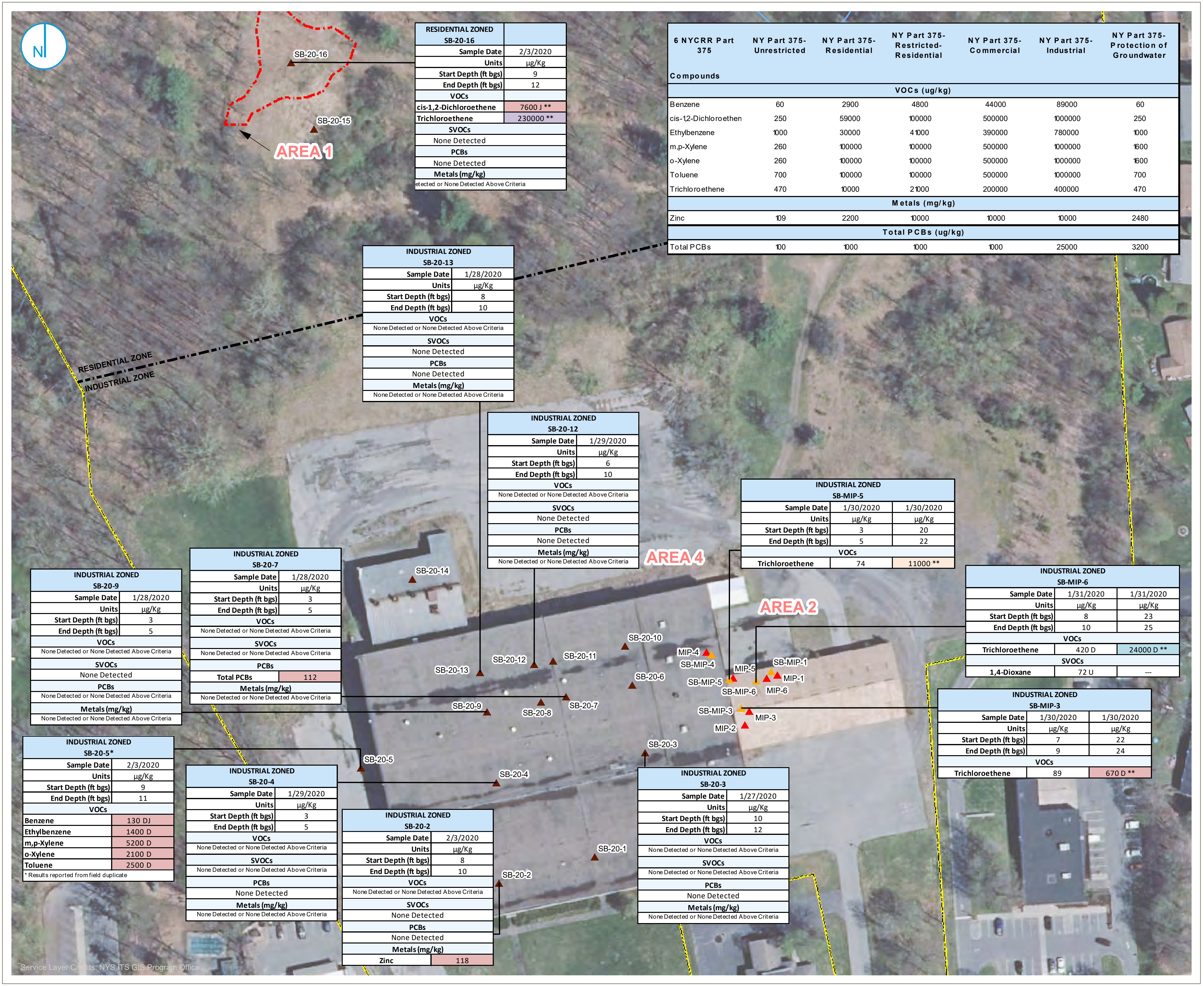
SURFACE AND NEAR SURFACE SOIL EXCEEDANCES

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 09

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL



6 NYCRR Part 375 Compounds	NY Part 375-Unrestricted	NY Part 375-Residential	NY Part 375-Restricted-Residential	NY Part 375-Commercial	NY Part 375-Industrial	NY Part 375-Protection of Groundwater
VOCs (ug/kg)						
Benzene	60	2900	4800	44000	89000	60
cis-1,2-Dichloroethen	250	59000	100000	500000	1000000	250
Ethylbenzene	1000	30000	41000	390000	780000	1000
m,p-Xylene	260	100000	100000	500000	1000000	1600
o-Xylene	260	100000	100000	500000	1000000	1600
Toluene	700	100000	100000	500000	1000000	700
Trichloroethene	470	10000	21000	200000	400000	470
Metals (mg/kg)						
Zinc	109	2200	10000	10000	10000	2480
Total PCBs (ug/kg)						
Total PCBs	100	1000	1000	1000	25000	3200

RESIDENTIAL ZONED SB-20-16	
Sample Date	2/3/2020
Units	µg/Kg
Start Depth (ft bgs)	9
End Depth (ft bgs)	12
VOCs	
cis-1,2-Dichloroethene	7600 J **
Trichloroethene	230000 **
SVOCs	
None Detected	
PCBs	
None Detected	
Metals (mg/kg)	
etected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-20-13	
Sample Date	1/28/2020
Units	µg/Kg
Start Depth (ft bgs)	8
End Depth (ft bgs)	10
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected	
PCBs	
None Detected	
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-20-12	
Sample Date	1/29/2020
Units	µg/Kg
Start Depth (ft bgs)	6
End Depth (ft bgs)	10
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected	
PCBs	
None Detected	
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-20-9	
Sample Date	1/28/2020
Units	µg/Kg
Start Depth (ft bgs)	3
End Depth (ft bgs)	5
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected	
PCBs	
None Detected or None Detected Above Criteria	
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-20-7	
Sample Date	1/28/2020
Units	µg/Kg
Start Depth (ft bgs)	3
End Depth (ft bgs)	5
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected or None Detected Above Criteria	
PCBs	
Total PCBs	112
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-MIP-5		
Sample Date	1/30/2020	1/30/2020
Units	µg/Kg	µg/Kg
Start Depth (ft bgs)	3	20
End Depth (ft bgs)	5	22
VOCs		
Trichloroethene	74	11000 **

INDUSTRIAL ZONED SB-MIP-6		
Sample Date	1/31/2020	1/31/2020
Units	µg/Kg	µg/Kg
Start Depth (ft bgs)	8	23
End Depth (ft bgs)	10	25
VOCs		
Trichloroethene	420 D	24000 D **
SVOCs		
1,4-Dioxane	72 U	---

INDUSTRIAL ZONED SB-MIP-3		
Sample Date	1/30/2020	1/30/2020
Units	µg/Kg	µg/Kg
Start Depth (ft bgs)	7	22
End Depth (ft bgs)	9	24
VOCs		
Trichloroethene	89	670 D **

INDUSTRIAL ZONED SB-20-5*	
Sample Date	2/3/2020
Units	µg/Kg
Start Depth (ft bgs)	9
End Depth (ft bgs)	11
VOCs	
Benzene	130 DJ
Ethylbenzene	1400 D
m,p-Xylene	5200 D
o-Xylene	2100 D
Toluene	2500 D
* Results reported from field duplicate	

INDUSTRIAL ZONED SB-20-4	
Sample Date	1/29/2020
Units	µg/Kg
Start Depth (ft bgs)	3
End Depth (ft bgs)	5
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected or None Detected Above Criteria	
PCBs	
None Detected	
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

INDUSTRIAL ZONED SB-20-2	
Sample Date	2/3/2020
Units	µg/Kg
Start Depth (ft bgs)	8
End Depth (ft bgs)	10
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected	
PCBs	
None Detected	
Metals (mg/kg)	
Zinc	118

INDUSTRIAL ZONED SB-20-3	
Sample Date	1/27/2020
Units	µg/Kg
Start Depth (ft bgs)	10
End Depth (ft bgs)	12
VOCs	
None Detected or None Detected Above Criteria	
SVOCs	
None Detected or None Detected Above Criteria	
PCBs	
None Detected	
Metals (mg/kg)	
None Detected or None Detected Above Criteria	

▲ MIP
▲ SOIL BORING AND
▲ SOIL BORING
SEWER LINE
ONONDAGA COUNTY PARCEL BOUNDARY
FORMER OIL SPILL AREA (GEOREFERENCED FROM SITE PLAN, JANUARY 1997)

🟥 Exceeds Unrestricted SCO
🟧 Exceeds Unrestricted and Residential SCO
🟦 Exceeds Unrestricted, Residential, and Restricted Residential Use SCO
🟪 Exceeds Unrestricted, Residential, Restricted Residential, and Commercial SCO
🟩 Exceeds Unrestricted, Residential, Restricted Residential, Commercial, and Industrial SCO
** - Exceeds Protection of Groundwater SCO

Notes

U - Not Detected
J - Estimated Value
D - Concentration is a Result of Dilution

0 100 Feet

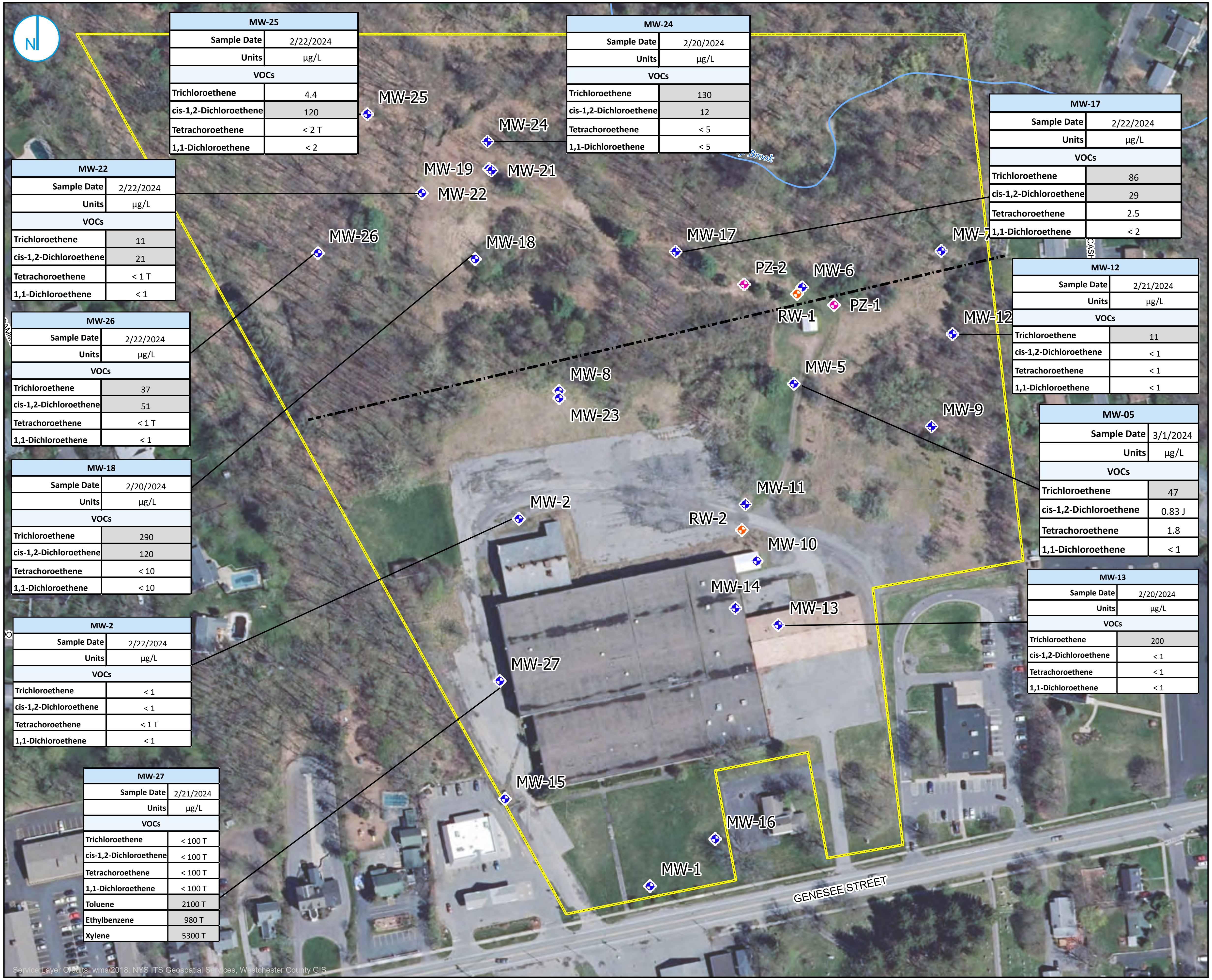
SUBSURFACE SOIL EXCEEDANCES

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 10

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

I:\Foubo-Env.25179\60243.Former-Accurate\Docs\DWG\MXD\RI



MW-25	
Sample Date	2/22/2024
Units	µg/L
VOCs	
Trichloroethene	4.4
cis-1,2-Dichloroethene	120
Tetrachoroethene	< 2 T
1,1-Dichloroethene	< 2

MW-24	
Sample Date	2/20/2024
Units	µg/L
VOCs	
Trichloroethene	130
cis-1,2-Dichloroethene	12
Tetrachoroethene	< 5
1,1-Dichloroethene	< 5

MW-22	
Sample Date	2/22/2024
Units	µg/L
VOCs	
Trichloroethene	11
cis-1,2-Dichloroethene	21
Tetrachoroethene	< 1 T
1,1-Dichloroethene	< 1

MW-26	
Sample Date	2/22/2024
Units	µg/L
VOCs	
Trichloroethene	37
cis-1,2-Dichloroethene	51
Tetrachoroethene	< 1 T
1,1-Dichloroethene	< 1

MW-18	
Sample Date	2/20/2024
Units	µg/L
VOCs	
Trichloroethene	290
cis-1,2-Dichloroethene	120
Tetrachoroethene	< 10
1,1-Dichloroethene	< 10

MW-2	
Sample Date	2/22/2024
Units	µg/L
VOCs	
Trichloroethene	< 1
cis-1,2-Dichloroethene	< 1
Tetrachoroethene	< 1 T
1,1-Dichloroethene	< 1

MW-27	
Sample Date	2/21/2024
Units	µg/L
VOCs	
Trichloroethene	< 100 T
cis-1,2-Dichloroethene	< 100 T
Tetrachoroethene	< 100 T
1,1-Dichloroethene	< 100 T
Toluene	2100 T
Ethylbenzene	980 T
Xylene	5300 T

MW-17	
Sample Date	2/22/2024
Units	µg/L
VOCs	
Trichloroethene	86
cis-1,2-Dichloroethene	29
Tetrachoroethene	2.5
1,1-Dichloroethene	< 2

MW-12	
Sample Date	2/21/2024
Units	µg/L
VOCs	
Trichloroethene	11
cis-1,2-Dichloroethene	< 1
Tetrachoroethene	< 1
1,1-Dichloroethene	< 1

MW-05	
Sample Date	3/1/2024
Units	µg/L
VOCs	
Trichloroethene	47
cis-1,2-Dichloroethene	0.83 J
Tetrachoroethene	1.8
1,1-Dichloroethene	< 1

MW-13	
Sample Date	2/20/2024
Units	µg/L
VOCs	
Trichloroethene	200
cis-1,2-Dichloroethene	< 1
Tetrachoroethene	< 1
1,1-Dichloroethene	< 1

PROJECT: 25179.60243 | DATED: 3/14/2025 | DESIGNER: CMEES

⊕	MONITORING WELL
⊕	PIEZOMETER
⊕	RECOVERY WELL
▭	PROPERTY LINE (approximate)

NYS Class GA Standard	
VOCs (µg/L)	
Trichloroethene	5
cis-1,2-Dichloroethene	5
Tetrachoroethene	5
1,1-Dichloroethene	5
Toluene	5
Ethylbenzene	5
Xylene	5

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

Greyed data boxes indicate VOC concentrations are above Class GA Standard.

COCs - Constituents of Concerns.

J - Estimated value

T - TIC compound

0 75 150 Feet

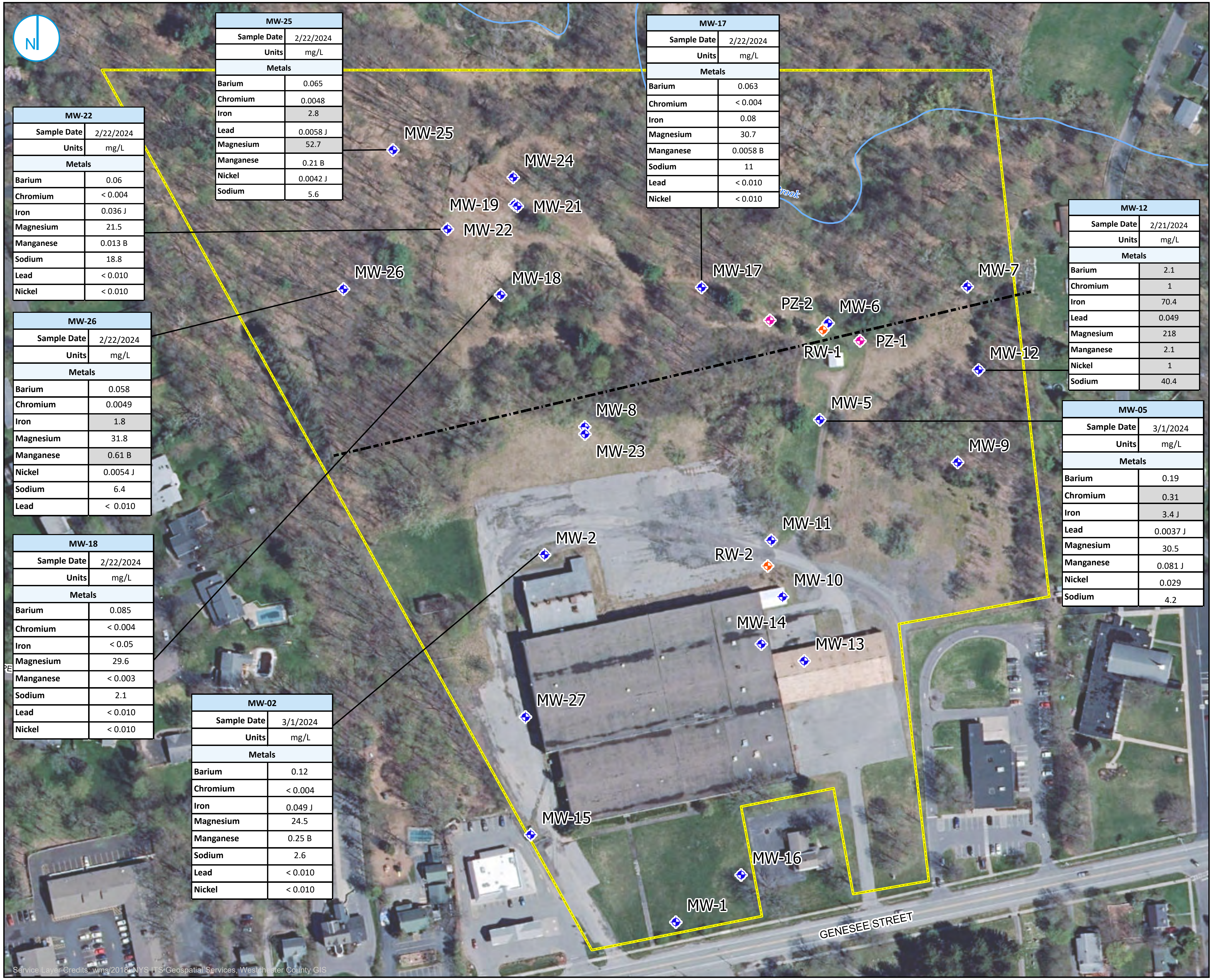
OVERBURDEN GROUNDWATER VOC CONCENTRATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 11

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL



MW-25	
Sample Date	2/22/2024
Units	mg/L
Metals	
Barium	0.065
Chromium	0.0048
Iron	2.8
Lead	0.0058 J
Magnesium	52.7
Manganese	0.21 B
Nickel	0.0042 J
Sodium	5.6

MW-22	
Sample Date	2/22/2024
Units	mg/L
Metals	
Barium	0.06
Chromium	< 0.004
Iron	0.036 J
Magnesium	21.5
Manganese	0.013 B
Sodium	18.8
Lead	< 0.010
Nickel	< 0.010

MW-26	
Sample Date	2/22/2024
Units	mg/L
Metals	
Barium	0.058
Chromium	0.0049
Iron	1.8
Magnesium	31.8
Manganese	0.61 B
Nickel	0.0054 J
Sodium	6.4
Lead	< 0.010

MW-18	
Sample Date	2/22/2024
Units	mg/L
Metals	
Barium	0.085
Chromium	< 0.004
Iron	< 0.05
Magnesium	29.6
Manganese	< 0.003
Sodium	2.1
Lead	< 0.010
Nickel	< 0.010

MW-02	
Sample Date	3/1/2024
Units	mg/L
Metals	
Barium	0.12
Chromium	< 0.004
Iron	0.049 J
Magnesium	24.5
Manganese	0.25 B
Sodium	2.6
Lead	< 0.010
Nickel	< 0.010

MW-17	
Sample Date	2/22/2024
Units	mg/L
Metals	
Barium	0.063
Chromium	< 0.004
Iron	0.08
Magnesium	30.7
Manganese	0.0058 B
Sodium	11
Lead	< 0.010
Nickel	< 0.010

MW-12	
Sample Date	2/21/2024
Units	mg/L
Metals	
Barium	2.1
Chromium	1
Iron	70.4
Lead	0.049
Magnesium	218
Manganese	2.1
Nickel	1
Sodium	40.4

MW-05	
Sample Date	3/1/2024
Units	mg/L
Metals	
Barium	0.19
Chromium	0.31
Iron	3.4 J
Lead	0.0037 J
Magnesium	30.5
Manganese	0.081 J
Nickel	0.029
Sodium	4.2

⌖	MONITORING WELL
⌖	PIEZOMETER
⌖	RECOVERY WELL
▭	PROPERTY LINE (approximate)

NYS Class GA Standard	
Metal (mg/L)	
Barium	1
Chromium	0.05
Iron	0.3
Lead	0.025
Magnesium	35
Manganese	0.3
Nickel	0.1
Sodium	20

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97

Greyed data boxes indicate VOC concentrations are above Class GA Standard.

COCs - Constituents of Concerns

J - Estimated value

< 1 - Not detected

0 75 150 Feet

OVERBURDEN GROUNDWATER METALS CONCENTRATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 12

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 25179.60243 | DATED: 3/4/2025 | DESIGNER: CMEES

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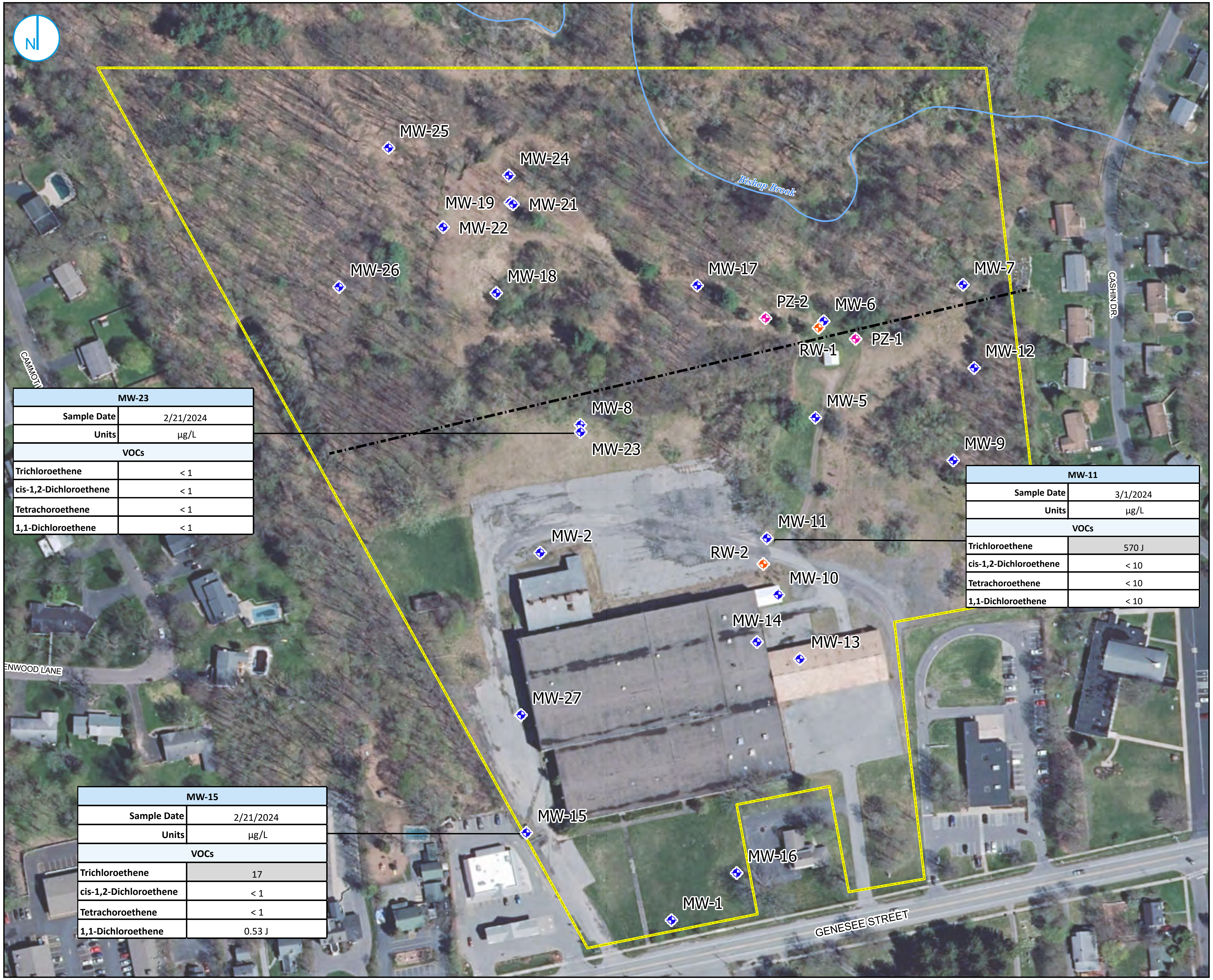

MW-23	
Sample Date	2/21/2024
Units	µg/L
VOCs	
Trichloroethene	< 1
cis-1,2-Dichloroethene	< 1
Tetrachoroethene	< 1
1,1-Dichloroethene	< 1

MW-11	
Sample Date	3/1/2024
Units	µg/L
VOCs	
Trichloroethene	570 J
cis-1,2-Dichloroethene	< 10
Tetrachoroethene	< 10
1,1-Dichloroethene	< 10

MW-15	
Sample Date	2/21/2024
Units	µg/L
VOCs	
Trichloroethene	17
cis-1,2-Dichloroethene	< 1
Tetrachoroethene	< 1
1,1-Dichloroethene	0.53 J

◆	MONITORING WELL
◆	PIEZOMETER
◆	RECOVERY WELL
▭	PROPERTY LINE (approximate)

NYS Class GA Standard	
VOCs (µg/L)	
Trichloroethene	5
cis-1,2-Dichloroethene	5
Tetrachoroethene	5
1,1-Dichloroethene	5

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

Greyed data boxes indicate VOC concentrations are above Class GA Standard.

COCs - Constituents of Concerns.

J - Estimated value

0 75 150 Feet

BEDROCK GROUNDWATER VOC CONCENTRATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 13

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

PROJECT: 25179.60243 | DATED: 3/14/2025 | DESIGNER: CMEES

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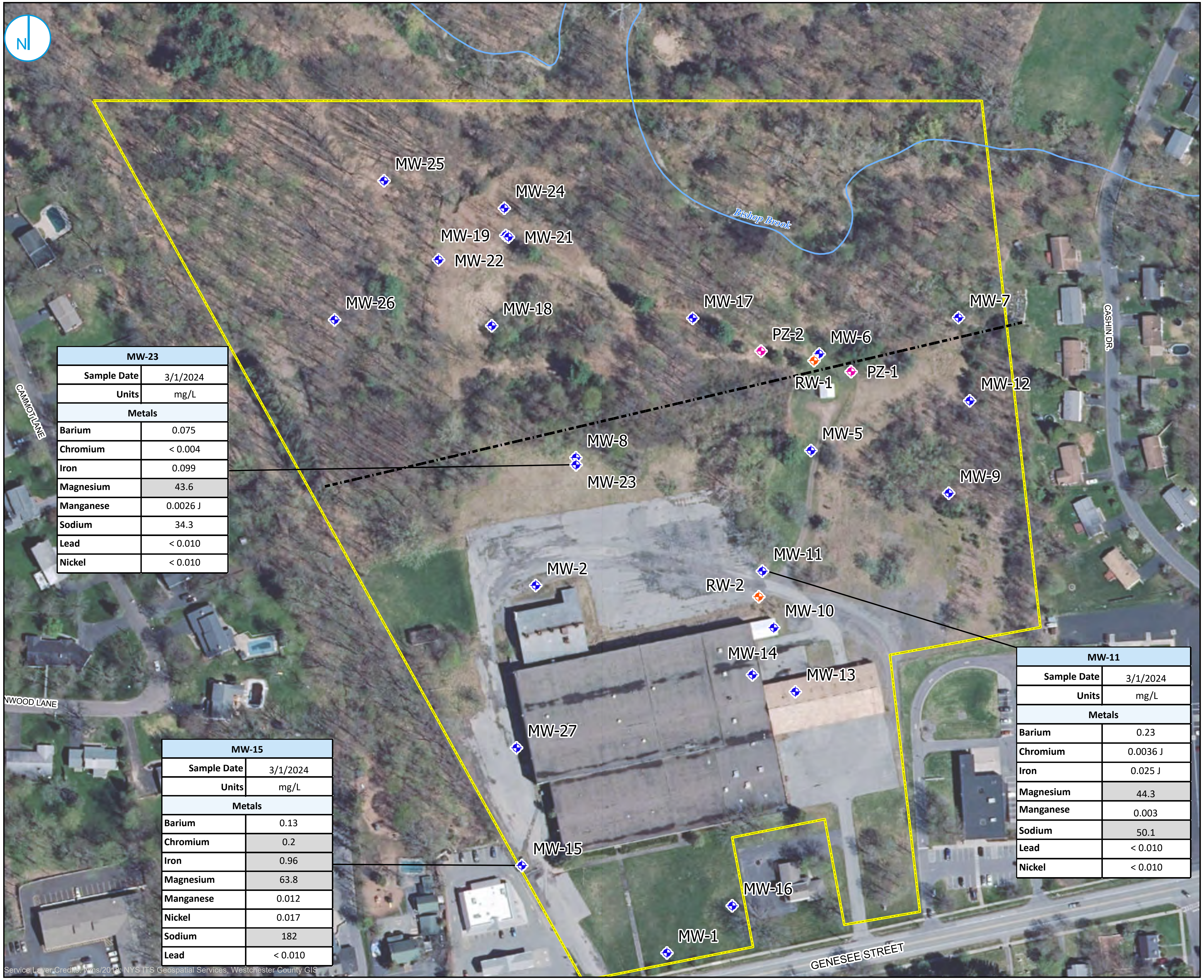

MW-23	
Sample Date	3/1/2024
Units	mg/L
Metals	
Barium	0.075
Chromium	< 0.004
Iron	0.099
Magnesium	43.6
Manganese	0.0026 J
Sodium	34.3
Lead	< 0.010
Nickel	< 0.010

MW-15	
Sample Date	3/1/2024
Units	mg/L
Metals	
Barium	0.13
Chromium	0.2
Iron	0.96
Magnesium	63.8
Manganese	0.012
Nickel	0.017
Sodium	182
Lead	< 0.010

MW-11	
Sample Date	3/1/2024
Units	mg/L
Metals	
Barium	0.23
Chromium	0.0036 J
Iron	0.025 J
Magnesium	44.3
Manganese	0.003
Sodium	50.1
Lead	< 0.010
Nickel	< 0.010

◆ MONITORING WELL
◆ PIEZOMETER
◆ RECOVERY WELL
▭ PROPERTY LINE (approximate)

NYS Class GA Standard	
Metal (mg/L)	
Barium	1
Chromium	0.05
Iron	0.3
Lead	0.025
Magnesium	35
Manganese	0.3
Nickel	0.1
Sodium	20

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

Greyed data boxes indicate VOC concentrations are above Class GA Standards.

COCs - Constituents of Concerns.

J - Estimated value

0 75 150 Feet

BEDROCK GROUNDWATER METALS CONCENTRATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 14

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 25179.60243 | DATED: 3/14/2025 | DESIGNER: CMEES

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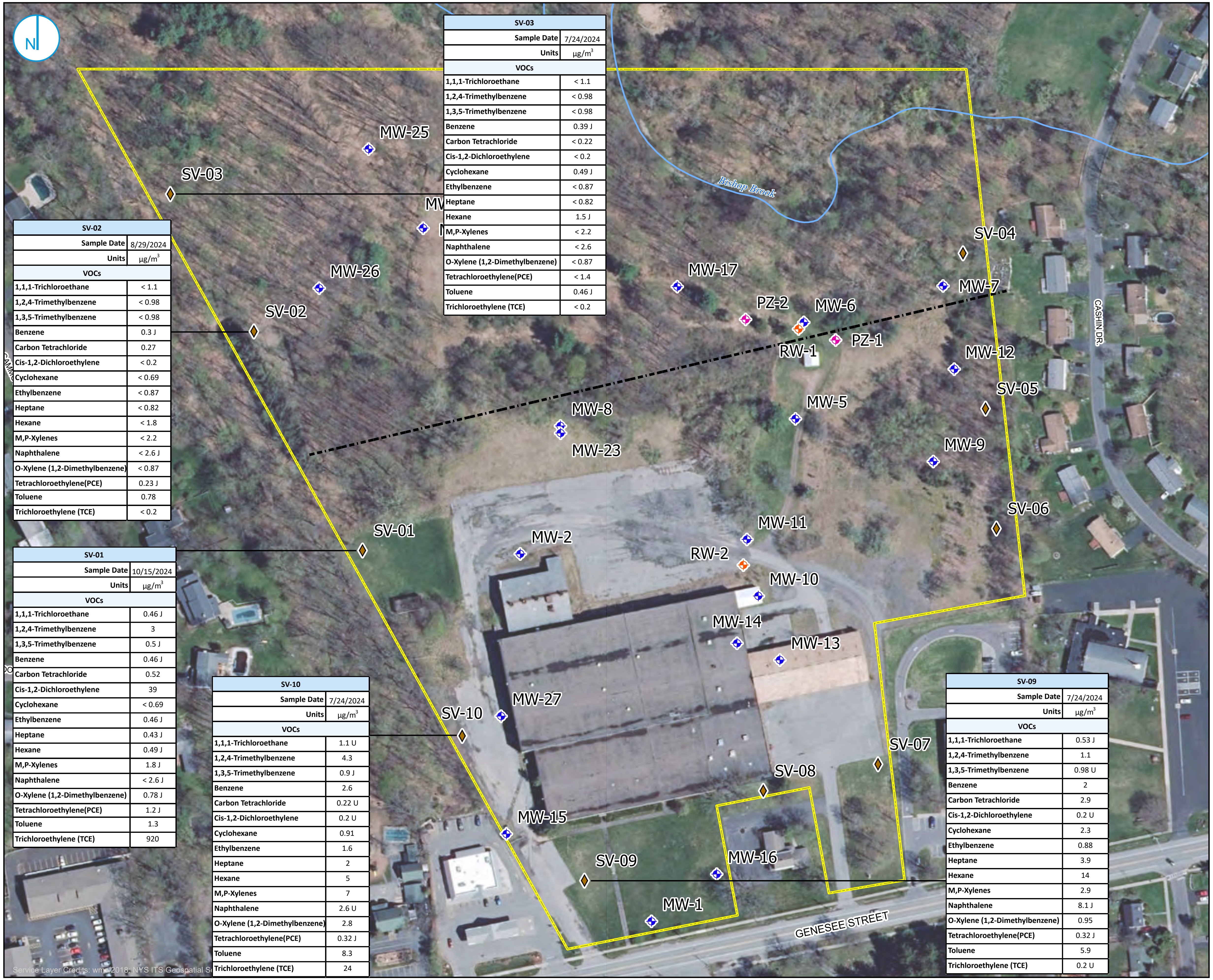


SV-03	
Sample Date	7/24/2024
Units	µg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	< 0.98
1,3,5-Trimethylbenzene	< 0.98
Benzene	0.39 J
Carbon Tetrachloride	< 0.22
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	0.49 J
Ethylbenzene	< 0.87
Heptane	< 0.82
Hexane	1.5 J
M,P-Xylenes	< 2.2
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	< 0.87
Tetrachloroethylene(PCE)	< 1.4
Toluene	0.46 J
Trichloroethylene (TCE)	< 0.2

SV-02	
Sample Date	8/29/2024
Units	µg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	< 0.98
1,3,5-Trimethylbenzene	< 0.98
Benzene	0.3 J
Carbon Tetrachloride	0.27
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	< 0.69
Ethylbenzene	< 0.87
Heptane	< 0.82
Hexane	< 1.8
M,P-Xylenes	< 2.2
Naphthalene	< 2.6 J
O-Xylene (1,2-Dimethylbenzene)	< 0.87
Tetrachloroethylene(PCE)	0.23 J
Toluene	0.78
Trichloroethylene (TCE)	< 0.2

SV-01	
Sample Date	10/15/2024
Units	µg/m³
VOCs	
1,1,1-Trichloroethane	0.46 J
1,2,4-Trimethylbenzene	3
1,3,5-Trimethylbenzene	0.5 J
Benzene	0.46 J
Carbon Tetrachloride	0.52
Cis-1,2-Dichloroethylene	39
Cyclohexane	< 0.69
Ethylbenzene	0.46 J
Heptane	0.43 J
Hexane	0.49 J
M,P-Xylenes	1.8 J
Naphthalene	< 2.6 J
O-Xylene (1,2-Dimethylbenzene)	0.78 J
Tetrachloroethylene(PCE)	1.2 J
Toluene	1.3
Trichloroethylene (TCE)	920

SV-10	
Sample Date	7/24/2024
Units	µg/m³
VOCs	
1,1,1-Trichloroethane	1.1 U
1,2,4-Trimethylbenzene	4.3
1,3,5-Trimethylbenzene	0.9 J
Benzene	2.6
Carbon Tetrachloride	0.22 U
Cis-1,2-Dichloroethylene	0.2 U
Cyclohexane	0.91
Ethylbenzene	1.6
Heptane	2
Hexane	5
M,P-Xylenes	7
Naphthalene	2.6 U
O-Xylene (1,2-Dimethylbenzene)	2.8
Tetrachloroethylene(PCE)	0.32 J
Toluene	8.3
Trichloroethylene (TCE)	24

SV-09	
Sample Date	7/24/2024
Units	µg/m³
VOCs	
1,1,1-Trichloroethane	0.53 J
1,2,4-Trimethylbenzene	1.1
1,3,5-Trimethylbenzene	0.98 U
Benzene	2
Carbon Tetrachloride	2.9
Cis-1,2-Dichloroethylene	0.2 U
Cyclohexane	2.3
Ethylbenzene	0.88
Heptane	3.9
Hexane	14
M,P-Xylenes	2.9
Naphthalene	8.1 J
O-Xylene (1,2-Dimethylbenzene)	0.95
Tetrachloroethylene(PCE)	0.32 J
Toluene	5.9
Trichloroethylene (TCE)	0.2 U

⌖	MONITORING WELL
⌖	PIEZOMETER
⌖	RECOVERY WELL
◆	SOIL VAPOR SAMPLE
▭	PROPERTY LINE (approximate)

NYSDOH Vapor Intrusion Guidance	
Current target constituents (including Feb 2024 updates)	
Matrix	Constituent
Matrix A	carbon tetrachloride
	1,1-dichloroethene
	cis- 1,2-dichloroethene
	trichloroethene
Matrix B	methylene chloride
	tetrachloroethene
	1,1,1-trichloroethane
Matrix C	vinyl chloride
Matrix D	Benzene
	Ethylbenzene
	Naphthalene
	Cyclohexane
	Isooctane (2,2,4 – Trimethylpentane)
	1,2,4 – Trimethylbenzene
	1,3,5 – Trimethylbenzene
	o - Xylene
Matrix E	*m*, *p* – Xylene
	Heptane
	Hexane
Matrix F	Toluene

0 75 150 Feet

2024 SOIL VAPOR SAMPLE RESULTS - WESTERN PROPERTY LINE

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

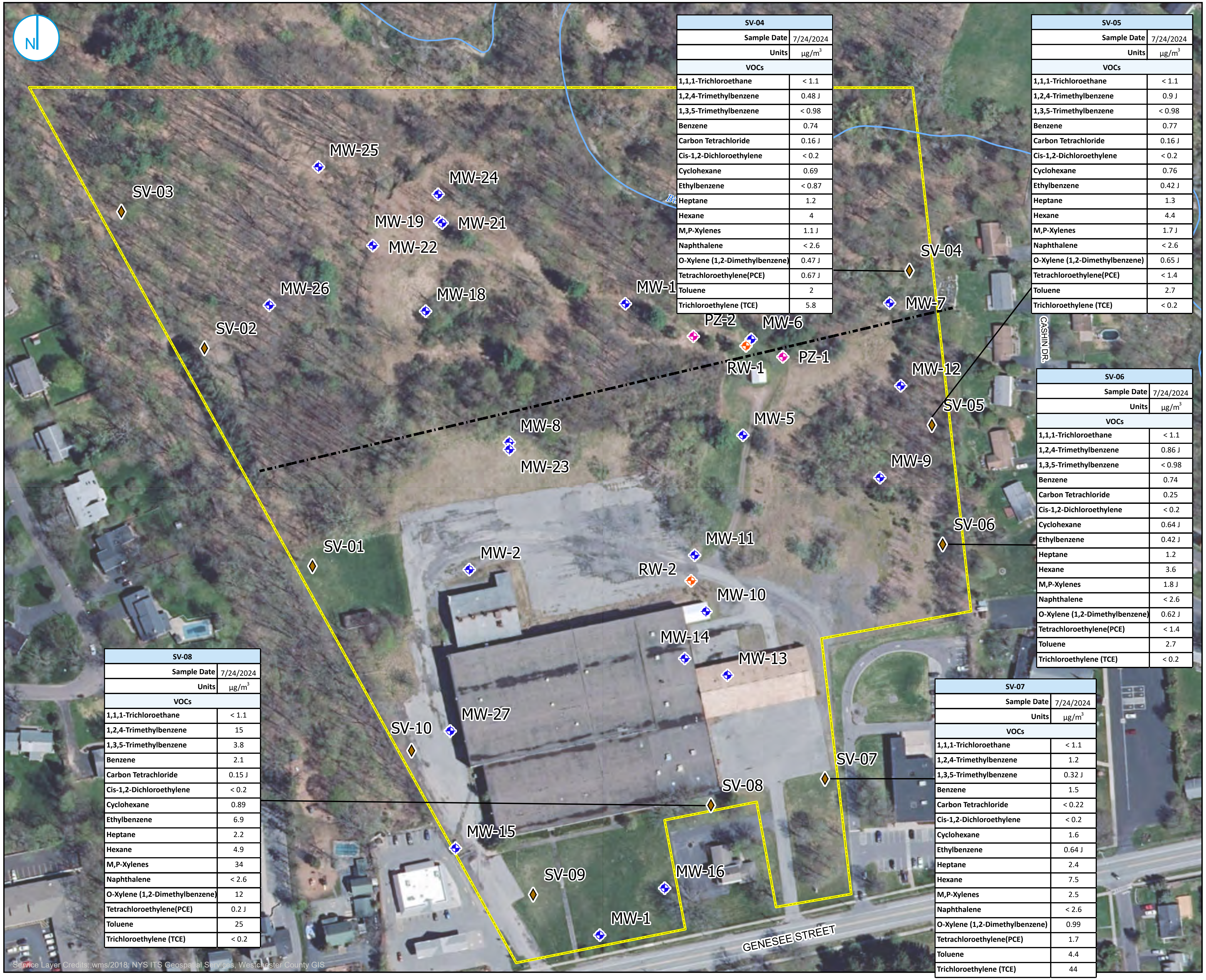
FIGURE 15A

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 25179.60243 | DATED: 3/17/2025 | DESIGNER: CMEES

I:\Foubo-Env.25179\60243.Former-Accurate\Docs\DWG\MXD\RI



SV-04	
Sample Date	7/24/2024
Units	μg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	0.48 J
1,3,5-Trimethylbenzene	< 0.98
Benzene	0.74
Carbon Tetrachloride	0.16 J
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	0.69
Ethylbenzene	< 0.87
Heptane	1.2
Hexane	4
M,P-Xylenes	1.1 J
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	0.47 J
Tetrachloroethylene(PCE)	0.67 J
Toluene	2
Trichloroethylene (TCE)	5.8

SV-05	
Sample Date	7/24/2024
Units	μg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	0.9 J
1,3,5-Trimethylbenzene	< 0.98
Benzene	0.77
Carbon Tetrachloride	0.16 J
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	0.76
Ethylbenzene	0.42 J
Heptane	1.3
Hexane	4.4
M,P-Xylenes	1.7 J
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	0.65 J
Tetrachloroethylene(PCE)	< 1.4
Toluene	2.7
Trichloroethylene (TCE)	< 0.2

SV-06	
Sample Date	7/24/2024
Units	μg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	0.86 J
1,3,5-Trimethylbenzene	< 0.98
Benzene	0.74
Carbon Tetrachloride	0.25
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	0.64 J
Ethylbenzene	0.42 J
Heptane	1.2
Hexane	3.6
M,P-Xylenes	1.8 J
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	0.62 J
Tetrachloroethylene(PCE)	< 1.4
Toluene	2.7
Trichloroethylene (TCE)	< 0.2

SV-08	
Sample Date	7/24/2024
Units	μg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	15
1,3,5-Trimethylbenzene	3.8
Benzene	2.1
Carbon Tetrachloride	0.15 J
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	0.89
Ethylbenzene	6.9
Heptane	2.2
Hexane	4.9
M,P-Xylenes	34
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	12
Tetrachloroethylene(PCE)	0.2 J
Toluene	25
Trichloroethylene (TCE)	< 0.2

SV-07	
Sample Date	7/24/2024
Units	μg/m³
VOCs	
1,1,1-Trichloroethane	< 1.1
1,2,4-Trimethylbenzene	1.2
1,3,5-Trimethylbenzene	0.32 J
Benzene	1.5
Carbon Tetrachloride	< 0.22
Cis-1,2-Dichloroethylene	< 0.2
Cyclohexane	1.6
Ethylbenzene	0.64 J
Heptane	2.4
Hexane	7.5
M,P-Xylenes	2.5
Naphthalene	< 2.6
O-Xylene (1,2-Dimethylbenzene)	0.99
Tetrachloroethylene(PCE)	1.7
Toluene	4.4
Trichloroethylene (TCE)	44

⯐	MONITORING WELL
⯐	PIEZOMETER
⯐	RECOVERY WELL
◆	SOIL VAPOR SAMPLE
▭	PROPERTY LINE (approximate)

NYSDOH Vapor Intrusion Guidance	
Current target constituents (including Feb 2024 updates)	
Matrix	Constituent
Matrix A	carbon tetrachloride
	1,1-dichloroethene
	cis- 1,2-dichloroethene
	trichloroethene
Matrix B	methylene chloride
	tetrachloroethene
	1,1,1-trichloroethane
Matrix C	vinyl chloride
Matrix D	Benzene
	Ethylbenzene
	Naphthalene
	Cyclohexane
	Isooctane (2,2,4 – Trimethylpentane)
	1,2,4 – Trimethylbenzene
	1,3,5 – Trimethylbenzene
	o - Xylene
Matrix E	*m* , *p* – Xylene
	Heptane
	Hexane
Matrix F	Toluene

0 75 150 Feet

2024 SOIL VAPOR SAMPLE RESULTS - EASTERN PROPERTY LINE

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

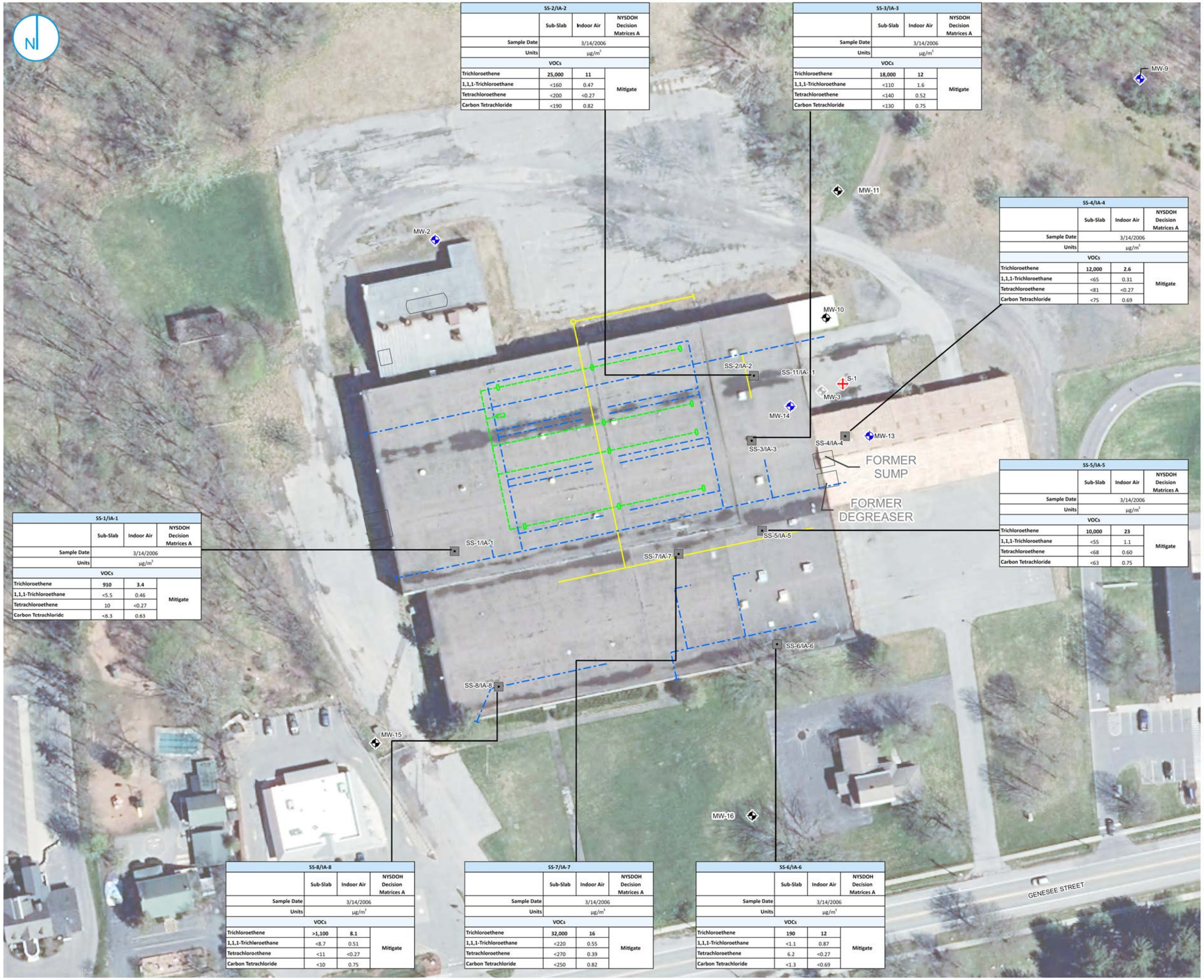
FIGURE 15B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 25179.60243 | DATED: 3/17/2025 | DESIGNER: CMEES

I:\Foubo-Env.25179960243.Former-Accurate\Docs\DWG\MXD\RI



SS-2/IA-2			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**25,000**	**11**	Mitigate
1,1,1-Trichloroethane	<160	0.47	
Tetrachloroethene	<200	<0.27	
Carbon Tetrachloride	<190	0.82	

SS-3/IA-3			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**18,000**	**12**	Mitigate
1,1,1-Trichloroethane	<110	1.6	
Tetrachloroethene	<140	0.52	
Carbon Tetrachloride	<130	0.75	

SS-4/IA-4			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**12,000**	**2.6**	Mitigate
1,1,1-Trichloroethane	<65	0.31	
Tetrachloroethene	<81	<0.27	
Carbon Tetrachloride	<75	0.69	

SS-5/IA-5			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**10,000**	**23**	Mitigate
1,1,1-Trichloroethane	<55	1.1	
Tetrachloroethene	<68	0.60	
Carbon Tetrachloride	<63	0.75	

SS-1/IA-1			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**910**	**3.4**	Mitigate
1,1,1-Trichloroethane	<5.5	0.46	
Tetrachloroethene	10	<0.27	
Carbon Tetrachloride	<6.3	0.63	

SS-8/IA-8			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**>1,100**	**8.1**	Mitigate
1,1,1-Trichloroethane	<8.7	0.51	
Tetrachloroethene	<11	<0.27	
Carbon Tetrachloride	<10	0.75	

SS-7/IA-7			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**32,000**	**16**	Mitigate
1,1,1-Trichloroethane	<220	0.55	
Tetrachloroethene	<270	0.39	
Carbon Tetrachloride	<250	0.82	

SS-6/IA-6			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	µg/m³		
VOCs			
Trichloroethene	**190**	**12**	Mitigate
1,1,1-Trichloroethane	<1.1	0.87	
Tetrachloroethene	6.2	<0.27	
Carbon Tetrachloride	<1.3	<0.69	

PROJECT: 25179.60243 | DATED: 3/20/2025 | DESIGNER: CMEES

⊕	ABANDONED OVERBURDEN MONITORING WELL
⊕	BEDROCK MONITORING WELL
⊕	OVERBURDEN MONITORING WELL
⊕	PIEZOMETER
+	RECOVERY WELL
Ⓜ	SEWER LINE MANHOLE (APPROXIMATE)
- - -	SEWER LINE (APPROXIMATE)
- - -	DIE COOLING & RETURN
—	SANITARY SEWER
-·-	STORM SEWER
▭	ONONDAGA COUNTY PARCEL BOUNDARY 2014

2006 SOIL VAPOR EVALUTATION (Locations Are Approximate)

■	SUB-SLAB AND INDOOR AIR SAMPLE LOCATION

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

0 50 Feet

BUILDING AREA VAPOR INTRUSION SAMPLE RESULTS

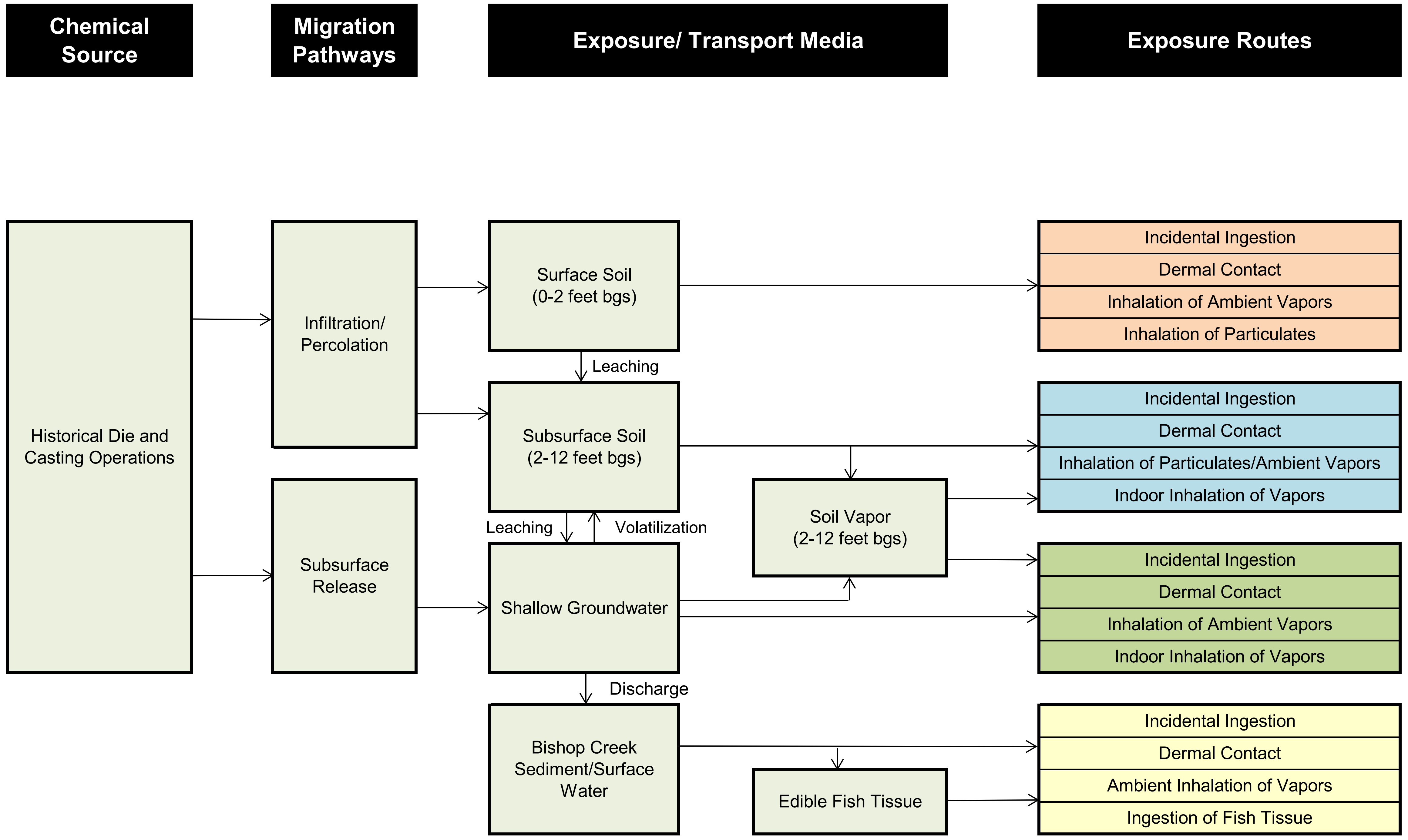
FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 16

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

Figure 17
Human Health Conceptual Site Model
Former Accurate Die Casting Site
Fayetteville, New York



Exposure Routes	Human Receptor Populations					
	On-Site Resident	Off-Site Resident	Utility Worker	Construction Worker	Industrial/Maintenance Worker	Trespasser
	Future	Current/Future	Current / Future	Future	Future	Current / Future
	0 - >18 years old	0 - >18 years old	>18 years old	>18 years old	>18 years old	>12 years old
Incidental Ingestion	●	◊	●	●	●	●
Dermal Contact	●	◊	●	●	●	●
Inhalation of Ambient Vapors	◊	◊	◊	◊	◊	◊
Inhalation of Particulates	●	◊	●	●	●	●
Incidental Ingestion	◊	◊	●	●	◊	◊
Dermal Contact	◊	◊	●	●	◊	◊
Inhalation of Particulates/Ambient Vapors	◊	◊	●	●	◊	◊
Indoor Inhalation of Vapors	●	●	●	●	●	◊
Incidental Ingestion	◊	◊	●	●	◊	◊
Dermal Contact	◊	◊	●	●	◊	◊
Inhalation of Ambient Vapors	◊	◊	●	●	◊	◊
Indoor Inhalation of Vapors	●	●	●	●	●	◊
Incidental Ingestion	◊	◊	◊	◊	◊	●
Dermal Contact	◊	◊	◊	◊	◊	●
Ambient Inhalation of Vapors	◊	◊	◊	◊	◊	◊
Ingestion of Fish Tissue	◊	◊	◊	◊	◊	●

Notes:
- ● : Complete or potentially complete exposure pathway
- ◊ : Incomplete exposure pathway

Appendices

APPENDIX A - SOIL BORING AND WELL LOGS

SURFACE AND NEAR-SURFACE BORING LOG

Surface and Near-Surface Boring Log

Location ID	***Start Depth***	***End Depth***	***Soil Description***	***Sample Intervals Collected***
SS-01	0 inches	24 inches	0-2" bgs: Moderate Yellowish Brown (10YR 4/6) SILT, with traces of sand, organics present, no odor, uniform, damp, coarse texture, no staining	Composite: 0-2 inches (PFAS and 1,4 Dioxane), 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6) SILT, with traces of sand, organics present, no odor, uniform, few pieces of angular gravel, damp, no staining	
			12-24" bgs: Yellowish Brown Color (10YR 4/6) SILT, with traces of sand and clay, no organics, no odor, no staining, some poorly sorted angular gravel, uniform, damp, coarse texture, no staining	
SS-02	0 inches	20 inches	Dark Yellowish Brown (10YR 4/2) SILT, trace clay, some organics, damp, medium fine grains, no staining, well sorted rounded to subrounded gravel	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
SS-03	0 inches	24 inches	0-2" bgs: Moderate Yellowish Brown (10YR 4/6), SILT, organics, gravel (angular, varying sizes), silty, soft texture, uniform/consistent, well sorted, no odor, no staining	Composite: 0-2 inches, 6- 12 inches (PFAS and 1,4 dioxane) 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6) SILT with trace clay, gravel (angular, varying sizes), siltly soft texture, uniform/ consistent, well sorted, no odor, no staining	
			12-24" bgs: Silt, gravel (angular, subrounded and round, varying sizes, poorly sorted), consistant texture, coarse grain sizes, no odor, no staining	
SS-04	0 inches	24 inches	0-2" bgs: Dark Yellowish Brown (10 YR 4/2), coarse silt w/ trace clay,organics, subangular gravel present poorly sorted,damp, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: fine to medium sand, some silt, trace clay, organics present, rounded and angular poorly sorted, gravel, soft, no odor, no staining , damp	
			12-24" bgs: Moderate Yellowish Brown (10 YR 5/4) , Pale Yellowish Orange (10YR 8/6) mottling , medium grainded silt and clay with organics, gravel and cobbles present, firm clay texture, not uniform, poorly sorted, damp, no odor, no staining	
SS-05	0 inches	24 inches	0-2" bgs: Dusky Yellowish Brown (10YR 2/2) SILT, some clay, trace fine sand, roots, consistent, well sorted, damp, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6) CLAY, some silt,trace sand, angular, varying sized gravel,organics (roots), clay like texture,poorly sorted, not uniform , damp, no odor, no staining	
			12-24" bgs: Light Brownish Gray (5YR 6/1), Moderate Yellowish Orange (10R 6/6) CLAY, trace sand, poorly sorted angular gravel, consistent, no odor, no staining	
SS-06	0 inches	24 inches	Moderate Yellowish Brown (10YR 4/6) SILT,clay at .9 inches, trace fine sand, well sorted, damp	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 8 inches, 18 inches
SS-07	0 inches	24 inches	0-12" bgs: Moderate Brown (5YR 3/4), SILT, trace fine sand, organics, damp, fine grained, well sorted, consistent, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6), more gravel, some clay	
			12-24" bgs: Light Brown (5YR 5/6), CLAY, lenses of sand, rounded gravel, poorly sorted, no odor, no staining	
SS-08	0 inches	24 inches	0-2"bgs: Moderate Yellowish Brown (10YR 4/6) CLAY, trace fine sand, some organics, soft, moist, uniform/consistent, well sorted, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 5/6), Dark Yellowish Orange (10YR 6/6) mottling, CLAY, trace fine sand, some organics, well sorted, not uniform, firm, stiff clay like texture, moist to wet, no odor, no staining	
			12-24" bgs: Same as above, plus Light Brownish Gray (5YR 6/1) and Light Red (5R 6/6) mottling	
SS-09	0 inches	24 inches	0-2" bgs: Dark Yellowish Brown (10YR 4/2), SILT, trace fine sand, organics, damp, soft ,consistent and uniform, silty texture, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 5/4) and Dark Yellowish Brown (10YR 3/4), CLAY, some silt, trace fine sand, some organics, damp, consistent, uniform, firm to hard, no odor, no staining	
			12-24"bgs: Moderate Yellowish Brown (10YR 5/4) Pale Yellowish Orange (10YR 8/6), CLAY, some silt, trace fine sand, firm to hard, damp, uniform, no odor, no staining	
SS-10	0 inches	24 inches	0-2" bgs: Dark Yellowish Brown (10YR 3/4), SILT, organics(roots), damp, consistent, well sorted, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12"bgs:Moderate Brown (5YR 3/4) SILT, some clay, gravel (poorly sorted, angular), consistent, clay like texture, damp, no odor, no staining	
			12-24"bgs: Yellowish Brown (10YR 3/4), CLAY, trace fine sand, primarily gravel (angular, well sorted) moist, consistent, no odor, no staining	
SS-11	0 inches	24 inches	0-2" bgs; Moderate Yellowish Brown (10YR 4/6), Silt with a little sand, organics, uniform, coarse texture, well sorted, damp, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6), fine to medium sand with a little silt, organics, coarse texture, uniform,well sorted,damp, no staining, no odor	
			12-24"bgs: Moderate Yellowish Brown (10YR 4/6), Medium Sand, uniform, well sorted,damp, no odor, no staining	
SS-12	0 inches	24 inches	0-2" bgs: Dusky Yellowish Brown (10YR 4/1) Silt, with little clay, organics, coarse texture, well sorted,damp,no staining, no odor	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Brownish Gray Color (5YR 4/1) SILT, with some clay, peat , organics, well sorted, coarse , no odor, no staining	
			12-18" bgs: Silt with some clay	
			18 -24" bgs: Dark Yellowish Brown (10YR 3/4) Clay with traces of silt, organics, coarse texture, well sorted, no staining, no odor	
SS-13	0 inches	24 inches	0-2" bgs: Dark Yellowish Brown (10YR 3/4),SILT and CLAY, organics, moist, uniform, consistent, clay like/soft texture, no staining, no odor, well sorted	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Dusky Yellowish Brown (10YR 2/2) CLAY, organics,uniform, soft,uniform,no odor, no staining	
			12-24" bgs: Moderate Yellowish Brown (10YR 5/4) and Moderate Yellowish Brown (10YR 5/6) CLAY, some sand (fine grain), little gravel, (rounded), uniform and consistent clay/grainy like texture, no staining, no odor	
SS-14	0 inches	24 inches	0-2" bgs: Dark Yellowish Brown (10YR 4/2), SILT, with traces of clay, organics, little amounts of rounded and angular gravel, coarse texture, uniform, no odor	Composite: 0-2 inches, 2-12 inches, 12-24 inches (PFAS and 1,4 Dioxane) Grab: 5 inches, 18 inches
			2-12" bgs: Dark Yellowish Brown (10 YR 4/2) SILT w/ traces of sand present, some rounded and angular gravel,organics, coarse texture, uniform, no odor	
			12-24" bgs: Dark Yellowish Br own (10 YR 4/2) SILT w/ medium sand and traces of clay, some organics, coarse, not uniform, poorly sorted, angular to subangular,damp, no odor, no staining	
SS-15	0 inches	21 inches(refusal)	0-2" bgs: Dark Yellowish Brown (10YR 3/4) SILT, gravel (varying sizes), organics, some asphalt, coarse, consistent, damp to moist	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6) SILT, gravel, coarse texture, traces of clay, rounded and angular gravel, no odor, damp to moist, no staining.	
			12-24" bgs: Dark Yellowish Brown (10 YR 3/4) SILT, gravel (angular, rounded and coarse) some organic material, damp to moist, no odor, no staining, coarse texture and consistent	
SS-16	0 inches	24 inches	0-2" bgs: Moderate Yellowish Brown (10YR 4/6) SILT, gravel (angular and rounded), coarse sand,organics (roots), poorly sorted	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6), SILT, gravel (angular and rounded,varying sizes),coarse sand, organics (roots), poorly sorted	
			12-24" bgs: Moderate Yellowish Brown (10YR 4/6), SILT, coarse gravel mixed angular and rounded	
SS-17	0 inches	24 inches	0-2" bgs: Moderate Yellowish Brown (10YR 4/6), SILT with trace sand, organics, subangular gravel, no odor, no staining	Composite: 0-2 inches, 2-12 inches, 12-24 inches Grab: 5 inches, 18 inches
			2-12" bgs: Moderate Yellowish Brown (10YR 4/6), SILT with trace sand and clay, organics, subangular gravel, no odor, no staining	
			12-24" bgs: Dark Yellowish Brown (10 YR 4/2) Silt with some clay, organics ,subangular gravel, poorly sorted, coarse texture, no staining, no odor	

2019/2020 RI BORING LOGS

OBG Part of Ramboll

SOIL BORING LOG

BORING ID: SB-MIP-1
INSPECTOR:

PROJECT: Accurate Die
CLIENT:
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-MIP-1-8-10, SB-MIP-1-23-25

DATE STARTED: 1/30/20
DATE COMPLETED: 1/30/20
SAMPLE TIME: 0930, 0945

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		Pre cleared w/hand auger			
	0	5	5/3	0-3 ft- Pale Yellowish Brown 10YR 6/2, ~~stiff~~,			0
				loose, dry, Silt w/ little medium			
				angular gravel			
	5	10	5/4	0-4 ft- S.A.A " "			0
	10	15	5/4	0-3 ft - S.A.A " "			0
				3-4 ft-pale Yellowish brown 10YR 6/2, stiff,			
				damp, SILT w/little medium angular			
				gravel		17 ft	
	15	20	5/4	0-4ft-S.A.A " "	till		
				4-5ft- Light Brown 5YA 6/4, stiff, damp,			
				silt w/ some clay, and trace FM sand			0
	20	25	5/3	0-3 ft. - S.A.A			
				Shale Bedrock at 25ft	shale		

NOTES: Refusal at 25 ft

PAGE: 1 of 2

Scanned with CamScanner

OBG Part of Ramboll

SOIL BORING LOG

BORING ID: SB-MIP-3-
INSPECTOR:

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-MIP-7-9, SB-MIP-3-22-24

DATE STARTED: 1/30/20
DATE COMPLETED: 1/30/20
SAMPLE TIME: 16:00 16:15

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger			
	0	5	5/3	0-3ft – Light olive grey 5Y 5/2, loose,	silt		0
				dry, SILT w/ little medium angular gravel			
	5	10	5/3.5	0-3.5ft – S.A.A " "	w/		0
	10	15	5/4	0-4 ft – S.A.A " "	sand		0
	15	20	5/5	0-4 ft – S.A.A " "			
				4-5ft – Light olive grey 5Y 5/2, stiff, damp,			
				SILT w/ little clay FM			
	20	24.5	5/3	0-3ft – S.A.A " "			0
				Bedrock ~ 24.5ft	shale		
					bedrock		

NOTES: Refusal at 24.5 ft
samples pulled at 7-9 ft, and 22-24 ft

PAGE: 1 of 2

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SOIL BORING LOG

BORING ID: SB-MIP-4
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-MIP-4-~~25~~, SB-MIP-4-23-25
DATE STARTED: 1/31/20
DATE COMPLETED: 1/31/20
SAMPLE TIME: 12:45, 12:50

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger	Silt		
	0	5	5/3	0-3ft - Light olive gray 5Y 5/2, loose, damp,	w/		0
				SILT w/ little medium angular gravel	some		
	5	10	5/3	0-3ft - S.A.A.	Sand		0
	10	15	5/3	0-3ft - S.A.A.			0
	15	20	5/5	0-1ft - S.A.A			0
				1-5ft - pale brown 5YR 5/2, SILT w/		17ft	
				little clay and trace FM sand			
	20	25	5/3	0-3ft - S.A.A			0
				Shale Bedrock	Shale	25ft	

NOTES: refusal at 25 ft

PAGE: 1 of 2

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SOIL BORING LOG

BORING ID: SB-MIP-5
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-MIP-5-3-5, SB-MIP-5-3-3

DATE STARTED: 1/30/20
DATE COMPLETED: 1/30/20
SAMPLE TIME: 14:00/14:30

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger			
	0	5	5/2	0-2ft - pale Yellowish Brown 10YR 6/2, loose, dry,	silt		0
				Silt w/ little medium angular gravel	w/		
	5	10	5/2	0-2ft - S.A.A " "	Some		0
	10	15	5/4	0-4ft - Pale Yellowish Brown 10YR 6/2, stiff,	Sand		0
				damp, SILT w/ little medium angular gravel			
	15	20	5/0	No Recovery		20 ft	0
	22	22	5/2	0-2 ft - pale brown 5YR 5/2, SILT w/ Little	fill		0
				clay, and trace FM sand			

NOTES: Refusal at 23 ft
Samples taken at 3-5 ft and 21-23 ft

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SOIL BORING LOG

BORING ID: SB-MIP-6
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-MIP-8-10, SB-MIP-23-25
DATE STARTED: 1/31/20
DATE COMPLETED: 1/31/20
SAMPLE TIME: 10:30, 10:45

DRILL CONT: Rich Reagan
FOREMAN: cascade
RIG TYPE: geoprobe
PURPOSE: Soil boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		pre cleared w/ hand auger			
	0	5	5/2	0-2 ft - Light olive gray 5Y 5/2, loose,	Silt		
				damp, SILT w/ little medium angular			
				gravel	w/		
	5	10	5/3	0-3 ft - Light olive gray 5Y 5/2, loose, dry,	sand		
				SILT w/ little medium angular gravel, and			
				FM sand			
	10	15	5/3	0-3 ft - S.A.A " "			
	15	20	5/5	0-2 ft - S.A.A " "			
				2-5 ft - pale brown 5YR 5/2, SILT w/	till	17ft	
				little clay, and trace FM sand			
	20	25	5/1	poor recovery			
				0-1 ft - S.A.A			
				Shale Bedrock			
					shale	25ft	

NOTES: refusal at 25 ft

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SOIL BORING LOG

BORING ID: SB-20-1
INSPECTOR:

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-1-8-10-012920

DATE STARTED: 1/29/20
DATE COMPLETED: 1/29/20
SAMPLE TIME: [illegible]

DRILL CONT: Rich Raagan
FOREMAN: Cascade
RIG TYPE: geoprobe
PURPOSE: soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger	Silt		
	0	5	5/2.5	0-3 Light olive gray 5Y 5/2, moist,	w/		0
				loose silt w/ little sand, and			
				little gravel, subangular, coarse "	some		0
	5	10	5/3	0-3ft - S.A.A "	clay		0
	10	15	5/5	0-5 ft - Light olive Gray 5Y 5/2, dry,			
				firm, SILT and some fine to medium			
				sand w/ trace course gravel			0
	15	20		- S.A.A " "			0
	20	25		- S.A.A " "			
				Bedrock at 24.5 ft			

NOTES: Refusal at 24.5 ft

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SOIL BORING LOG

BORING ID: SB-20-2
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-2-8-10

DATE STARTED: 2/3/20
DATE COMPLETED: 2/3/20
SAMPLE TIME: 14:30

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
1	0	5	5/3	0-3 ft Light olive gray 5Y 5/2, dry,			0
				loose, silt w/ little sand and little gravel,			
				subangular, coarse			
	5	10	5/5	0-5ft - S.A.A " "			0
	10	15	5/5	0-5 ft - Grayish red 10R 4/2, moist,			0
				firm, silt w/ ~~some~~ little clay, and little coarse	fill	10ft	
				gravel			
	15	20	5/3	0-3ft - S.A.A			
	20	25	5/1	poor recovery S.A.A			

NOTES: refusal at 24 ft

PAGE: 1 of 2

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SOIL BORING LOG

BORING ID: SB-[illegible]03
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-03
DATE STARTED: 1/27/20
DATE COMPLETED: 1/27/20
SAMPLE TIME: 13:05

DRILL CONT: Cascade
FOREMAN: Rich
RIG TYPE: geoprobe
PURPOSE: Soil boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
1	0	5	5/1	poor recovery			0
				0-1ft Dark yellowish Brown 10YR4/2, dry,			
				loose, SILT some medium sand and	SILT		
				little coarse gravel	w/		
					some		
2	5	10	5/4.5	0-1.6f Pale Yellowish brown 10YR6/2, dry,	sand		0
				loose to firm, SILT some fine-medium sand			
				and little medium to coarse gravel			
				1.6-2.3ft Rock fragments w/ little silt			
				2.3ft-5ft Pale Yellowish brown 10YR6/2, dry			
				loose to firm, SILT some fine - medium sand			
				and little medium to coarse gravel			
3	10	15	5/5				9
				0-1.83ft "S.A.A"			
				1.83-4 ft Moderate reddish brown 10R4/6, dry,	Till	11.83 ft	
				Stiff, SILT and SAnd w/ little medium to		from	
				coarse gravel		graud	
				4-5 ft Yellowish gray 5Y 7/2, dry, stiff,			
				SILT and some SAND and little medium to			
				coarse gravel			
4	15	20	5/5	0-2.5ft Moderate reddish brown 10R4/6,			0
				dry, stiff, SILT and some SAND w/ trace			
				medium to coarse gravel			
				2.5-5ft Dusky yellow 5Y 6/4, moist,			
				Stiff, SILT and Clay w/ trace Sand,			
5	2e	22	5/5	0-2ft Light olive grey 5Y 5/2, moist,			
				Stiff SILT w/ Trace medium sand			

NOTES: sample taken at 10-12ft, refusal at 22 ft

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SOIL BORING LOG

BORING ID: SB-20-4
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-4-3-5-012920
DATE STARTED: 1/29/20
DATE COMPLETED: 1/29/20
SAMPLE TIME: 14:30

DRILL CONT: Cascade
FOREMAN: Rich Raegan
RIG TYPE: Geoprobe
PURPOSE: Soil boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
-	0	2		precleared w/ hand auger	SILT		
1	2	5	5/1	0-1 ft - Moderate olive brown 5Y 4/4,	w/		0
				moist, loose, SILT w/ little sand and	Some		
				some subangular gravel	Sand		
2	5	10	5/3	0-3 ft - Moderate yellowish brown 10YR 5/4,			0
				dry, loose SILT w/ some FM sand		11 ft	
3	10	15	5/4	0-4 ft - Moderate brown 5YR 4/4, stiff,			
				dry, SILT w/ trace FM sand and little			0
				gravel (subangular, coarse)			
4	15	20	5/4	0-4 ft - S.A.A " "			
5	20	23.5	5/1	poor recovery - S.A.A		23.5	0
				Shale bedrock	Shale		0

NOTES: Refusal hit at 23.5 ft.

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SOIL BORING LOG

BORING ID: SB-20-5
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-5-9-11-020320

DATE STARTED: 2/3/20
DATE COMPLETED: 2/3/20
SAMPLE TIME: 13:00

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	5	5/4	0-2"- asphalt			0
				2"- pale Yellowish brown 10YR 6/2, loose, dry,	Silt		
				SILT w/ little medium angular gravel	w/sand		
	5	10	5/5	0-2ft - S,A,A	and little		0
				2-4ft - Moderate Brown 5YR 4/4, stiff, damp,	gravel		
				silt w/ little clay, and little FM sand			0
				4-5ft - pale Yellowish brown, SAND and some		9ft	30.6
				gravel w/ trace silt, damp, petroleum odor present, no sheen			
	10	15	5/4	0-1ft - S,A,A		11ft	11.6
				1-5ft - Moderate brown 5YR 4/4, stiff, damp	till	11 ft	
				silt w/ little clay, and little FM sand			0
	15	20	5/5	0-5ft - Grayish Red 10R 4/2, stiff, damp,			0
				silt w/ some clay and little sub-angular			
				gravel			

NOTES: depth stopped at 20 ft

PAGE: 1 of 2

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SOIL BORING LOG

BORING ID: SB-20-06
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-06

DATE STARTED: 1/27/20
DATE COMPLETED: 1/27/20
SAMPLE TIME:

DRILL CONT: Cascade
FOREMAN: Rich
RIG TYPE: Geoprobe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
1	0	5	5/3	0–2.5ft Grayish Brown 5YR 3/2, dry,	Silt		0
				loose, SILT and FM SAND w/ trace	w/		
				coarse gravel	Some		
~~2~~	~~5~~	~~10~~		2.5ft–3.0 ft Dusky yellow 5Y 6/4, dry,	Sand		
~~2~~	~~5~~	~~10~~		loose, SILT w/ some Coarse gravel			
2	5	10	5/2.5	0–2.75ft – S.A.A. " "			
							0
3	10	15	5/3	0–2ft light olive gray 5Y 5/2, dry,			
				stiff, SILT and FM Sand w/ trace			
				coarsegravel		13.5ft	
				2–3ft Dark reddish brown 10R 3/4, dry,	Till	from ground	
				stiff, SILT and FM Sand w/ trace clay			
4	15	20	5/5	0–3ft Moderate brown 5YR 4/4, dry,			0
				firm to stiff SILT w/ some FM Sand and			
				trace clay			
				3–5ft Dark Yellowish Brown 10YR 4/2,			
				damp, firm to stiff, SILT and Clay w/			
				trace Coarse sand, and trace fine gravel			
5	20	25		0–5ft Moderate Brown 5YR 3/4, damp,			0
				stiff, SILT w/ some FM Sand trace course			
				gravel, trace clay			

NOTES: Sample taken from 11–13 ft

0–3 ft preclear w/ hand auger

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SOIL BORING LOG

BORING ID: SB-20-7
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-7-3-5-012820

DATE STARTED: 1/28/20
DATE COMPLETED: 1/28/20
SAMPLE TIME: 10:00

DRILL CONT: Rich Reagan
FOREMAN: Cascade
RIG TYPE: geoprobe
PURPOSE: soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		procleared w/ hand auger	Silt		
1	0	5	5/2	0-2 ft greyish Red 10R 4/2, dry, Loose,	w/some		0
				SILT w/ little coarse gravel and trace FM	Sand		
				sand			
2	5	10	5/3	0-3ft – S.A.A " "			0
3	10	15	5/3	0-2ft – S.A.A " "			
				2-3ft – Dark reddish brown 10R 3/4, dry,	fill	14ft	
				stiff, SILT w/ trace FM Sand and trace			
				clay and little coarse gravel			
4	15	20	5/3	0-3ft – S.A.A " "			0
5	20	25	5/4	0-4ft – S.A.A			0
				Shale bedrock	Shale		

NOTES: Sample taken at 3-5ft at 10:00
refusal at 23ft

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SOIL BORING LOG

BORING ID: SB-20-8
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-8-7-9-012820

DATE STARTED: 1/28/20
DATE COMPLETED: 1/28/20
SAMPLE TIME: 14:15

DRILL CONT: Cascade
FOREMAN: Rich Raegor
RIG TYPE: GeoProbe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/hand auger	silt		
1	0	5	5/2	0-2 ft Dark Yellowish brown 10YR 4/2, dry,	w/		0
				loose, SILT w/ little FM Sand, and little coarse	some		
				gravel angular to sub-angular. " "	sand		
2	5	10	5/3	0-3 ft- S.A.A	and		0
3	10	15	5/2	poor recovery 0-1 ft- S.A.A	gravel		0
				1-2 ft - Moderate yellowish brown 10YR 5/4,			
				dry, Stiff, SILT w/ some FM Sand, and little			
				sub-angular gravel			
4	15	20	5/5	0-5 ft - S.A.A			0
5	20	22		0-1.9 ft - S.A.A	till	18 ft	
				1.9-2.0 ft - Bedrock, grey shale			

NOTES: samples taken from 7-9 ft at 16:45
refusal reached at 22 ft

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SOIL BORING LOG

BORING ID: SB-20-9
INSPECTOR:

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-9-3-5-012820

DATE STARTED: 1/28/20
DATE COMPLETED: 1/28/20
SAMPLE TIME: 11:40

DRILL CONT: Cascade
FOREMAN: Rich Ragan
RIG TYPE: GeoProbe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2	5/	precleared w/ hand auger	silt		
1	0	5	5/2	0-2 ft greyish Red 10R 4/2, dry, loose	w/ some		0
				SILT w/ a little sand and trace course	Sand		
				gravel			
2	5	10	5/4.5	0-5 ft greyish red 10R 4/2, dry, stiff			0
				SILT w/ some coarse gravel and trace FM			
				Sand.			
3	10	15	5/4.5	~~0-5 ft — S.A.A~~ 0-2 ft " " S.A.A			0
~~4~~	~~15~~	~~20~~		2-4.5 ft Dark yellowish orange 10YR 6/6,	Till	12 ft	
				dry, stiff, SILT w/ some clay, trace			
				coarse gravel			
4	15	20	5/5	0-1 ft — S.A.A " "			
				1-5 ft - Grayish brown 5YR 3/2, dry,			
				stiff, SILT w/ some clay and a little			
				coarse gravel.			
5	20	25		0-5 ft - S.A.A " "			0
				Shale Bedrock	Shale		

NOTES: refusal at 25 ft
Sample taken 3-5 ft at 11:40

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SOIL BORING LOG

BORING ID: SB-20-10
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-10-012720

DATE STARTED: 1/27/20
DATE COMPLETED: 1/27/20
SAMPLE TIME:

DRILL CONT: ~~[illegible]~~ Cascade
FOREMAN: Rich
RIG TYPE: geoprobe
PURPOSE: soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		0-2ft precleared	Silt		0
1	0	5	5/2	poor recovery, Moderate olive brown 5Y4/4	w/ some		
				dry, loose, SILT w/ some coarse gravel	sand		
				and trace FM sand			
2	5	10	5/2.5	0-2.5ft Light olive gray 5Y 5/2, dry,			0
				firm, SILT w/ some coarse gravel and			
				a little FM sand			
3	10	15	5/3	0-3ft — S.A.A " "			0
4	15	20		0-1ft - S.A.A " "		16ft	0
				1-5ft - Grayish red 10R 4/2, damp,	till	from	
				firm, ClAY w/ a little silt and trace		surface	
				FM sand			
5	20	25		0-5ft - S.A.A			0

NOTES: sample taken from 8-10 ft

PAGE: 1 of 2

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OBG
Part of Ramboll

SOIL BORING LOG

BORING ID: SB-20-11
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-11-3-5-012920
DATE STARTED: 1/29/20
DATE COMPLETED: 1/29/20
SAMPLE TIME: 11:45

DRILL CONT: Cascade
FOREMAN: Rich Raegan
RIG TYPE: geoprobe
PURPOSE: Soil boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger	silt		0
	0	5	5/2	0-2ft – Dark yellowish brown 10YR 4/2,	w/		0
				stiff, silt w some FM-sand, little coarse	some		
				gravel	sand		
	5	10	5/3	poor recovery – S,A,A " "			0
	10	15	5/2	poor recovery – S,A,A " "		15ft	0
	15	29	5/5	0-5ft – Moderate Brown 5YR 4/4, damp,	till		0
				stiff, SILT w/ little FM sand, trace			
				coarse gravel			
	20	25	5/5	0-~~5~~4ft – S,A,A			0
				Shale Bedrock	shale		

NOTES: refusal at 24 ft
Sample taken from 3-5 ft at 11:45

PAGE: 1 of 2

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OBG
Part of Ramboll

SOIL BORING LOG

BORING ID: SB-20-12
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-12-6-10-012920
DATE STARTED: 1/29/20
DATE COMPLETED: 1/29/20
SAMPLE TIME: 10:15

DRILL CONT: Rich Reagan
FOREMAN: Cascade
RIG TYPE: Geoprobe
PURPOSE: soil boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	2		precleared w/ hand auger			
1	0	5	5/1	0 – 1 ft Dark yellowish brown 10YR 6/2,			0
				damp, loose, SILT w/ FM sand, and little			
				sub angular course gravel.			
	5	10	5/3.5	0 – 3.5ft – S.A.A " "			0
	10	15	5/3.5	0 – 1 ft – S.A.A " "			0
				1 – 3.5ft Moderate Yellowish Brown 10YR 5/4,	till	11 ft	
				damp, stiff, SILT w/ little clay, and trace			
				FM sand.			
	15	20	5/3	0 – 3ft Pale Brown 5YR 5/2, damp, stiff,			0
				SILT w/ little FM Sand, and little angular			
				medium coarse bedrock			
	20	25	5/3	0 – 22.5 ft – S.A.A			9
				Shale bedrock			

NOTES: refusal at 22.5 ft
sample taken from

PAGE: 1 of 2

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OBG Part of Ramboll

SOIL BORING LOG

BORING ID: SB-20-13
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-13-8-10-012820

DATE STARTED: 1/28/20
DATE COMPLETED: 1/28/20
SAMPLE TIME: 16:00

DRILL CONT: Cascade
FOREMAN: Rich Raegan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing PID (ft)	Field Testing PID (ppm)
	0	2		precleared by hand auger	silt		
1	0	5	5/1	poor recovery 0-1 ft, Dark Yellowish Brown	w/ some		0
				10YR 4/2, loose, dry, SILT w/ a little	gravel		
				FM Sand, and some medium coarse gravel			
2	5	10	5/3	0-3ft Grayish brown 5YR 3/2, firm, Moist,			0
				silt w/ some clay and trace coarse gravel			
3	10	15	5/3	0-1ft - S.A.A			0
				1-3ft - Moderate brown 5YR 3/4, firm, damp	till	-14ft	
				silt w/ a little clay and little FM Sand			
4	15	20	5/4	0-4ft - S.A.A. " "			0
5	20	23	5/2	0-2ft - S.A.A. " " w/ Shale			0
				bedrock at bottom			
					Shale	23	

NOTES:

Refusal at 23 ft

Sample taken at 8-10 ft

PAGE: 1 of 2

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OBG Part of Ramboll

SOIL BORING LOG

BORING ID: SB-20-14
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243
SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-14-7-9-013020
DATE STARTED: 1/30/20
DATE COMPLETED: 1/30/20
SAMPLE TIME: 11:00

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring
DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:
NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing PID (ft)	Field Testing PID (ppm)
	0	2		precleared w/ hand auger	silt		0
	0	5	5/3	0-3ft- Light olive gray 5Y 5/2, dry, loose	w/		0
				SILT w/ little FM sand, little small sub-	same		
				angular coarse gravel.	sand		
	5	10	5/4	0-3ft- S.A.A " "			0
				3-4ft- Pale brown 5YR 5/2, dry, stiff,			
				SILT w/ trace small angular gravel, w/	till	9ft	
				trace FM sand.			
	10	15	5/3	0-3 ft- S.A.A			0
	15	20	5/2.5	0-2.5ft- pale brown 5YR 5/2, dry, stiff			0
				SILT w/ little medium angular gravel.			

NOTES: Stopped at 20 ft

PAGE: 1 of 2

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OBG Part of Ramboll

SOIL BOORING LOG

BORING ID: SB-20-15
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Ramboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-15-2-4-020320

DATE STARTED: 2/3/20
DATE COMPLETED: 2/3/20
SAMPLE TIME: 10:20

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil Boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing PID (ft)	Field Testing PID (ppm)
	0	5	5/3.5	0-2.5ft - Dark yellowish brown 10YR 4/2,	fill		0
				loose, organics present, damp, SILT w/ trace			
				Clay		2.5ft	
				2.5-3.5ft - Moderate Yellowish Brown 10YR 5/4,	native		0
				loose, FM Sand w/ some ~~little~~ silt,	soil		
				damp, trace cobbles on bottom			
	5	10	5/3	0-2ft - S.A.A " "		9ft	0
				2-3ft - Moderate brown 5YR 4/4, firm,	till		
				damp, SILT and Clay w/ little small, rounded			
				to angular gravel present "			
	10	15	5/5	0-5ft - S.A.A "			

NOTES:

PAGE: 1 of 2

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OBG Part of Ramboll

SOIL BORING LOG

BORING ID: SB-20-16
INSPECTOR: MAZ

PROJECT: Accurate Die
CLIENT: Romboll
JOB #: 60243

SITE NAME: Former Accurate Die Casting Site
SITE LOC.: Fayetteville, NY
SAMPLE ID.: SB-20-16-9-12-020320

DATE STARTED: 2/03/20
DATE COMPLETED: 2/03/20
SAMPLE TIME: 11:30

DRILL CONT: Cascade
FOREMAN: Rich Reagan
RIG TYPE: Geoprobe
PURPOSE: Soil boring

DRILLING METHOD: Direct Push
SAMPLER TYPE: Macrocore
SAMPLER DIAM:
FINAL STATIC WL:

NORTHING:
EASTING:
ELEVATION:
DATUM:

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ft)	PID (ppm)
	0	5	5/2	0-2 ft - Dark Yellowish Brown 10YR 4/2,	Silt		0
				loose, dry, SILT w/ little FM sand, little large			
				angular gravel			
	5	10	5/3	0-1ft - pale Reddish Brown 10YR 5/4, stiff,	reworked		0
				damp, SILT w/ little Clay, little angular	till		
				gravel,		7ft	
				1-3ft - Very dark red 5R 2/6, stiff, damp,	Native		
				Silt w/ little clay, little angular gravel	till		
	10	15	5/4	0-4ft - S.A.A " "			0

NOTES:

PAGE: 1 of 2

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1993 RI BORING LOGS

Project Name: Accurate Die Casting
Job No. 1682
Start
Date 8/24/89 Time 8:00 am
Finish
Date 8/24/89 Time 4:00 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-1

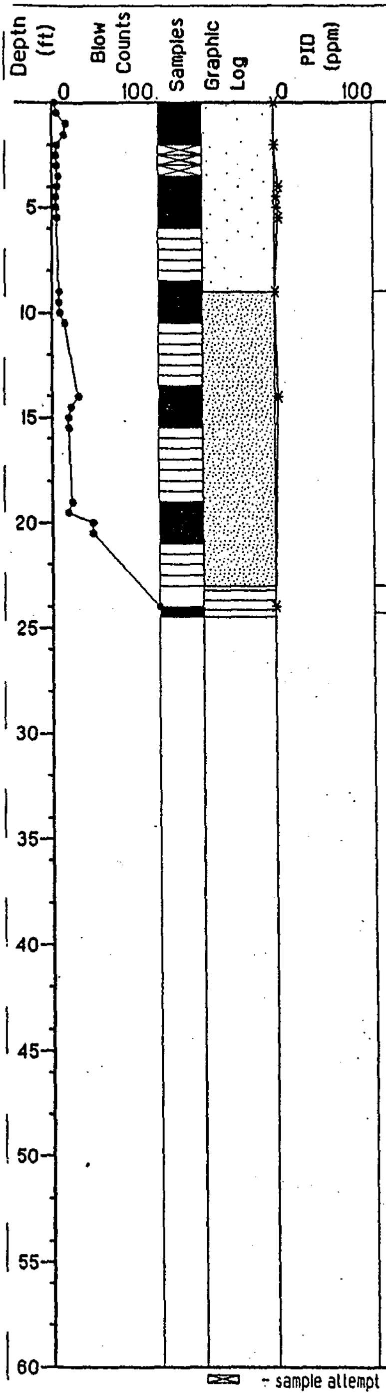
Drilling Company: Rochester D.C.
Driller:
S&W Inspector: S&W--TRB
Drill Rig Type: CME-45 ATV
Drilling Method: 4.25" i.d. HSA

Weather: sunny, 70-75 F

Elevation
99.36

X coord: 4943.151 feet
Y coord: 5138.164 feet

Groundwater Observations
Time :
Date : 8/24/89
Casing Depth:
Boring Depth:
Water Depth :



Sample Description

Dry Br.-Tn. F sand and silt, some C gravel and cobbles

Damp Br. F sand, little silt

Damp Rd.-Br. silt and F sand, some F-C gravel

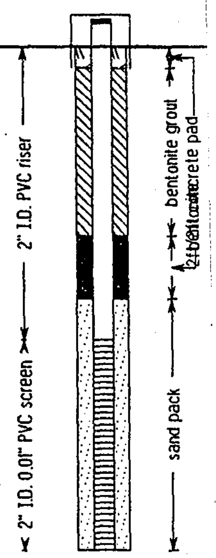
Damp Tn.-Gy. silt, some cobbles and rd oxidized areas

Damp Tn.-Gy. silt, some cobbles and rd oxidized areas, tr F gravel

Gy. Shale Bedrock

Bottom of Boring

Well Diagram



⊠ - sample attempt
■ - sample recovered
▣ - grain size analysis performed, results tabulated elswhere in report
☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

e: Accurate Die Casting
1682
Start
/89 Time 10:00 am
Finish
/89 Time 5:00 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-2

any: Rochester D.C.
or: S&W--GG
e: CME-45 ATV
od: 4.25" i.d.HSA

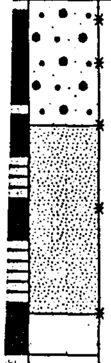
Weather: sunny, 70-75 F

Elevation
91.78

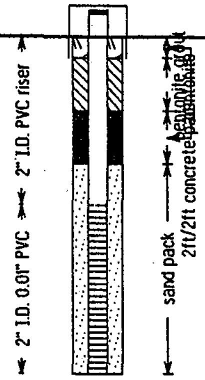
X coord: 5582.595 feet
Y coord: 5129.512 feet

Groundwater Observations
Time :
Date : 8/18/89
Casing Depth: 8 ft
Boring Depth:
Water Depth :

Graphic Log	PID (ppm) 0 100	Sample Description
		Dry Gy.-Br. gravelly fill with silt, sand and pebbles Damp Br. silt and clay, some pebbles and sand (fill)
		Moist dark Br. silt, some sand and clay. little Og. mottling Wet sand layer 1-2" thick
		Wet Br. sand, some silt dense dry gy. sand, some silt and pebbles, angular rock fragments
		Bottom of Boring



Well Diagram



5
10
15
20
25
30
35
40
45
50
55
60

▭ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
▭ - core attempt

og have been generalized for clarity of presentation. Significant changes
been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting

Job No. 1682

Start
Date 8/22/89 Time 8:30 am
Finish
Date 8/23/89 Time 4:30 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-3

Drilling Company: Rochester D.C.

Driller:

S&W Inspector: S&W--TRB

Drill Rig Type: CME-45 ATV

Drilling Method: 4.25" i.d.HSA

Weather:

Elevation
97.65

X coord: 5318.143 feet
Y coord: 5454.696 feet

Groundwater Observations

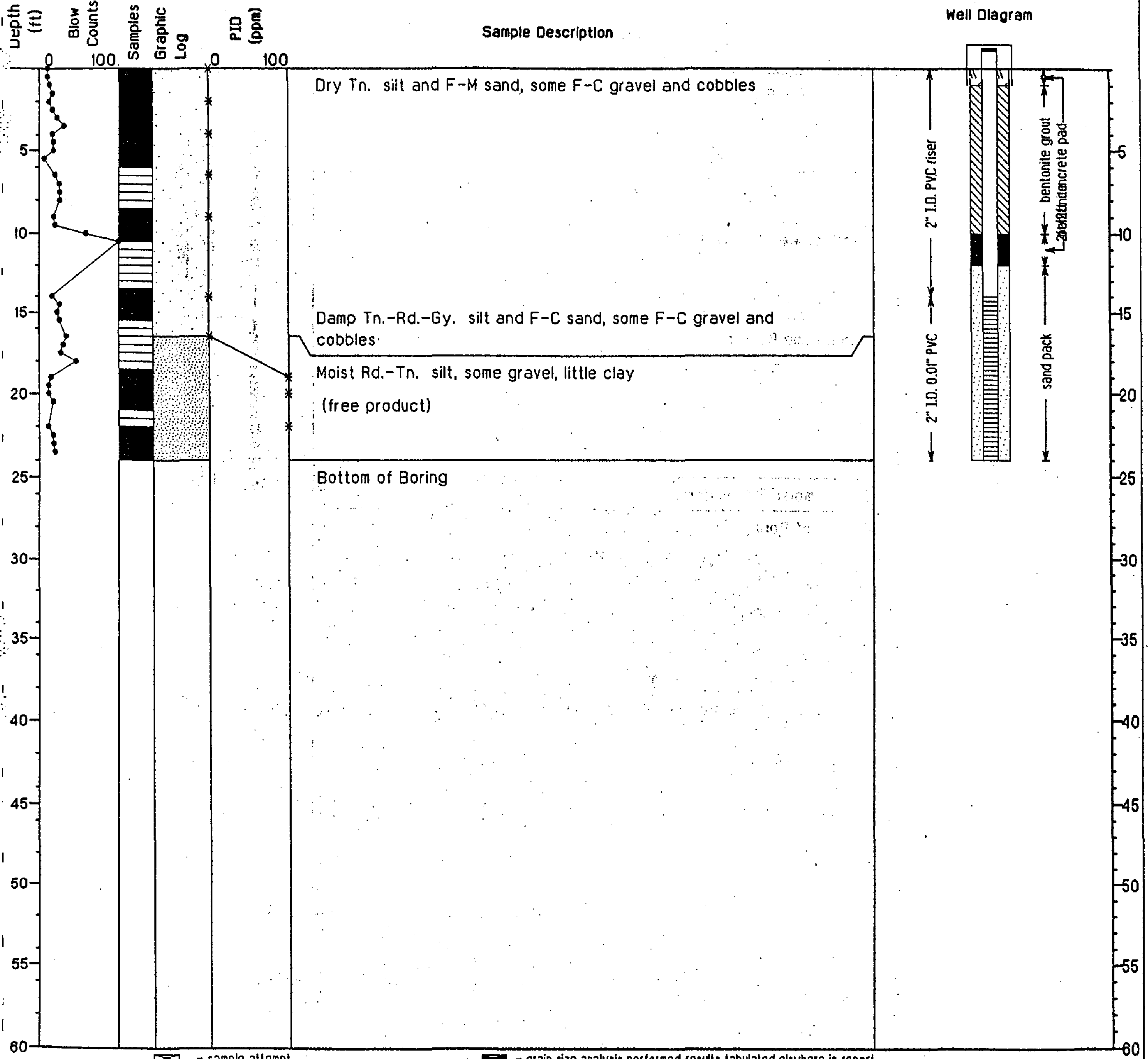
Time :

Date :

Casing Depth:

Boring Depth:

Water Depth :



Dry Tn. silt and F-M sand, some F-C gravel and cobbles

Damp Tn.-Rd.-Gy. silt and F-C sand, some F-C gravel and cobbles

Moist Rd.-Tn. silt, some gravel, little clay

(free product)

Bottom of Boring

▭ - sample attempt

■ - sample recovered

▬ - grain size analysis performed, results tabulated elswhere in report

▭ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting

Job No. 1682

Start
Date 1/5/90 Time 10:30 am
Finish
Date 1/5/90 Time 4:00 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-3SS

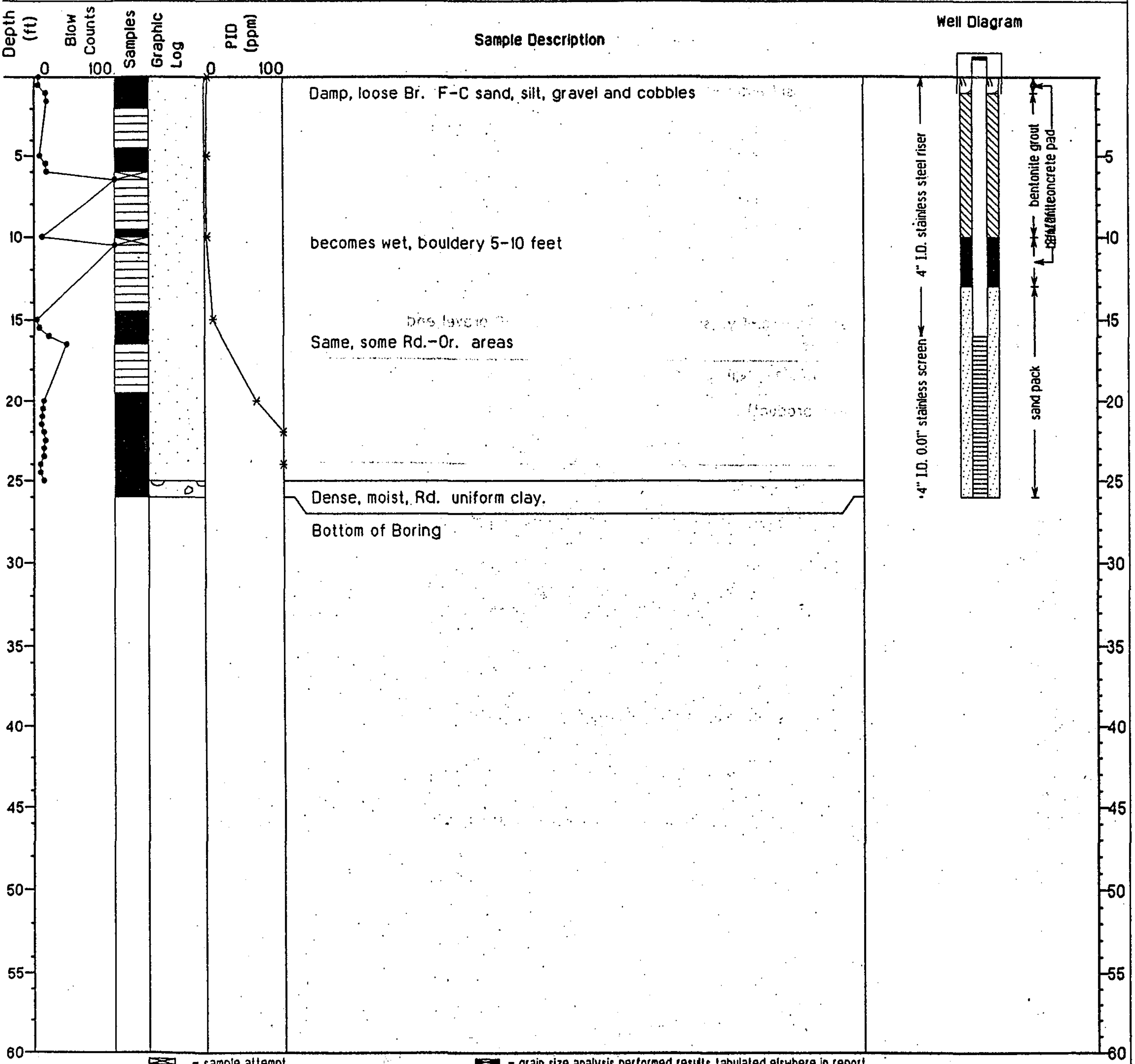
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--DNS
Drill Rig Type: CME-55
Drilling Method: 6.25" i.d. HSA

Weather: Overcast, 35F

Elevation
97.81

X coord: 5312.998 feet
Y coord: 5455.147 feet

Groundwater Observations
Time : 16:00
Date : 1/5/90
Casing Depth: 26.0
Boring Depth: 26.0
Water Depth : 18.0



Damp, loose Br. F-C sand, silt, gravel and cobbles

becomes wet, bouldery 5-10 feet

Same, some Rd.-Or. areas

Dense, moist, Rd. uniform clay.

Bottom of Boring

⊠ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
□ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: Accurate Die Casting

Job No. 1682

Start
Date 8/16/89 Time 11:00 am
Finish
Date 8/17/89 Time 1:30 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-4

Drilling Company: Rochester D.C.

Driller:

S&W Inspector: S&W--GG

Drill Rig Type: CME-45 ATV

Drilling Method: 4.25" I.d.HSA

Weather:

Elevation
65.62

X coord: 6152.312 feet
Y coord: 5197.201 feet

Groundwater Observations

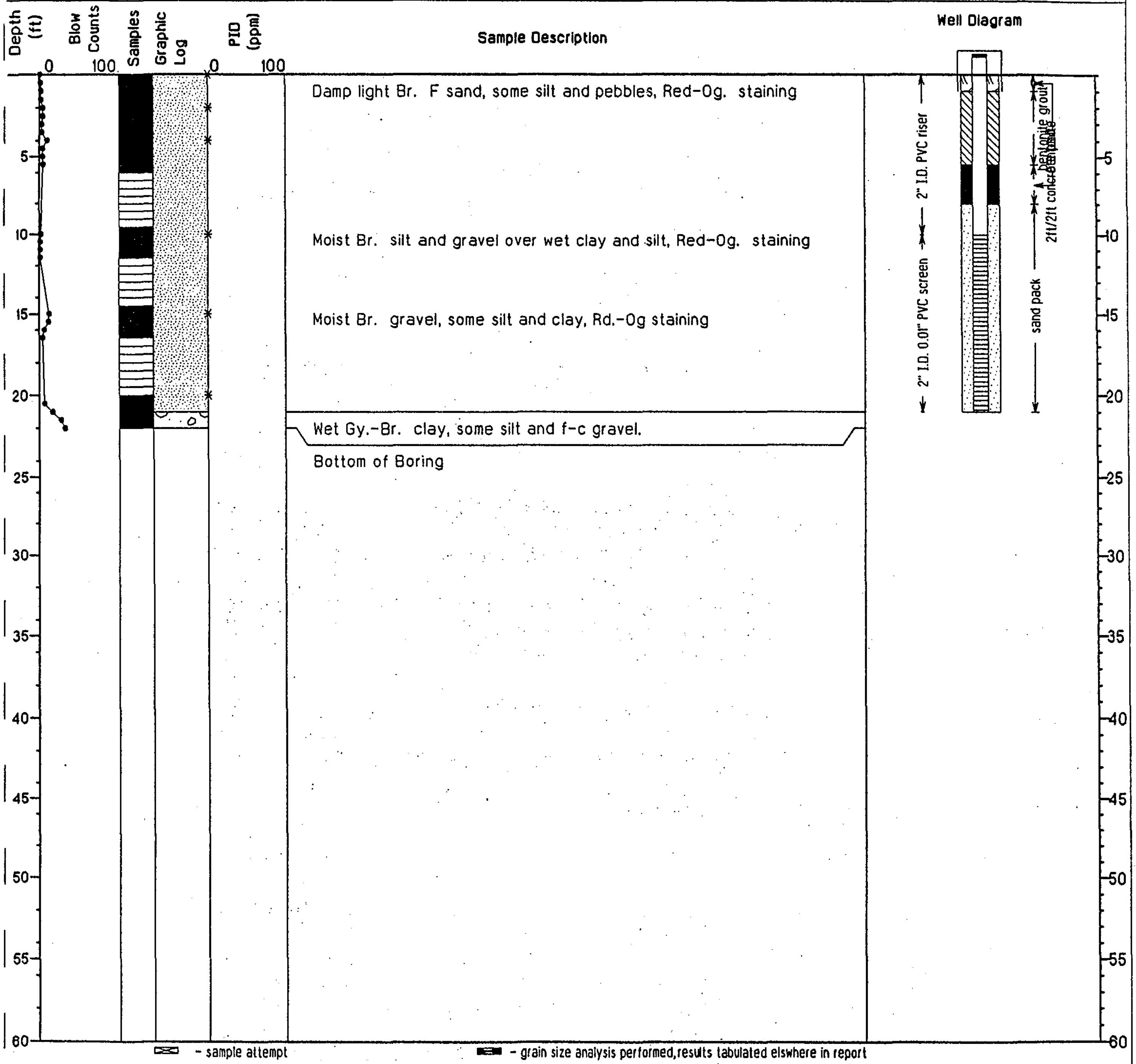
Time : 15:30

Date : 8/17/89

Casing Depth: 20 ft

Boring Depth:

Water Depth : 16.5



Damp light Br. F sand, some silt and pebbles, Red-Og. staining

Moist Br. silt and gravel over wet clay and silt, Red-Og. staining

Moist Br. gravel, some silt and clay, Rd.-Og staining

Wet Gy.-Br. clay, some silt and f-c gravel.

Bottom of Boring

▭ - sample attempt

▬ - sample recovered

▬ - grain size analysis performed,results tabulated elswhere in report

▭ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: Accurate Die Casting

Job No. 1682

Start
Date 11/2/89 Time 8:00 am
Finish
Date 11/2/89 Time 4:00 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-5

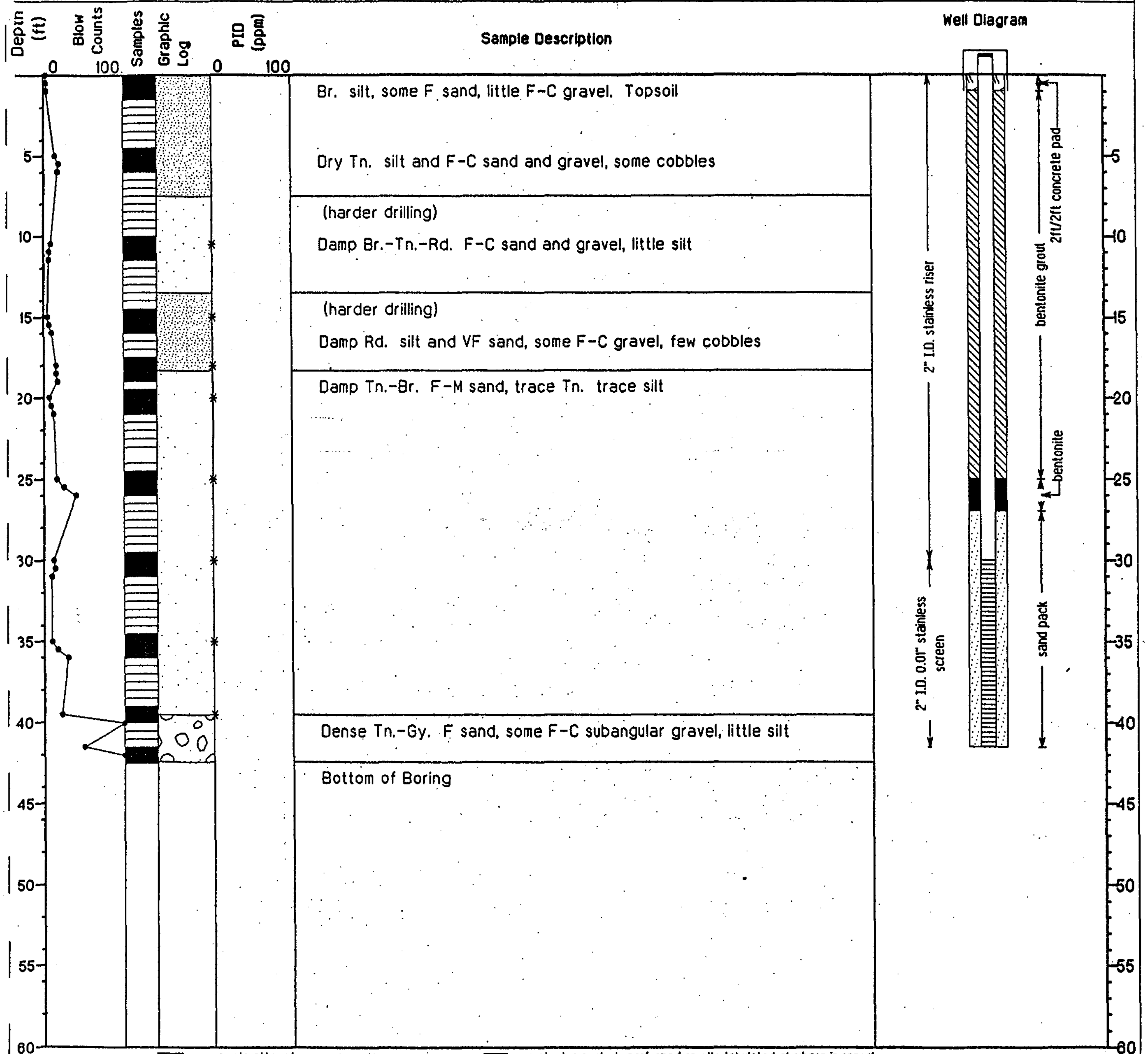
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TRB
Drill Rig Type: CME-55 Truck
Drilling Method: 4.25" i.d.HSA

Weather: partly cloudy, 40 F

Elevation
88.21

X coord: 5624.097 feet
Y coord: 5612.209 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth :



Br. silt, some F sand, little F-C gravel. Topsoil

Dry Tn. silt and F-C sand and gravel, some cobbles

(harder drilling)

Damp Br.-Tn.-Rd. F-C sand and gravel, little silt

(harder drilling)

Damp Rd. silt and VF sand, some F-C gravel, few cobbles

Damp Tn.-Br. F-M sand, trace Tn. trace silt

Dense Tn.-Gy. F sand, some F-C subangular gravel, little silt

Bottom of Boring

▭ - sample attempt
■ - sample recovered
■ - grain size analysis performed,results tabulated elswhere in report
▭▭ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting

Job No. 1682

Start
Date 11/9/89 Time 9:30 am
Finish
Date 11/10/89 Time 5:00 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-6

Drilling Company: Northstar

Driller:

S&W Inspector: S&W--DNS

Drill Rig Type: CME-55

Drilling Method: 4.25" i.d.HSA

Weather: overcast, rain 50 F

Elevation
77.46

X coord: 5764.680 feet
Y coord: 5674.237 feet

Groundwater Observations

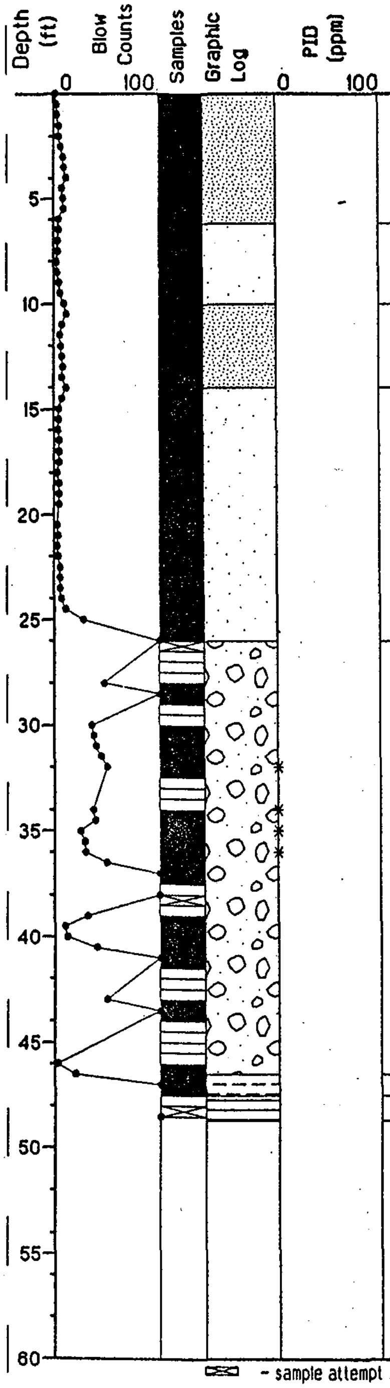
Time : 8:00

Date : 11/10/89

Casing Depth: 32 ft

Boring Depth:

Water Depth : 5.0 ft



Sample Description

Moist firm Rd.-Br. silt, some f-c sand, little gravel and clay

Damp Gy.-Br. silt and f-c sand and gravel, some cobbles

Damp Br. F-M sand, some C sand. trace F gravel and silt.

Damp Br. f-c sand, some f-c gravel, trace silt

Moist Br. silt and f-c sand, some F-C gravel

Damp Br. F-M sand, some C sand, trace F gravel and silt

wet Br. F-C sand, some F-M gravel, little silt and C gravel

Same material, Gy-Gr shaley limestone fragments in tip of spoon

No recovery--boulder

Gr.-Gy. shaley limestone fragments in tip of spoon

Damp dense Gy. silt with f-c sand and gravel

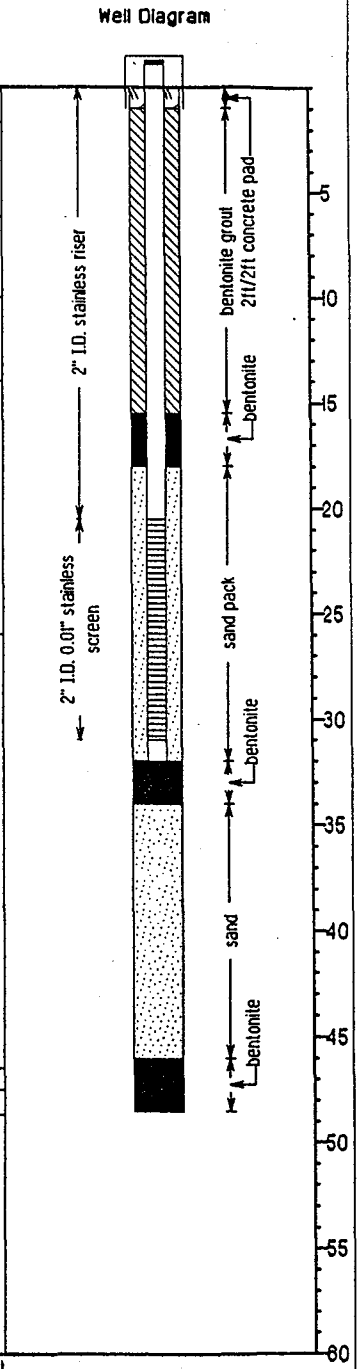
Moist dense Br.-Gy. silt, some f-c sand, little F-M gravel and clay
Angular shale fragments

Wet Dk Br. silt, some F. sand

wet Gy silt and f sand w/angular L.S. fragments

No recovery; probable bedrock

Bottom of Boring



⌧ - sample attempt

▬ - sample recovered

▬ - grain size analysis performed,results tabulated elswhere in report

◻◻ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: Accurate Die Casting
Job No. 1682
Start
Date 11/13/89 Time 3:30 pm
Finish
Date 11/21/89 Time 10:00 am

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-7

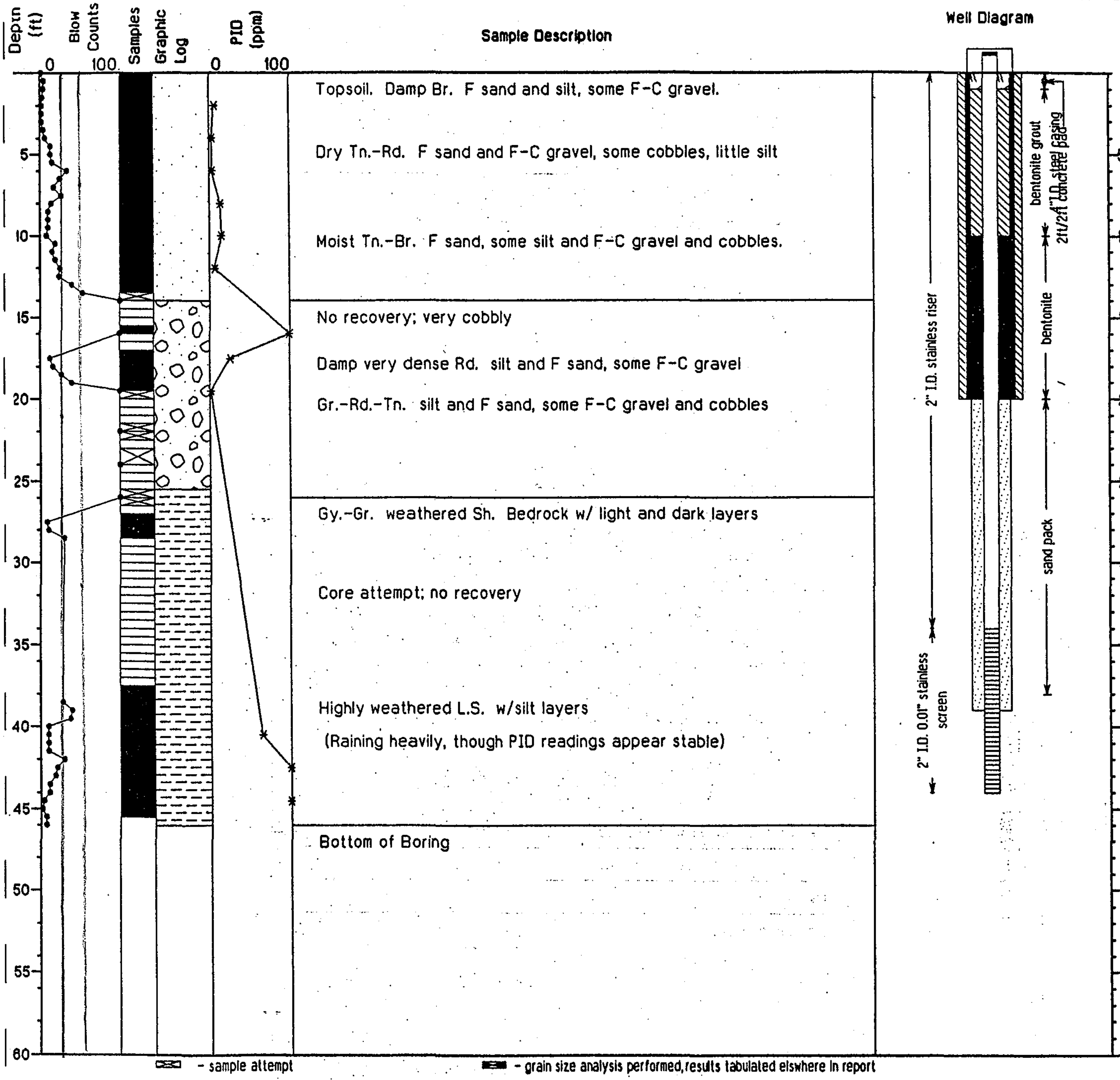
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--DNS
Drill Rig Type: CME-55
Drilling Method: 4.25" i.d.HSA

Weather: Sunny, 50F

Elevation
75.66

X coord: 5747.699 feet
Y coord: 5902.130 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth :



Sample Description

Topsoil. Damp Br. F sand and silt, some F-C gravel.

Dry Tn.-Rd. F sand and F-C gravel, some cobbles, little silt

Moist Tn.-Br. F sand, some silt and F-C gravel and cobbles.

No recovery; very cobbly

Damp very dense Rd. silt and F sand, some F-C gravel

Gr.-Rd.-Tn. silt and F sand, some F-C gravel and cobbles

Gy.-Gr. weathered Sh. Bedrock w/ light and dark layers

Core attempt; no recovery

Highly weathered L.S. w/silt layers
(Raining heavily, though PID readings appear stable)

Bottom of Boring

⌧ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 1682
Start
Date 11/8/89 Time 10:30 am
Finish
Date 11/8/89 Time 5:40 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-8

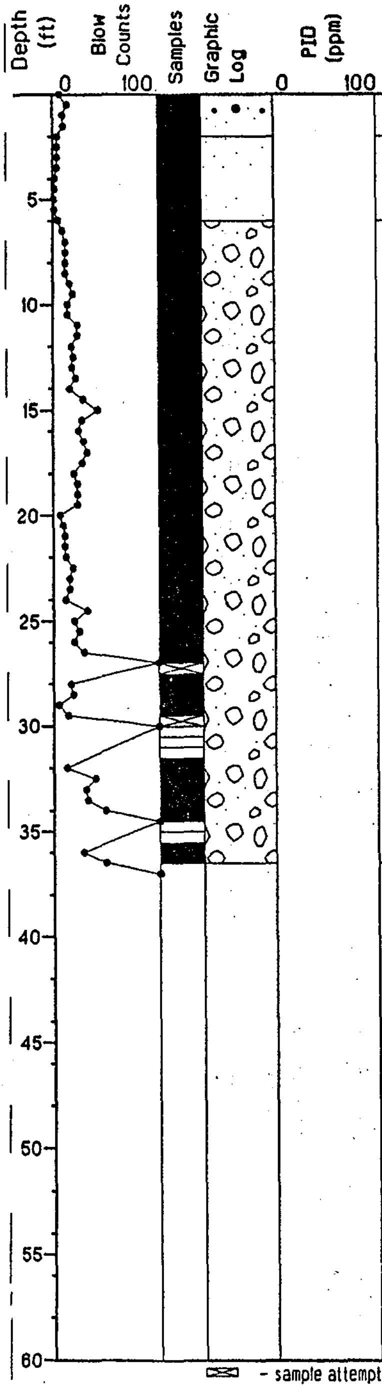
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--DNS
Drill Rig Type: CME-55
Drilling Method: 4.25" i.d.HSA

Weather: Overcast and cool. 50F

Elevation
88.21

X coord: 5733.879 feet
Y coord: 5255.257 feet

Groundwater Observations
Time : 15:15
Date : 11/8/89
Casing Depth: 38.0'
Boring Depth:
Water Depth : 25.9'



Sample Description

Moist Br. silt, some F-C sand w/brick and ash fragments.

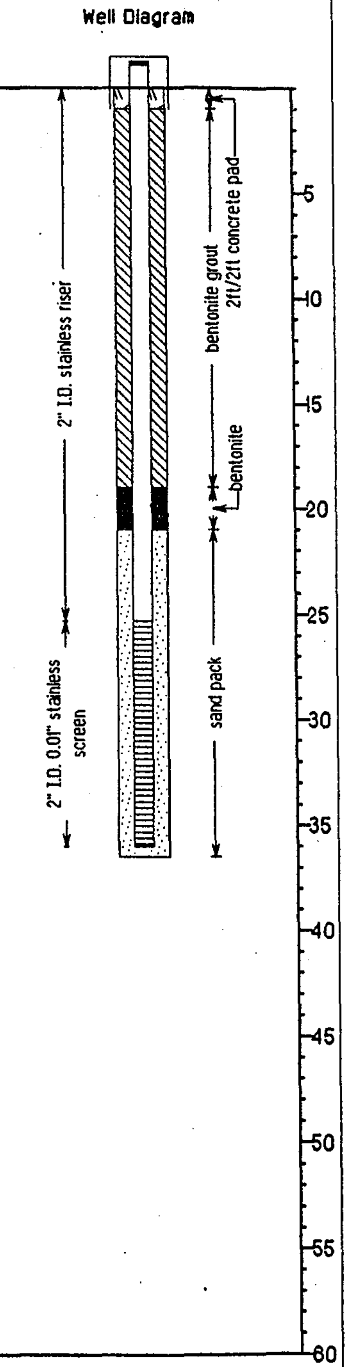
Moist Br. F-M sand, little C sand, trace cobbles, plant matter

Moist, firm Rd.-Br. silt and F-C sand, little clay and Sh. fragments

Damp, firm Rd.-Br. silt, some F-C sand and gravel, trace clay

Same, moist

Bottom of Boring



☒ - sample attempt
■ - sample recovered
■ - grain size analysis performed,results tabulated elswhere in report
☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 1682
Start
Date 11/7/89 Time 2:50 pm
Finish
Date 11/7/89 Time 4:05 pm

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-9

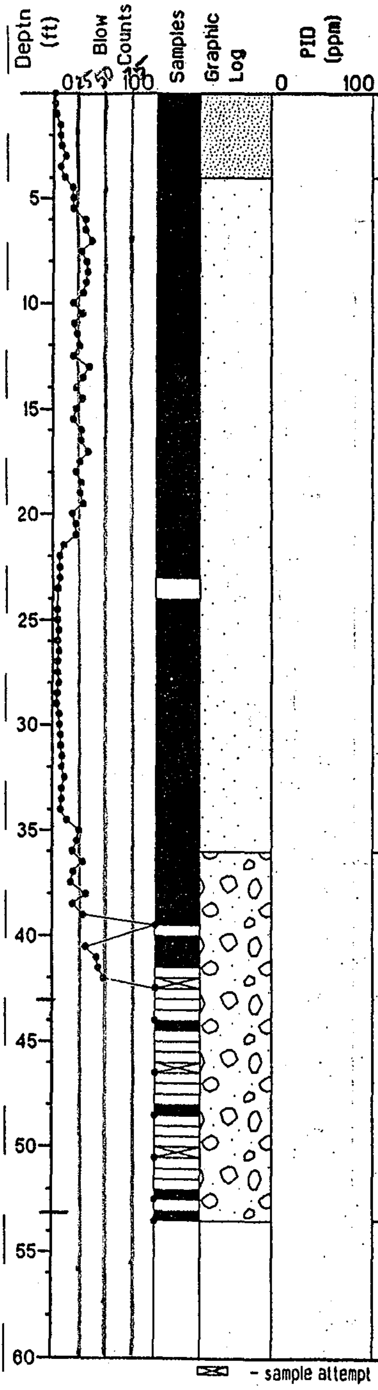
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--DNS
Drill Rig Type: CME-55
Drilling Method: 4.25" i.d.HSA

Weather: mostly cloudy, 55 F

Elevation
102.44

X coord: 5489.173 feet
Y coord: 5797.369 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth :



Sample Description

Damp Br. silt, some F-C sand and cobbles, little clay

Dry Br.-Gy. F-C sand and gravel w/ cobbles, tr.-little silt

Dry Br.-Gy. F-C sand and gravel, some silt and cobbles

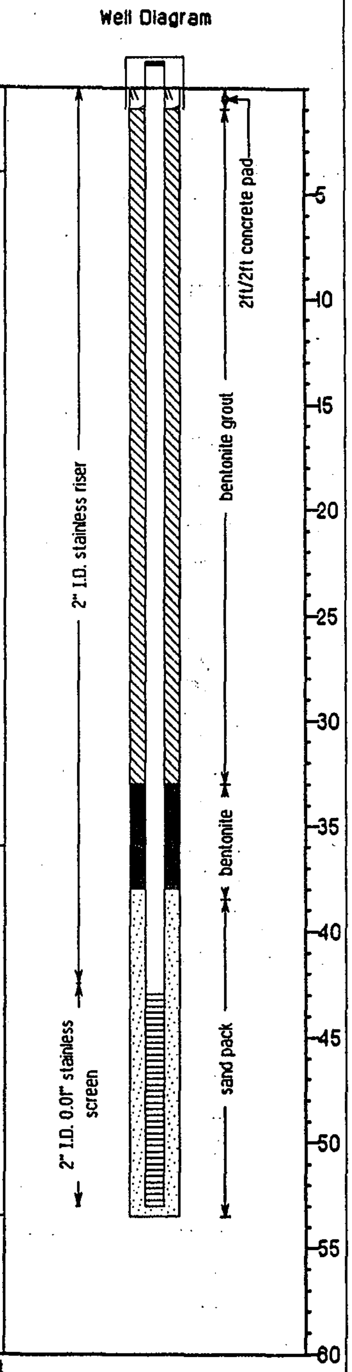
Moist Br. F-C sand and silt, some F gravel

Moist Gy.-Br. F-C sand and F-M gravel, little C gravel and silt

Dry dense Br.-Gr.-Gy. F-C sand and gravel and silt, trace clay

Similar material, some cobbles

Bottom of Boring



▨ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 2125
Start
Date 5/7/92 Time 7:30 am
Finish
Date 5/15/92 Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-10

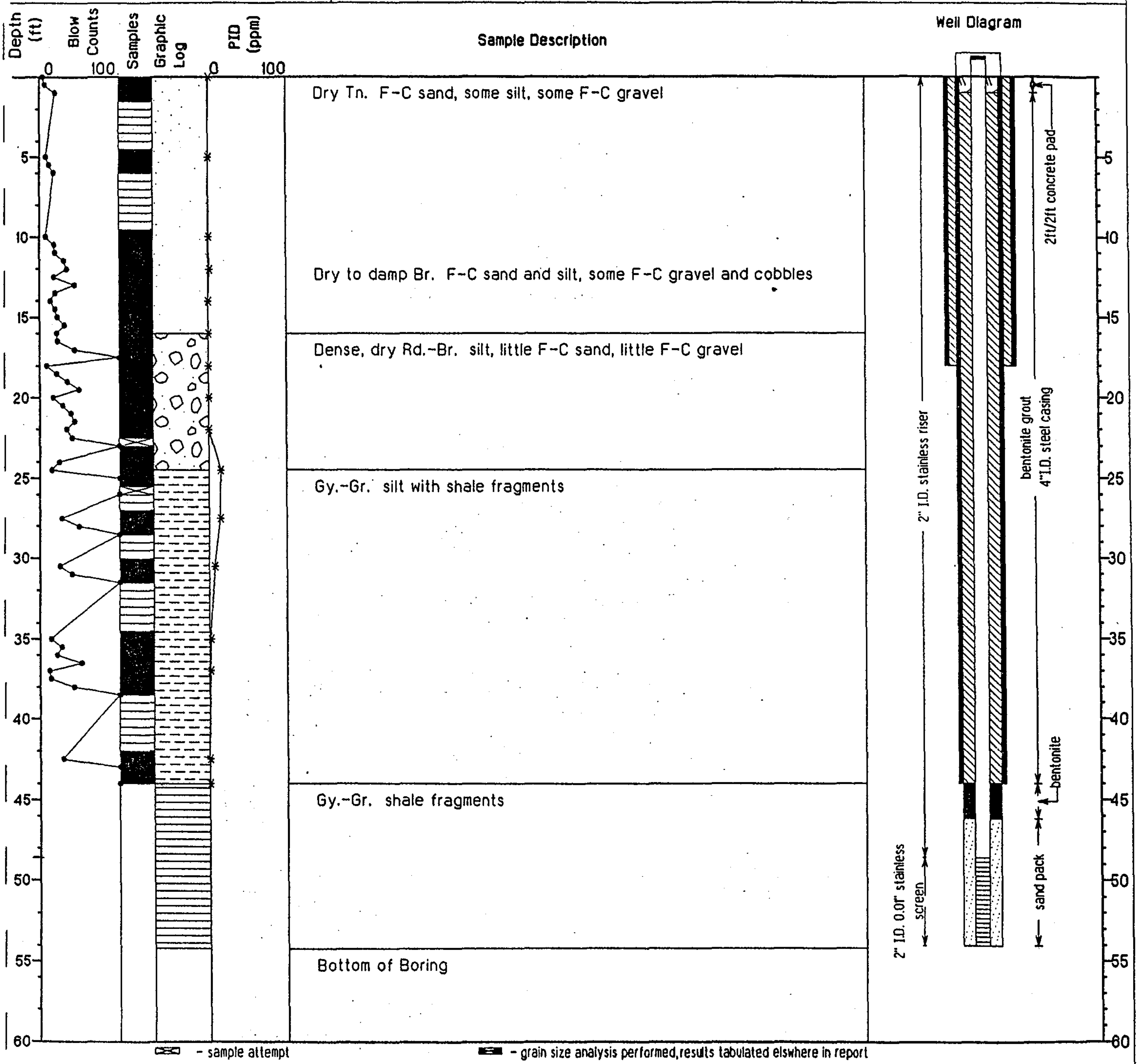
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TRB/TLH
Drill Rig Type: CME 75
Drilling Method: HSA-mud rotary

Weather: sunny, 60 F

Elevation
97.51

X coord: 5377.000 feet
Y coord: 5464.816 feet

Groundwater Observations
Time :
Date : 5/13/92
Casing Depth: 44 ft
Boring Depth:
Water Depth : .03 ft.



Dry Tn. F-C sand, some silt, some F-C gravel

Dry to damp Br. F-C sand and silt, some F-C gravel and cobbles

Dense, dry Rd.-Br. silt, little F-C sand, little F-C gravel

Gy.-Gr. silt with shale fragments

Gy.-Gr. shale fragments

Bottom of Boring

▭ - sample attempt
■ - sample recovered
▬ - grain size analysis performed, results tabulated elswhere in report
◫ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting

Job No. 2125

Start
Date 5/6/92 Time 12:30 pm
Finish
Date 5/14/92 Time

Stearns and Wheler

**Environmental
Engineers and Scientists**

Boring ID: MW-11

Drilling Company: Northstar

Driller:

S&W Inspector: S&W--TRB/TLH

Drill Rig Type: CME 75

Drilling Method: HSA-mud rotary

Weather: cloudy, 50

Elevation
91.48

X coord: 5468.564 feet
Y coord: 5476.841 feet

Groundwater Observations

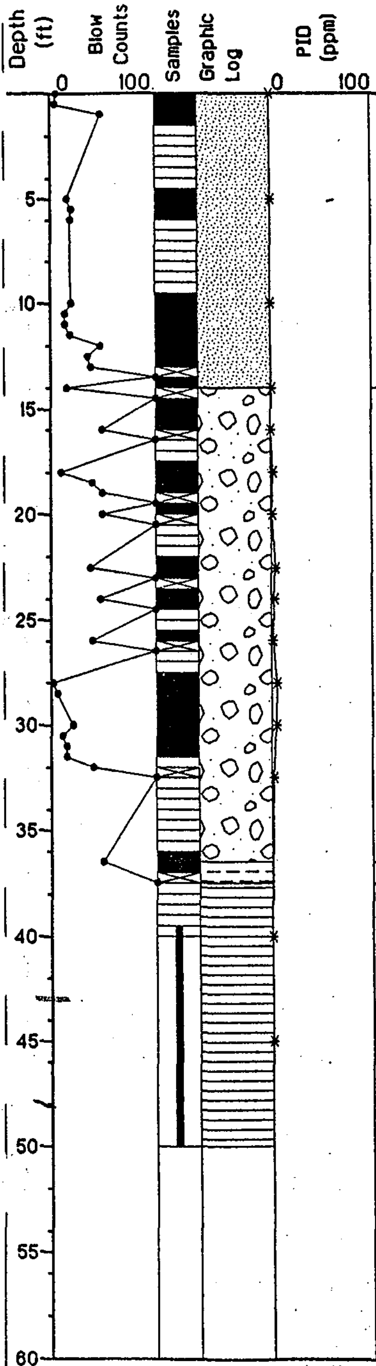
Time :

Date : 5/14/92

Casing Depth: 39.5 ft

Boring Depth:

Water Depth : 0.3 ft



Sample Description

Br. topsoil over silt, some F-C sand, little gravel

Tn. dry silt and F-C sand, some F-C gravel and cobbles

Dense, damp to dry Tn.-Rd. silt, some F-C sand and F-C gravel

Tn.-Rd. silt, little F-C gravel and cobbles

Gy. silt, little fine gravel, angular shale/limestone fragments

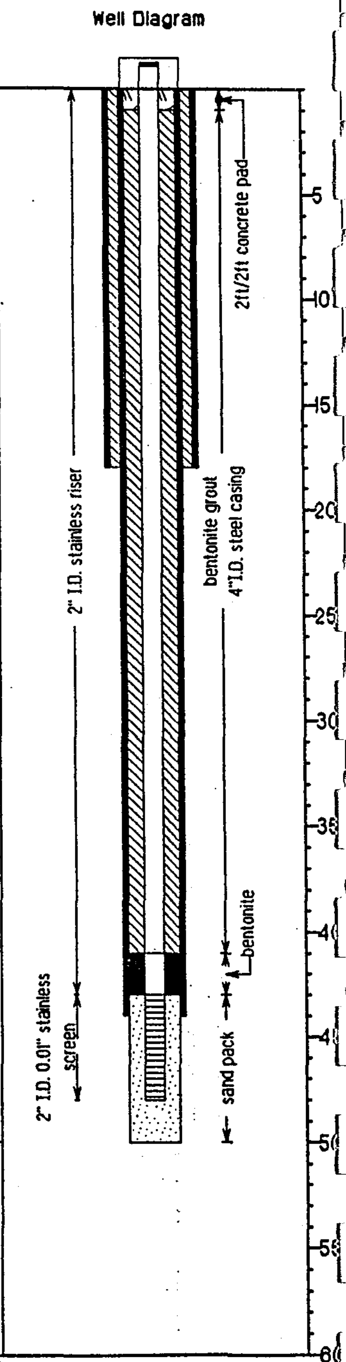
Dry Gy-Br silt, little fine gravel

Gy.-Br. silt and gravel, angular shale fragments

Gy.-Gr. shale with silt partings

Bottom of Boring

Well Diagram



☒ - sample attempt

■ - sample recovered

▬ - grain size analysis performed,results tabulated elswhere in report

☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 2125
Start
Date 5/6/92 Time 12:30 pm
Finish
Date 5/14/92 Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-11

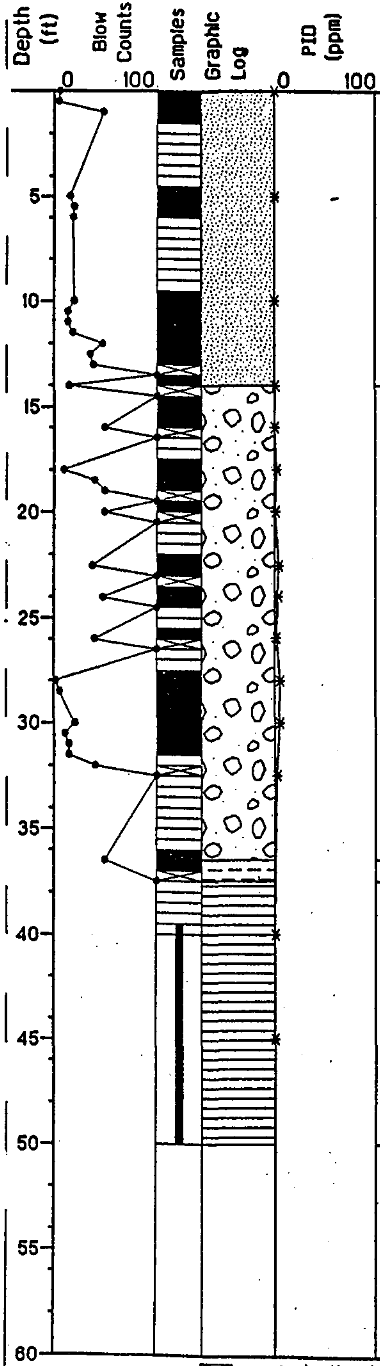
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TRB/TLH
Drill Rig Type: CME 75
Drilling Method: HSA-mud rotary

Weather: cloudy, 50

Elevation
91.48

X coord: 5468.564 feet
Y coord: 5476.841 feet

Groundwater Observations
Time :
Date : 5/14/92
Casing Depth: 39.5 ft
Boring Depth:
Water Depth : 0.3 ft



Sample Description

Br. topsoil over silt, some F-C sand, little gravel

Tn. dry silt and F-C sand, some F-C gravel and cobbles

Dense, damp to dry Tn.-Rd. silt, some F-C sand and F-C gravel

Tn.-Rd. silt, little F-C gravel and cobbles

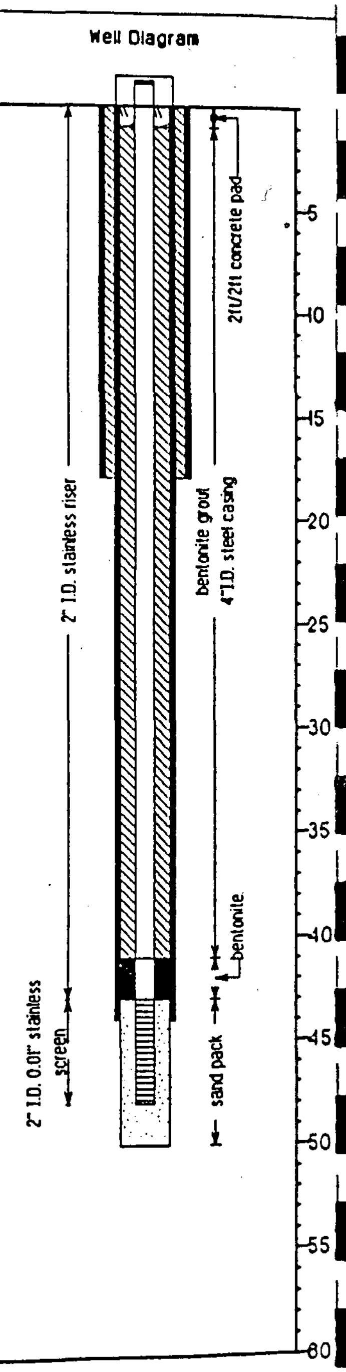
Gy. silt, little fine gravel, angular shale/limestone fragments

Dry Gy-Br silt, little fine gravel

Gy.-Br. silt and gravel, angular shale fragments

Gy.-Gr. shale with silt partings

Bottom of Boring



☒ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting

Job No. 2125

Start

Date 5/7/92 Time 7:30 am

Finish

Date 5/15/92 Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-10

Drilling Company: Northstar

Driller:

S&W Inspector: S&W--TRB/TLH

Drill Rig Type: CME 75

Drilling Method: HSA-mud rotary

Weather: sunny, 60 F

Elevation
97.51

X coord: 5377.000 feet
Y coord: 5464.816 feet

Groundwater Observations

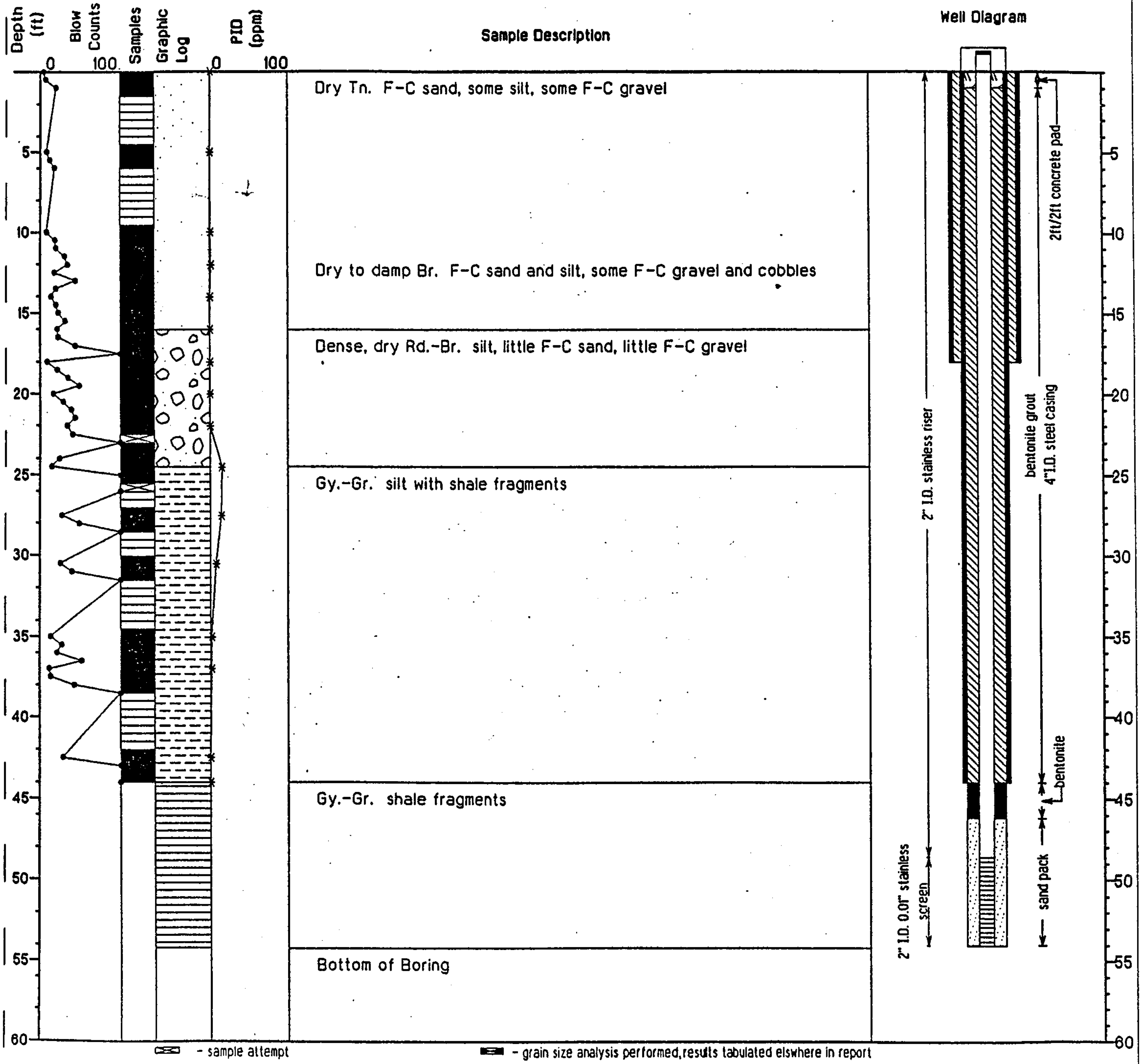
Time :

Date : 5/13/92

Casing Depth: 44 ft

Boring Depth:

Water Depth : .03 ft.



Depth (ft)	Sample Description
0	Dry Tn. F-C sand, some silt, some F-C gravel
	Dry to damp Br. F-C sand and silt, some F-C gravel and cobbles
16	Dense, dry Rd.-Br. silt, little F-C sand, little F-C gravel
24.5	Gy.-Gr. silt with shale fragments
44	Gy.-Gr. shale fragments
54.5	Bottom of Boring

▭ - sample attempt

▬ - sample recovered

▬ - grain size analysis performed,results tabulated elswhere in report

▭▭ - core attempt

Project Name: Accurate Die Casting
Job No. 2125
Start
Date 5/8/92 Time 8:45 am
Finish
Date Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-12

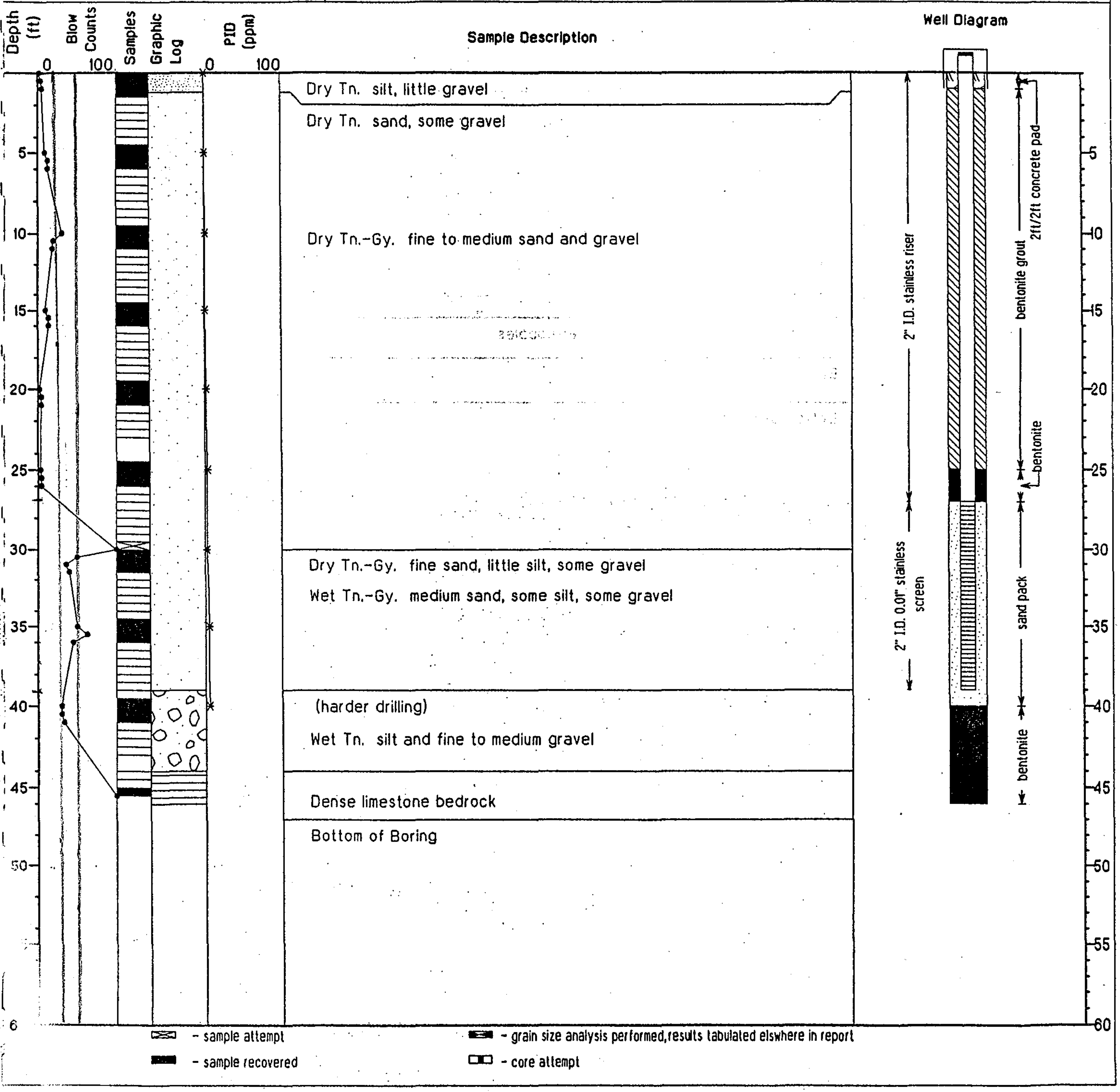
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TLH
Drill Rig Type: CME 75
Drilling Method: HSA-mud rotary

Weather: overcast, 40F

Elevation
93.62

X coord: 5618.891 feet
Y coord: 5873.762 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth :



Dry Tn. silt, little gravel

Dry Tn. sand, some gravel

Dry Tn.-Gy. fine to medium sand and gravel

Dry Tn.-Gy. fine sand, little silt, some gravel

Wet Tn.-Gy. medium sand, some silt, some gravel

(harder drilling)

Wet Tn. silt and fine to medium gravel

Dense limestone bedrock

Bottom of Boring

▨ - sample attempt
■ - sample recovered
■ - grain size analysis performed, results tabulated elswhere in report
☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 2125
Start
Date 5/7/92 Time 7:30 am
Finish
Date Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-13

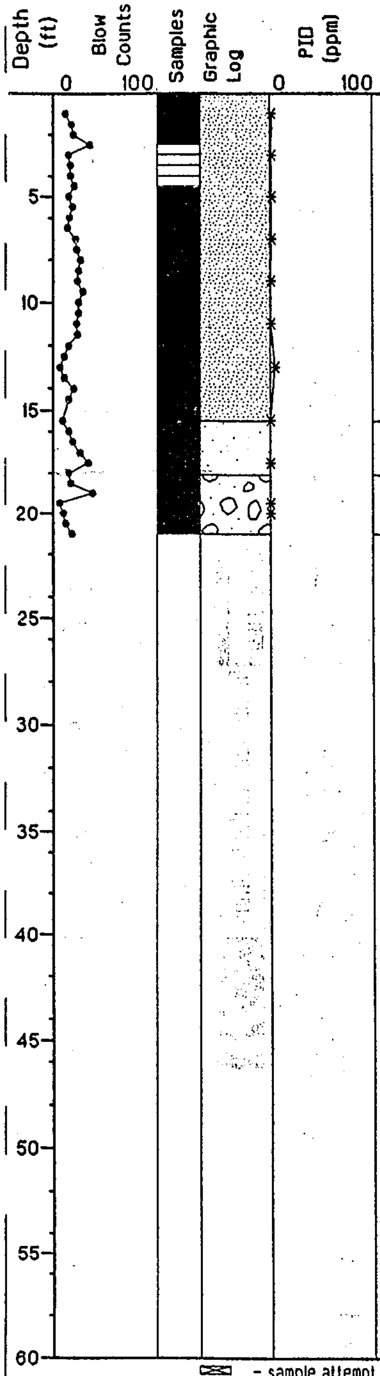
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TLH/TRB
Drill Rig Type: CME 75
Drilling Method: HSA-mud rotary

Weather: sunny, 60 F

Elevation
98.73

X coord: 5265.000 feet
Y coord: 5423.000 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth : dry



Sample Description

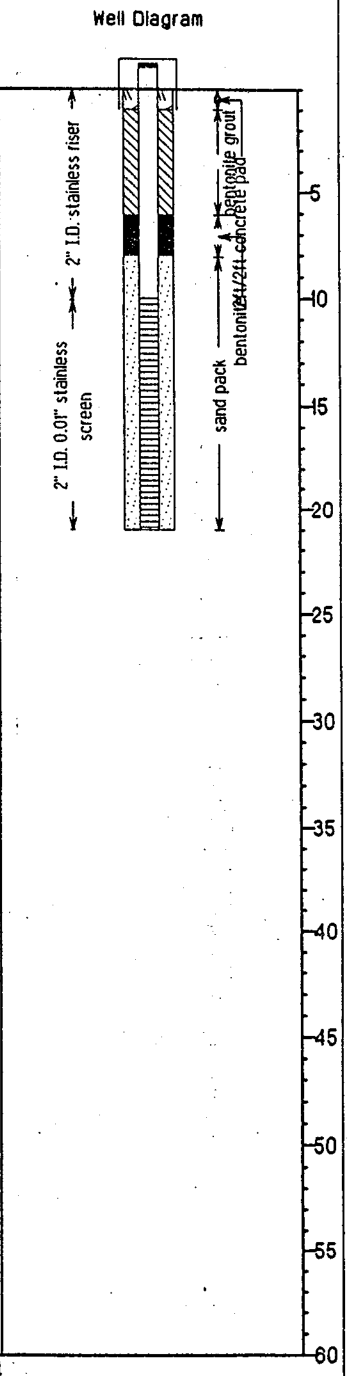
Tn. loose silt, some F-C sand, little gravel/cobbles

Similar material, some F-C gravel and cobbles

Dry, loose F-C sand and F-C gravel/cobbles

Br.-Rd. clay, little gravel/silt

Bottom of Boring



▭ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
▭▭ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Sheet 1 of 1

Project Name: Accurate Die Casting
Job No. 2125
Start
Date 5/14/92 Time 3:00 pm
Finish
Date Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-14

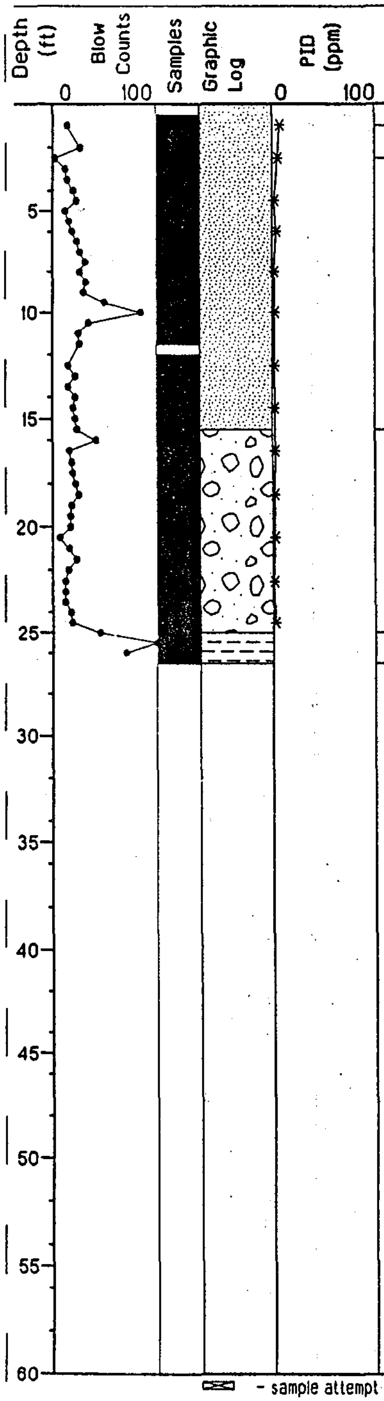
Drilling Company: Northstar
Driller:
S&W Inspector: S&W--TRB
Drill Rig Type: CME 75
Drilling Method: HSA-mud rotary

Weather: partly cloudy, 60F

Elevation
98.76

X coord: 5316.102 feet
Y coord: 5408.797 feet

Groundwater Observations
Time :
Date :
Casing Depth:
Boring Depth:
Water Depth :



Sample Description

Dry Br. silt and F-C sand, F-C gravel and cobbles

Dry Tn. loose F-C sand and silt, some F-C gravel and cobbles

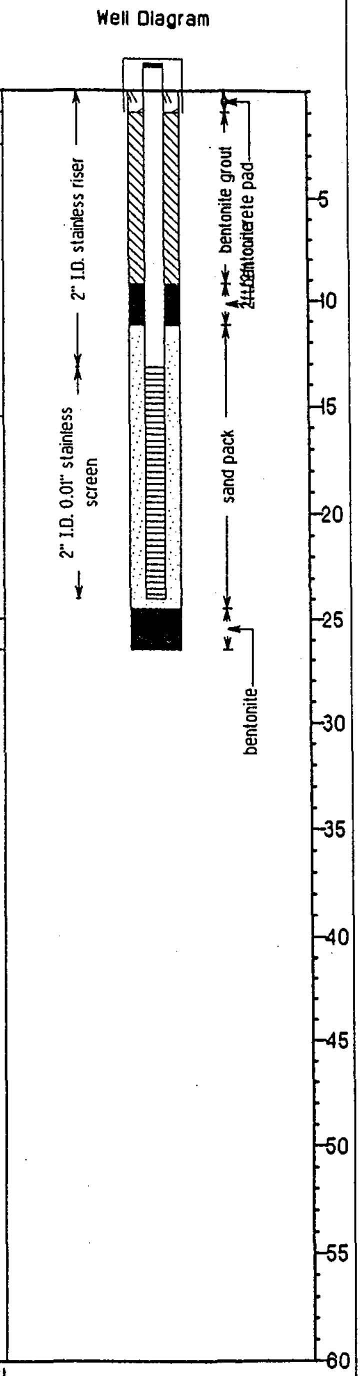
Denser

Damp Tn. F-C sand and silt, some F.-M. gravel, trace cobbles

Damp Rd. silt, little F-C sand, little F-C gravel, trace cobbles

Tn. silt and shale fragments, light/dark layers in silt, iron staining along apparent vertical partings

Bottom of Boring



▭ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
▭▭ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: ACCURATE

Job No. 2125

Start
Date 8/3/93 Time 0810
Finish
Date 8/4/93 Time 1200

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-15

Drilling Company: NORTHSTAR

Driller: JOE

S&W Inspector: S&W--SLG

Drill Rig Type: CME TRUCK RIG

Drilling Method: 4.25"/6.25 i.d. HSA

Weather: HIGH OVERCAST, 70 F

Elevation

X coord: 4943.151 feet
Y coord: 5138.164 feet

Groundwater Observations

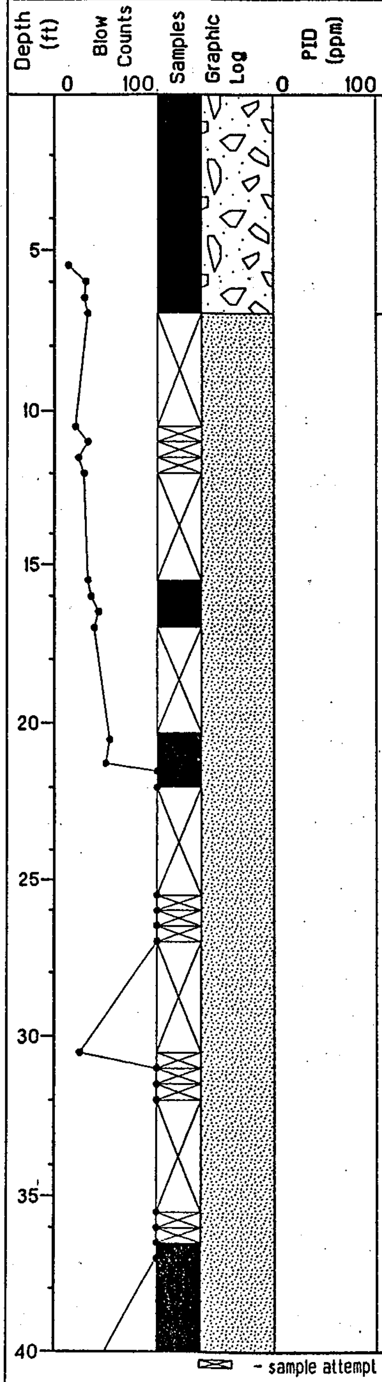
Time :

Date :

Casing Depth: 50

Boring Depth: 63

Water Depth :



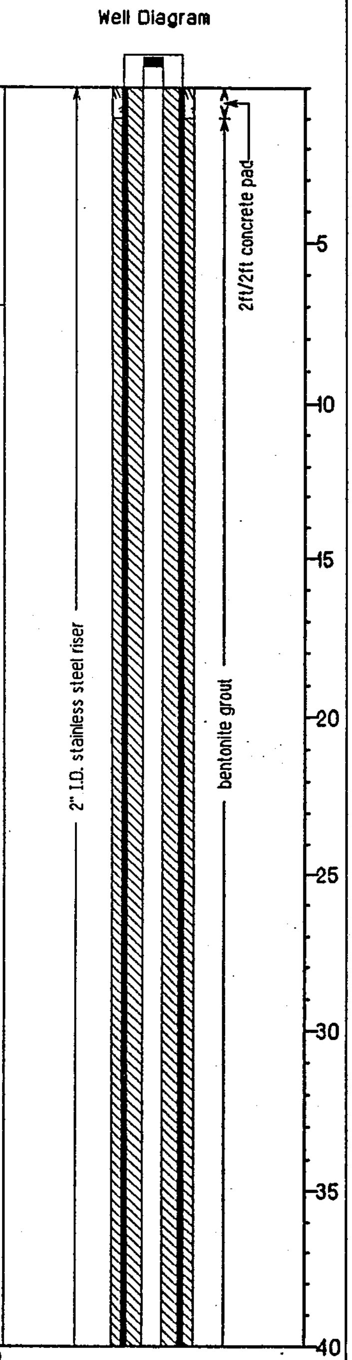
Sample Description

Dry, gray fill material

Red-brown, dry dense silty CLAY, some f-m gravel and sand

Dense, dry gray SILT, some f sand, some weathered shale fragments

Gray, dry SILT, some f-c sand and angular gravel, shale fragments



⊠ - sample attempt

■ - sample recovered

▬ - grain size analysis performed,results tabulated elswhere in report

☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: ACCURATE
Job No. 2125
Start
Date 8/3/93 Time 0810
Finish
Date 8/4/93 Time 1200

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-15

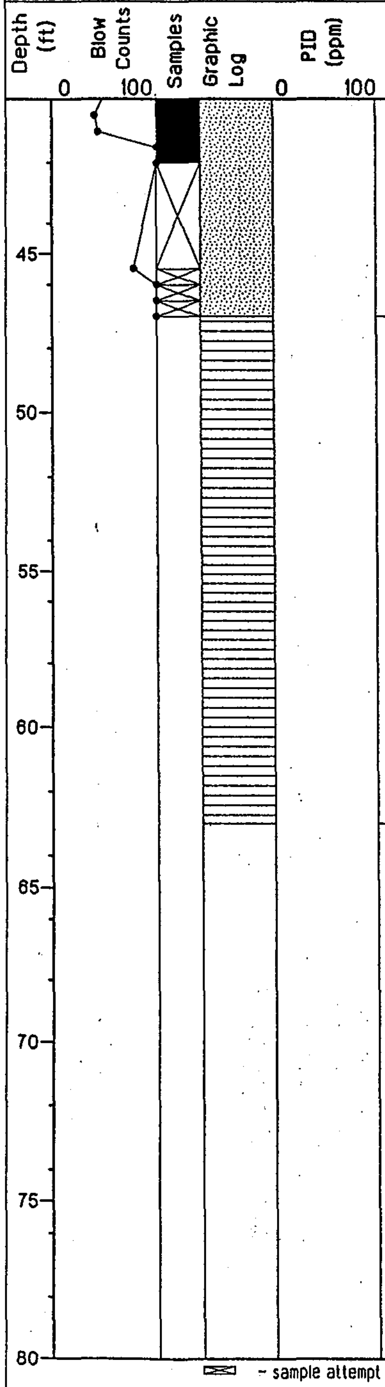
Drilling Company: NORTHSTAR
Driller: JOE
S&W Inspector: S&W--SLG
Drill Rig Type: CME TRUCK RIG
Drilling Method: 4.25"/6.25 i.d. HSA

Weather: HIGH OVERCAST, 70 F

Elevation

X coord: 4943.151 feet
Y coord: 5138.164 feet

Groundwater Observations
Time :
Date :
Casing Depth: 50
Boring Depth: 63
Water Depth :



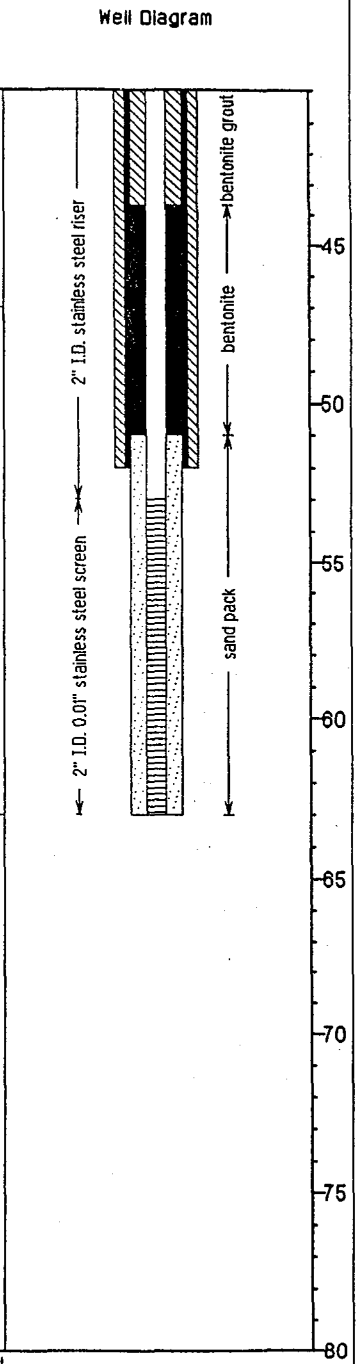
Sample Description

Wet, gray, dense, silty clay, some f sand and f-m gravel

Moist, gray shale bedrock (incompetent)

Gray-green shale bedrock (competent)

Bottom of Boring



▨ - sample attempt
■ - sample recovered
▨ - grain size analysis performed, results tabulated elswhere in report
☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: ACCURATE

Job No. 2125

Start
Date 8/5/93 Time 0700
Finish
Date 8/7/93 Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-16

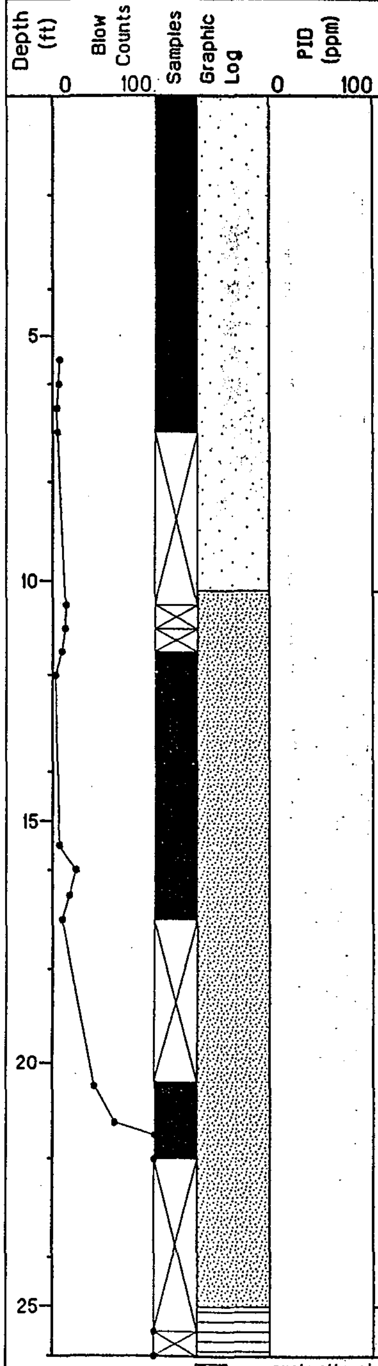
Drilling Company: NORTHSTAR
Driller: JOE ELY
S&W Inspector: S&W--SLG
Drill Rig Type: CME TRUCK RIG
Drilling Method: 4.25" i.d. HSA

Weather: PARTLY SUNNY, 75 F

Elevation

X coord: 4943.151 feet
Y coord: 5138.164 feet

Groundwater Observations
Time :
Date :
Casing Depth: 33.5
Boring Depth: 47.8
Water Depth :

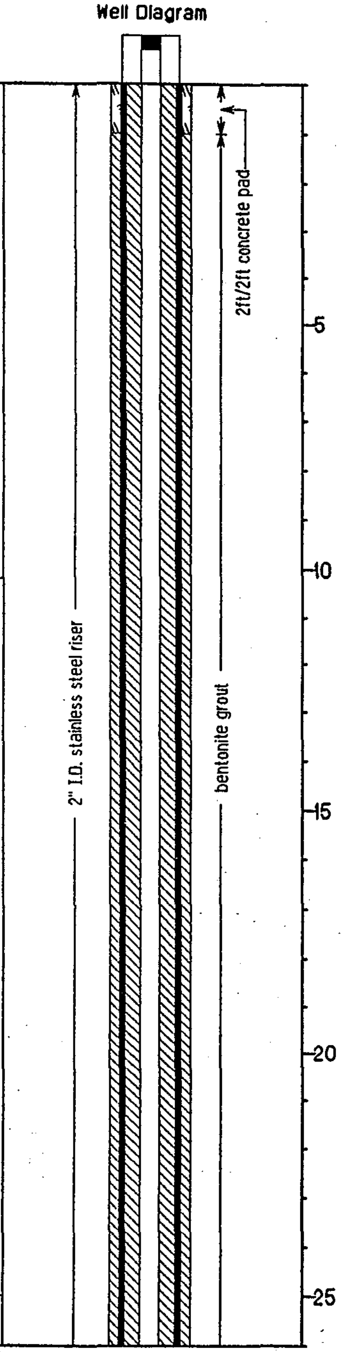


Sample Description

Moist, tan, SILT, some f sand, little to trace gravel

Dense, dry gray clayey SILT, some f-m-c sand and gravel, shale fragments, Fe stains

Gray shale bedrock (incompetent)



☒ - sample attempt
■ - sample recovered
■ - grain size analysis performed, results tabulated elswhere in report
☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

Project Name: ACCURATE

Job No. 2125

Start
Date 8/5/93 Time 0700
Finish
Date 8/7/93 Time

Stearns and Wheler

Environmental
Engineers and Scientists

Boring ID: MW-16

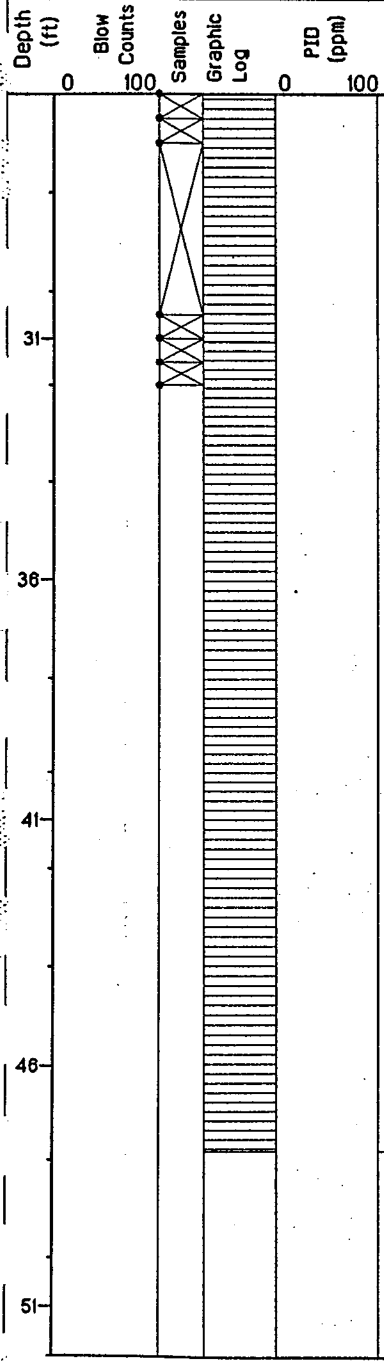
Drilling Company: NORTHSTAR
Driller: JOE ELY
S&W Inspector: S&W--SLG
Drill Rig Type: CME TRUCK RIG
Drilling Method: 4.25" i.d. HSA

Weather: PARTLY SUNNY, 75 F

Elevation

X coord:	4943.151	feet
Y coord:	5138.164	feet

Groundwater Observations
Time :
Date :
Casing Depth: 33.5
Boring Depth: 47.8
Water Depth :

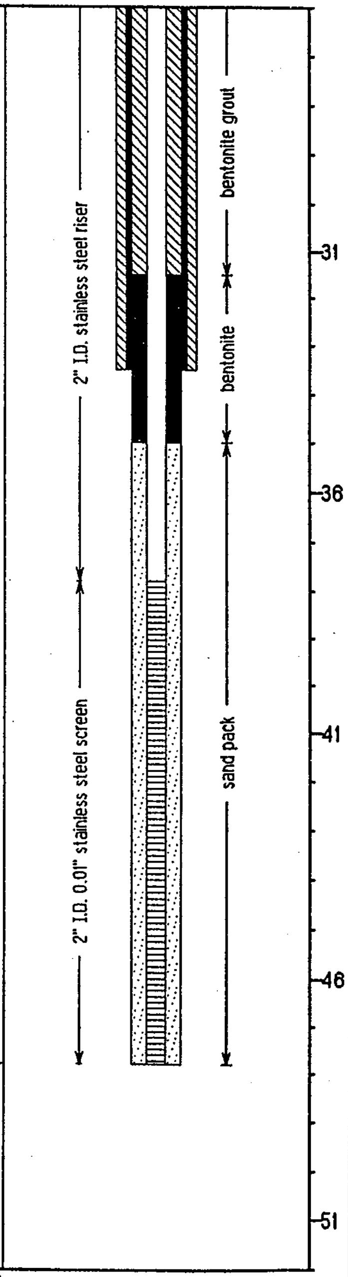


Sample Description

Gray shale bedrock (competent)

Bottom of Boring

Well Diagram



▭ - sample attempt
■ - sample recovered
▬ - grain size analysis performed,results tabulated elswhere in report
☐☐ - core attempt

Descriptions in log have been generalized for clarity of presentation. Significant changes in lithology have been noted. Original well logs are available from Stearns and Wheler files.

SUPPLEMENTAL SITE INVESTIGATION BORING LOGS

O'BRIEN & GERE ENGINEERS, INC.

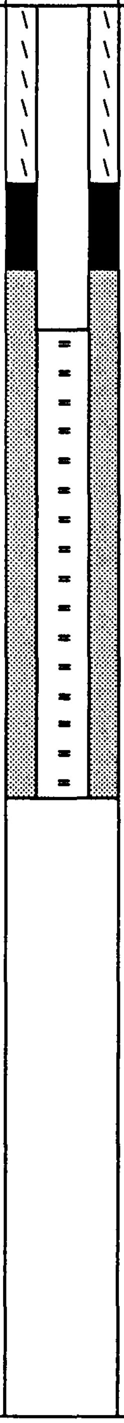
TEST BORING LOG

REPORT OF BORING
MW-17

Client: OBG Tehnical Services	Sampler: 2" Split Spoon	Page 1 of 1 Location:
Proj. Loc: Accurate Die Casting Fayetteville, N.Y.	Hammer: 140 lbs.	Start Date: 8/4/94
File No.: 2488.396.523	Fall: 30"	End Date: 8/4/94

Boring Company: OP-TECH
Foreman: Steve Laramee
OBG Geologist: DJ Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing	
										HNU (ppn)
0	1	0-2	1-1	2/2		Moist, brown, fine sand, little silt.				7.2
			2-1	(1245)						
1										
2										
3										
4										
5	2	5-7	3-5	2/2	10	Moist, gray brown, fine to medium SAND, coarse sand, little to trace of very fine rounded gravel.				11.4
			5-11	(1315)						
6										
7										
8										
9										
10	3	10-12	8-19	2/2	47	Wet, grayish purple till (SILT) with fine to medium gravel, rounded to subangular to 11.2', to similar till but brown, moist with some coarse GRAVEL and shale fragments to 12.				9.8
			28-27	(1340)						
11										
12	4	12-14	8-19	2/2	64	Moist to wet, gray green weathered SHALE.				38
			31-70	(1415)						
13										
14	5	14-16	5-45	2/	102	Moist, gray brown weathered SHALE.				56
			57-26	(1450)						
15										
16										
17										
18										
19										
20										
21										
22										
23										

Sand 14- 13.5 Bentonite 4.5- 3.0
2" 0.010-in slot screen 13.5- 5.5
Sandpack 13.5- 4.5 Cement/bentonite grout to grade with 4' dia. locking guard pipe.

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING PZ-1

Client: OBG Tehnical Services	**Sampler:** 2" Split Spoon		Page 1 of 2 **Location:** 50'E of MW-6
Proj. Loc: Accurate Die Casting	**Hammer:** 140 lbs.		
File No.: 2488.396.523	**Fall:** 30"		**Start Date:** 8/1/94 **End Date:** 8/2/94

Boring Company: OP-TECH
Foreman: Steve Laramee
OBG Geologist: DJ Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing	
										HNU (ppn)
0	1	0-2	2-6	2/2	12	Dry to damp, brown, very fine to fine SAND,		\ \		0.6
			6-6	(0920)		little silt, 1 pc gravel in tip of shoe.		\ \		
1								\ \		
								\ \		
2	2	2-4	2-5	2/1	18	Damp, dark brown SILT, little very fine		\ \		1.4
			13-16	(0925)		sand, shaly rock in shoe.		\ \		
3								\ \		
								\ \		
4	3	4-6	8-11	2/1.5	11	Dry, gray brown fine SAND and SILT, little		\ \		13.2
			36/0.5	(0945)		very fine gravel, loose, shaly rock in tip of		\ \		
5						shoe, cobbles in cutting.		\ \		
								\ \		
6	4	6-8	5-7	2/2	15	Dry to damp, fine to coarse SAND, little silt		\ \		10.2
			8-7	(1010)		and fine to medium gravel, cobbles in cutting.		\ \		
7								\ \		
								\ \		
8	5	8-10	4-7	2/2	14	Damp to moist, as above, trace very		\ \		28
			7-7	(1015)		coarse GRAVEL, cobbles in cutting.		\ \		
9								\ \		
								\ \		
10	6	10-12	5-6	2/2	13	Damp, brown gray medium SAND, some fine		\ \		5.8
			7-16	(1100)		sand, little coarse sand, trace fine broken		\ \		
11						gravel.		\ \		
								\ \		
12	7	12-14	6-9	2/2	15	Damp to moist, brown gray, medium to		\ \		11.4
			6-6	(1120)		coarse SAND,some fine sand, little medium to		\ \		
13						fine broken gravel.		\ \		
								\ \		
14	8	14-16	4-8	2/2	14	Moist, brown gray, fine SAND, some medium		\ \		10.6
			6-5	(1145)		sand, trace silt.		\ \		
15								\ \		
								\ \		
16	9	16-18	3-4	2/2	8	Moist to wet, gray brown fine SAND, some		\ \		6.8
			4-4	(1255)		medium sand, little to trace of coarse sand.		\ \		
17								■ ■		
								■ ■		
18	10	18-20	5-5	2/2	9	Moist, gray brown, fine to medium SAND,		■ ■		2.8
			4-4	(1320)		little to trace coarse sand, saturated		■ ■		
19						at 19.5'		■ ■		
								■ ■		
20	11	20-22	3-4	2/2	9	Wet, gray brown, fine to medium SAND,		▨ ▨		3.6
			5-6	(1350)		little coarse sand and silt, some fine gravel		▨ ▨		
21						21.5' to 22', brown clayey sand in tip of		▨ ▨		
						shoe.		▨ ▨		
22	12	22-24	5-5	2/2	12	Wet, gray brown, fine to medium SAND, little		▨ = ▨		3.2
			7/16	(1425)		fine to medium gravel, coarse sand, silt,		▨ = ▨		
23						trace to little clay red to brown clay in		▨ = ▨		
						tip of shoe at 24'		▨ = ▨		

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING
PZ-1

Client: OBG Tehnical Services
Proj. Loc: Accurate Die Casting
File No.: 2488.396.523

Sampler: 2" Split Spoon
Hammer: 140 lbs.
Fall: 30"

Page 2 of 2
Location: 50'E of MW-6
Start Date: 8/1/94
End Date: 8/2/94

Boring Company: OP-TECH
Foreman: Steve Larance
OBG Geologist: DJ Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing	
										HNU (ppn)
24	13	24-26	3-1	2/2	6	Wet, gray brown fine to medium SAND, some		=		3.8
			5-7	(1450)		silt, little coarse sand, trace to little		=		
25						clay		=		
								=		
26	14	26-28	9-19	2/2		Wet, as above to 26.5' to red to brown CLAY		=		3.8
			26-60/.5	(1705)		till, very fine gravel to 26.8 ft., to gray		=		
27						fine sand, some medium sand, silt, clay and		=		
						broken gravel shale fragments.		=		
28	15	28-30	27-55	2/2		Wet, brown gray fine SAND, some medium sand,		=		4
			60/.5	(1705)		little coarse sand, to 28.7' to gray green		=		
29						weathered shale to 29.2' to gray brown fine		=		
						sandy silt, some clay, to red silt and fine		=		
						to medium broken faceted rocks fragments.		=		
30	16	30-32	50/6	2/0		No recovery		=		
				(0815)				=		
31								=		
								=		
32	17	32-34	64/0	2/0		No recovery as above				–
33										
						B.O.B = 32'				–
34										
37										
38										
39										
40										
41										
42										
43										
44										
45										
46										
47										

2" 0.010-in screen 32- 22 Bentonite 19.6- 17.0
Sandpack 32- 19.6
Cement/ bentonite grout to grade with 4" dia locking guard pipe

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING PZ-2

Client: OBG Tehnical Services
Proj. Loc: Accurate Die Casting
Fayetteville
File No.: 2488.396.523

Sampler: 2" Split Spoon
Hammer: 140 lbs.
Fall: 30"

Page 1 of 2
Location: N50'W of MW-6
Start Date: 8/3/94
End Date: 8/4/94

Boring Company: OP-TECH
Foreman: Steve Laramee
OBG Geologist: DJ Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing	HNU (ppn)
0	1	0-2	2-3	2/2	6	Damp, medium brown, and fine SAND.		\ \		ND
			3-3	(0705)				\ \		
1								\ \		
								\ \		
2								\ \		
								\ \		
3								\ \		
								\ \		
4								\ \		
								\ \		
5	2	5-7	2-4	2/2	7	Moist, gray brown fine SAND, trace little silt.		\ \		0.6
			3-3	(0720)				\ \		
6								\ \		
								\ \		
7								\ \		
								\ \		
8								\ \		
								\ \		
9								\ \		
								\ \		
10	3	10-12	5-5	2/2	10	Moist to wet, gray brown, fine to coarse sand		\ \		1.2
			5-7	(0735)		and very fine to medium gravel.		\ \		
11								\ \		
								\ \		
12								\ \		
								\ \		
13								\ \		
								\ \		
14								\ \		
								\ \		
15	4	15-17	6-7	2/2	16	As above		\ \		0.6
			9-9	(0800)				\ \		
16								\ \		
								\ \		
17								\ \		
								\ \		
18								\ \		
								\ \		
19								\ \		
								\ \		
20	5	20-22	2-10	2/2	22	Wet, reddish brown clayey silt matrix till, some		\ \		0.8
			12-16	(0830)		fine to medium sand and very fine gravel.		\ \		
21								\ \		
								\ \		
22	6	22-24	8-22	2/2	53	Wet, gray brown till of claying SILT and fine		■ ■		3.2
			31-30	(0840)		sand, some medium sand broken shale		■ ■		
23						fragments to medium gravel.		■ ■		
								■ ■		

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING PZ-2

Client: OBG Tehnical Services
Proj. Loc: Accurate Die Casting
Fayetteville
File No.: 2488.396.523

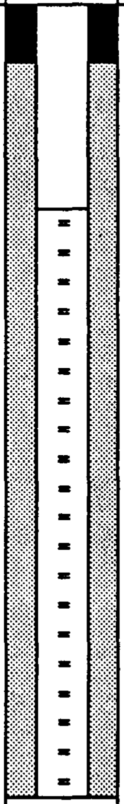
Sampler: 2" Split Spoon
Hammer: 140 lbs.
Fall: 30"

Page 2 of 2
Location: N50'W of MW-6
Start Date: 8/3/94
End Date: 8/4/94

Boring Company: OP-TECH
Foreman: Steve Laramee
OBG Geologist: DJ Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppn)
24	7	24-26	25-60/.2	0.5/0.5		As of previous page			3.8
				(90920)					
25									
26	8	26-28	52-85/.3	0.5/0.5		Wet, molted reddish brown to greenish gray brown claying SILT till with fine sand and fine rounded gravel, some little to medium sand and broken shale fragments with medium gravel, wet, as above.			7.8
				(1040)					
27									
28	9	28-30	55/0.2	0.5/0.5					5.8
				(1100)					
29									
30	10	30-32	98-135	1/1.0		Wet, brown, fine sandy till with fine rounded gravel, little medium sand, some silt.			3.6
				(1145)					
31									
32	11	32-34	21-30	2/	63	Wet, gray, very fine sandy till, fine rounded GRAVEL, solvent odor.			28
			33-19	(1305)					
33									
34	12	34-36	3-10	1.5/1.5	90	Wet, brown very fine SAND and SILT with broken shale fragments to 35.3 to gray broken shale fragments in fine sandy silt with fine rounded gravel, solvent odor, black, moist to wet, weathered shale.			22
			80-	(1330)					
35									
36	13	36-38	63-80/0.	0.7/0.7					3.8
				1550					
37									
38	14	38-40	53-36	2/	55	Black, weathered SHALE wet			1.8
			19-16	(1615)					
39									
						B.O.B = 40'			
40									
41									
42									
43									
44									
45									
46									
47									



2" 0.010-in slot screen 37.5- 27.5
Bentonite 25- 22
Sandpack 37.5-25
Cement/bentonite grout to grade with 4" dia locking guard pipe

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING MW-18

Client: Former Accurate Die Facility
Proj. Loc: Fayetteville, NY
File No.: 2488.396

Sampler: 2-inch Split Spoon
Hammer: 140 lbs
Fall: 30 inches

Page 1 of 2
Location:
Start Date: 5/3/96
End Date: 5/3/96

Boring Company: OP-Tech Environmental Services
Foreman: Todd Burnham
OBG Geologist: David Carnevale

Screen =
Riser ☐
\ **Grout**
▒ **Sand Pack**
▓ **Bentonite**

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm)
0 1		2	1-3 3-3	2/2	6	Grayish brown (5 YR 3/2), moist, soft, SILT, little fine sand and fine angular gravel		/ /	3.0
2 3		4	4-5 3-4	2/2	8	Pale brown (5 YR 5/2), saturated, loose, well sorted, fine sand, trace silt	Sand	▓ ▓	7.8
4 5		6	3-5 6-10	2/2	11	Pale brown (5 YR 5/2), saturated, medium dense, well sorted, fine SAND, trace silt and clay		▒ = ▒	6.0
6 7		8	12-12 13-20	2/2	25	Pale reddish brown (10 R 5/4), moist, medium dense, clayey SILT matrix TILL with fine rounded gravel, little to trace fine sand	Till	▒ = ▒	8.0
8 9		10	1-5 8-8	2/2	13	Dark yellowish brown (10 YR 4/2), saturated, medium dense, poorly sorted, fine to medium sand, some coarse sand and fine rounded gravel, little silt	Sand	▒ = ▒	6.6
10 11		12	6-10 13-17	2/2	23	Dark yellowish brown (10 YR 4/2), saturated, medium dense, poorly sorted, fine to medium sand, some coarse sand and fine rounded gravel little silt to 11.5 ft, to pale reddish brown '(10 R 5/4), moist, medium dense, clayey silt matrix till with fine rounded gravel		▒ = ▒	9.6
12 13		14	6-15 25-36	2/2	40	Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay	Till	▒ = ▒	7.6
14 15		16	15-37 42-45	2/2	79	Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay, very dense		▒ = ▒	8.2
16 17		18	15-38 35-42	2/2	73	Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay, very dense			8.0
18 19		20	35-44 80-92	2/2	124	Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay, extremely dense			6.2

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING MW-18

Client: Former Accurate Die Facility
Proj. Loc: Fayetteville, NY
File No.: 2488.396

Sampler: 2-inch Split Spoon
Hammer: 140 lbs
Fall: 30 inches

Page 2 of 2
Location:
Start Date: 5/3/96
End Date: 5/3/96

Boring Company: OP-Tech Environmental Services
Foreman: Todd Burnham
OBG Geologist: David Carnevale

Screen =
Riser ☐
\ **Grout**
▨ **Sand Pack**
■ **Bentonite**

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm)	
20		22	25-35	2/2	78	Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay, very dense with shale fragments			5.2	
			43-56							
21										
22		23	47-42	1/1		Pale brown (5 YR 5/2), damp to moist, dense, SILT matrix till, with fine subangular gravel, trace clay, very dense with shale fragment			9.8	
23						Bottom of boring at 23 ft				

Monitor Well Installation: 0.010-inch slotted PVC screen 15 to 5 ft; PVC Riser 5 to 0 ft; sand pack 15 to 4 ft; bentonite seal 4 to 2 ft; grout to the surface finished as a stick up well.

DJC:ers/div71/notes/mw18

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING MW-19

Client: Former Accurate Die Facility
Proj. Loc: Fayetteville, NY
File No.: 2488.396

Sampler: 2-inch Split Spoon
Hammer: 140 lbs
Fall: 30 inches

Page 1 of 2
Location:
Start Date: 5/6/96
End Date: 5/6/96

Boring Company: OP-Tech Environmental Services
Foreman: Todd Burnham
OBG Geologist: Chawn O'Dell

Screen = **Riser** ☐ \ **Grout** ▨ **Sand Pack** ■ **Bentonite**

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing	
									HNU (ppm)	
0	1	0-2	3-4	2/0.6	7	Dark yellowish brown (10 YR 4/2), moist, loose, SILT, some fine to very fine SAND, little clay, trace medium to coarse, subangular to subrounded sand			0.0	
			3-4							
1										
2	2	2-4	2-3	2/0.3	7	Dark yellowish brown (10 YR 4/2), moist, loose, SILT, some fine to very fine sand, little clay, trace medium to coarse, subangular to subrounded sand, medium subrounded gravel lodged in split spoon tip			0.0	
			4-3							
3										
4	3	4-6	4-4	2/1.3	9	Dark yellowish brown (10 YR 4/2), wet, loose, fine SAND, some medium sand, little silt to very fine sand, trace coarse, subrounded to subangular sand			0.0	
			5-5							
5										
6	4	6-8	8-12	2/1.7	36	Pale brown (5 YR 5/2), saturated dense, subangular to angular, coarse SAND, some medium sand, little fine to medium angular gravel, trace silt to fine sand			1.1	
			24-14							
7										
8	5	8-10	12-17	2/1.8	35	Pale brown (5 YR 5/2), moist, very hard, CLAY, some silt, little fine to medium, subangular gravel, trace fine to coarse subangular sand	Till	8	0.9	
			18-22							
9										
10	6	10-12	22-41	2/1.6	85	Grayish red (10 YR 4/2), damp, extremely hard, CLAY, some silt, little fine to medium, subrounded to subangular gravel, trace fine to coarse sand			0.4	
			44-38							
11										
12	7	12-14	7-14	2/1.5	36	Grayish red (10 YR 4/2), moist, very hard, CLAY, some silt, little subangular to subrounded fine gravel, trace fine to coarse sand			0.3	
			22-21							
13										
14	8	14-16	14-25	2/1.0	47	Grayish red (10 YR 4/2), moist, very hard, CLAY, some silt, little subangular to angular, fine to medium gravel, trace fine to coarse sand			0.2	
			22-23							
15										
16	9	16-18	36-35	2/0.9	60	Grayish red (10 YR 4/2), moist, extremely hard, CLAY, some silt, little fine to medium, subangular to angular gravel, trace fine to coarse sand			0.0	
			25-40							
17										
18	10	18-20	10-20	2/0.0	46	No recovery			NA	
			26-19							
19										

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	REPORT OF BORING MW-19

Client: Former Accurate Die Facility
Proj. Loc: Fayetteville, NY
File No.: 2488.396

Sampler: 2-inch Split Spoon
Hammer: 140 lbs
Fall: 30 inches

Page 2 of 2
Location:
Start Date: 5/6/96
End Date: 5/6/96

Boring Company: OP-Tech Environmental Services
Foreman: Todd Burnham
OBG Geologist: Chawn O'Dell

Screen	=	\	Grout
Riser	☐	▨	Sand Pack
		■	Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm)	
20	11	20-22	22-15	2/	26	No recovery			NA	
			11-20							
21										
22	12	22-24	14-50/	0.8/0.5	50(+)	Olive gray (5 Y 4/1), damp, very dense, fine angular, gravel, little medium, angular gravel, trace fine to coarse sand (weather bedrock) Augered to 23 ft and set the monitor well			0.0	
			0.3							
23										

Monitor well installation: 0.010-inch slotted PVC screen: 23 to 13 ft; PVC riser 13 to 0 ft; Sand Pack: 23 to 11 ft; Bentonite Seal: 11 to 9 ft; Grout to the surface, finished as a stick up well.

O'BRIEN & GERE ENGINEERS, ... C.	TEST BORING LOG	REPORT OF BORING MW-20
Client: Former Accurate Die Facility	**Sampler:** 2-inch Split Spoon	**Page 1 of 1**
		Location:
Proj. Loc: Fayetteville, NY	**Hammer:** 140 lbs	**Start Date:** 5/6/96
File No.: 2488.651	**Fall:** 30 inches	**End Date:** 1/20/97

Boring Company: OP-Tech Environmental Services
Foreman: Todd Burnham
OBG Geologist: Chawn O'Dell

Screen = | Riser ☐ | \ Grout | ▨ Sand Pack | ■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing HNU (ppm)
0	1	0-2	1-1	2/2	3	Dark yellowish brown (10 YR 4/2), moist, very loose, fine to medium SAND, little fine sand to silt		\ \	0.0
			2-3					\ \	
1								\ \	
								\ \	
2	2	2-4	3-2	2/2	4	Pale brown (5 YR 5/2), saturated, loose, SILT, some fine angular gravel, little clay, trace fine to coarse sand		\ \	0.0
			2-4					■ ■	
3								■ ■	
								■ ■	
4	3	4-6	10-12	2/1.6	27	Grayish red (10 YR 4/2), moist, hard, CLAY, some silt, little subrounded to subangular, fine to medium gravel, trace fine to coarse sand		■ ■	0.0
			15-14					▨ ▨	
5								▨ ▨	
								▨ ▨	
								▨ = ▨	
6	4	6-8	14-12	2/1.4	24	Grayish red (10 YR 4/2), wet, medium, dense, medium SAND some fine subrounded to subangular, gravel, little clay, little silt, trace fine to medium sand		▨ = ▨	0.2
			12-12					▨ = ▨	
7								▨ = ▨	
								▨ = ▨	
								▨ = ▨	
8	5	8-10	6-6	2/1.3	14	Grayish red (10 YR 4/2), wet, medium dense, fine to medium SAND, some clay, little subrounded to subangular fine gravel, trace coarse sand		▨ = ▨	0.1
			8-9					▨ = ▨	
9								▨ = ▨	
								▨ = ▨	
								▨ = ▨	
10	6	10-12	7-7	2/1.5	16	Grayish red (10 YR 4/2) saturated medium dense fine to medium SAND, some CLAY, little fine subangular to angular gravel, trace coarse sand to 11 ft; then grayish red (10 YR 4/2), hard, damp, CLAY, some silt, little fine to medium, subrounded to subangular gravel, trace fine to coarse sand		▨ = ▨	0.0
			9-8						
11									
12									
13									
14									
15	7	15-17	17-50/	0.7/0.0	50(+)	No recovery			NA
			0.2						
16									
17									
18									
19									
20	8	20-22	22-11	1.8/1.1	21	Olive gray (5 Y 4/1) damp, medium dense, fine angular, GRAVEL, some silt, little medium angular gravel, trace fine to coarse sand (weathered bedrock)			0.0
			10-50/						
21			0.3						

Monitor well installation: 0.010 inch slotted PVC screen: 12 to 7 ft; PVC Riser 7 to 0 ft; Sand Pack 12 to 5 ft; Bentonite seal 5 to 3 ft; Grout to surface. Finished as a stickup well.

Note: Original MW-20 abandoned and replaced on 1/20/97.

CPO:ers/div71/notes/mw20-REV1

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

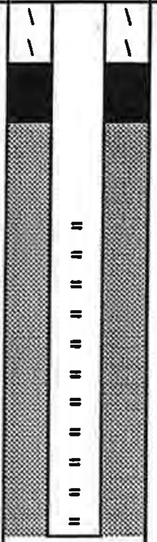
REPORT OF BORING MW-21

Client:	Former Accurate Die	**Sampler:**	2-inch Split Barrel Sampler	**Page 1 of 1**	
Proj. Loc:	Fayetteville, NY	**Hammer:**	140 lbs	**Location:**	
				Start Date:	1/20/97
File No.:	2488.651	**Fall:**	30 inches	**End Date:**	1/20/97

Boring Company: Parratt-Wolff
Foreman: Arnold Chappel
OBG Geologist: Chawn O'Dell

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)
1						See MW-19 boring log for additional geologic description			
2									
3									
4									
5									
6									
7	1	7-9	12-15 23-27	2'/2'	38	Pale brown (5YR 5/2), saturated, dense, medium to coarse SAND, some fine sand, little silt to approximately 8 ft; then pale brown (5YR 5/2), damp, hard clay, some silt, little fine to medium subangular gravel, trace subangular to subrounded coarse sand.			
8									
9									
10									



Monitor well installation: 0.010 inch slotted PVC screen: 9 to 4 ft; PVC Riser 4 to 0 ft; Sand Pack 9 to 2.5 ft; Bentonite seal 2.5 to 1.5 ft; Grout to surface. Finished as a stickup well.

CPO:ers/div71/MW-21

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING MW-23

Client: OBG Technical Services
Former Accurate Die Casting
Proj. Loc: Fayetteville, New York
File No.: 2488.396

Sampler: 2-inch Split Spoon
Hammer: 140 lb
Fall: 30-inch

Page 1 of 1
Location:
Start Date: 4/7/97
End Date: 4/7/97

Boring Company: Parratt-Wolff, Inc.
Foreman: Glenn Lansing
OBG Geologist: David J. Carnevale

Screen =
Riser ☐
\ Grout
▨ Sand Pack
■ Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)	
37		38.7	NA	1.7/1.7	NA	Pale reddish brown (10R 5/4), damp, dense, fine sand and silt matrix TILL with fine to medium angular gravel				
42.5		43	NA	0.5/0.5	NA	Olive gray (5Y 4/1), damp, dense, very fine sand and silt matrix TILL with fine angular gravel				
44		44.2	NA	0.2/0.2	NA	Olive gray (5Y 4/1), damp, extremely dense, very fine sand and silt matrix TILL with fine angular gravel				
49.5		50.0	NA	0.5/0.5	NA	Olive gray (5Y 4/1), damp, dense, very fine sand and silt matrix TILL with fine angular gravel				
56		58	NA	2/2	NA	Olive gray (5Y 4/1), damp, dense, very fine sand and silt matrix TILL with fine to medium angular gravel				
						Encountered bedrock at approximately 60.5 ft				

DJC:ers/div71/4_n&d/mw-23

O'BRIEN & GERE ENGINEERS, INC.

TEST BORING LOG

REPORT OF BORING MW-24

Client: OBG Technical Services

Proj. Loc: Former Accurate Die

File No.: 2488.731

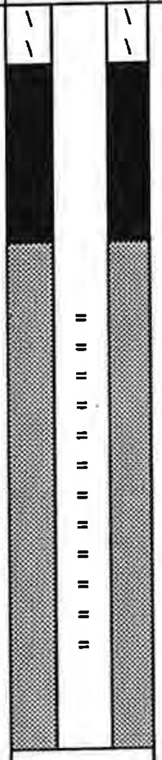
Drill Method: Hollow Stem Auger
Sampler: 2-inch Split Spoon
Hammer: 140 lbs
Fall: 30 inches

Page 1 of 1
Location:

Start Date: 11/5/98
End Date: 11/5/98

Boring Company: Parratt-Wolff
Foreman: Mark Eaves
Drill Rig: CME-55
OBG Geologist: Chawn O'Dell

Screen = **Riser** ☐ **Steel** // \ **Grout** ▨ **Sand Pack** ■ **Bentonite**

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)
0	1	0-2	2-14	2.0/1.5	22	Dark reddish brown (10R 3/4), damp, hard, SILT, some clay, little fine to medium gravel (subangular), trace fine to coarse sand.			1.2
			8-14						
1									
2	2	2-4	20-14	2.0/1.8	26	Dark reddish brown (10R 3/4), damp, hard, SILT, some clay, little fine to medium gravel (subangular), trace fine to coarse sand, to approx. 3.5 ft, dark yellowish brown (10YR 4/2), saturated, medium dense, fine to medium SAND, little coarse sand, trace silt			2.0
			12-12						
3									
4	3	4-6	6-6	2.0/1.5	13	Dark yellowish brown (10YR 4/2), saturated, medium dense, fine SAND, some medium sand, little coarse sand.			40
			7-5						
5									
6	4	6-8	5-9	2.0/1.5	16	Dark yellowish brown (10YR 4/2), saturated, medium dense, fine to coarse SAND, little fine to medium gravel (subangular to subrounded), SILT/CLAY, some fine to medium gravel encountered approx. 7.0 to 7.4 ft			48
			14-19						
7									
8	5	8-10	47-50/	2.0/0.0	50+	No Recovery			
			0.2						
9									
10	6	10-10.8	27-50/	0.8/0.4	50+	Grayish red (10YR 4/2), damp, extremely hard, CLAY, some silt, little fine to medium gravel (subangular to angular), trace fine to coarse sand.			NA
			0.3						

Notes: Well Installation: 2 inch x 0.010 inch PVC Screen: 9.0 to 4.0 ft Grout: 1.0 to 0.0 ft
Sand Pack: 10.8 to 3.0 ft
Bentonite Seal: 3.0 to 1.0 ft Finished as a stick-up well.

CPO:ers/div58/4_notes/mw-24

2024 SRI BORING LOGS AND

WELL COMPLETION LOGS

Date 2-12-2024

RAMBOLL

SOIL BORING LOG

BORING ID: MW-25
INSPECTOR: VCF

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing PID (ppm)	Field Testing Other
1	0	4	4/0.3	Poor recovery - Brown, damp, loose, loamy SILT, trace organics, trace Sand	SILT	0	
2	4	8	4/0	No recovery	N/A	0	
3	8	12	4/4	8-12 - L brown - yellowish, mod. dense, wet, mt. SAND w/ interbedded lenses of CM. Sand, little Silt	Sand	0	
4	12	16	4/4	12-13 - SAA	Sand	0	
				13-14.8 - L. grey to moderate L Brown, mod. dense, SILT, some clay, little Sand, moderately plastic, moist, some gravel	Silt~ Till	0	
				14.8-16 - Rusty Red/ Moderate Brown, very dense, moist, TILL, well graded, Silt and clay, Some sand and gravel.	Till	0	
~~5~~	~~16~~	~~19~~		X			
				Stick up - 2.56"			
				Bottom - 16.21'			

NOTES: furthest back near stream valley. Till ~ 14.5 ft.
Well → 10 ft screen, 14-4 ft bgs
Sand 14-3 ft bgs; chips 3-0 ft
WL → 7.72 below pvc

PAGE: ____ of ____

2-12-2024

RAMBOLL

SOIL BORING LOG

BORING ID: MW-26
INSPECTOR: VCF

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ppm)	Other
1	0	4	4/2.8	0-0.3 - Brown, damp, loose, loamy, SILT, trace organics, trace Sand.	Silt	0	
				0.3-1.2 - L Brown, moist, m.d dense, SILT, some f. Sand, trace m. gravel, trace roots.	Silt	0	
				1.2-2.8 - Medium Grey - L Brown, damp, dense, SILT, and m.f. gravel, little Sand.	Silt	0	
2	4	8	4/2	4-5.6 - Grey, wet, m. dense, c.m. SAND, some silt, little m.f. gravel	Sand	0	
				5.6-6 - D. grey-Brown, m. dense, wet, c.m. SAND, some clay, little silt, trace m.f. gravel.	Sand	0	
3	8	12	4/3.8	8-9 - Rusty red / moderate Brown, ~~Clay~~ moist, CLAY, some silt, plastic.	Clay	0	
				9-11.8 - Rust red / moderate brown, wet, well graded ~~Till~~ TILL; silt and Clay and some Sand and gravel	Till	0	
				Till at 9 ft			
				Stick up - 2.62' DTB - 11.5'			

NOTES: Closest to residences
well → 5 ft screen → 9-4 ft bgs
Sand 9-3 ft bgs; Chips 3-0 ft bgs
WL - 9.55 ft below TOC

PAGE: ____ of ____

Date: 2-12-2024

RAMBOLL

SOIL BORING LOG

BORING ID: MW-27
INSPECTOR: VCF

Sample No.	Sample Start Depth (ft.)	Sample End Depth (ft.)	Penetration / Recovery	MATERIAL DESCRIPTION	General Stratum Descrip.	Field Testing	
						PID (ppm)	Other
1	0	4	2.4/4	0-0.2 - Asphalt pavement	Asphalt	0	
				0.2-2.4 - Light/Pale brown-yellowish, dry, medium dense, SILT, some angular gravel, trace sand.	Silty Fill	0.3	
2	4	8	3.4/4	4-6.8 - SAA	Silty fill	7.6	
				6.8-7.4 - Moderate Brown / Rust Red, Very dense, damp, well graded, TILL; silt and clay, some gravel, some sand, Petroleum odor.	Till	138	
3	8	12	2.4/4	8-9.7 - SAA w/o petroleum odor	Till	9.4	
				9.7-10.1 - Moderate-Light Brown, moist, ~~well sorted~~, SAND, little silt, trace gravel.	SAND Lense	2.1	
				10.1-10.4 - Till, same as above	Till	0	

NOTES: Near facility, old tank area
Well → 5 ft screen, 4-9 ft bgs.
Sand 3-9 ft bgs; Chips 3-0 ft bgs

PAGE: ____ of ____

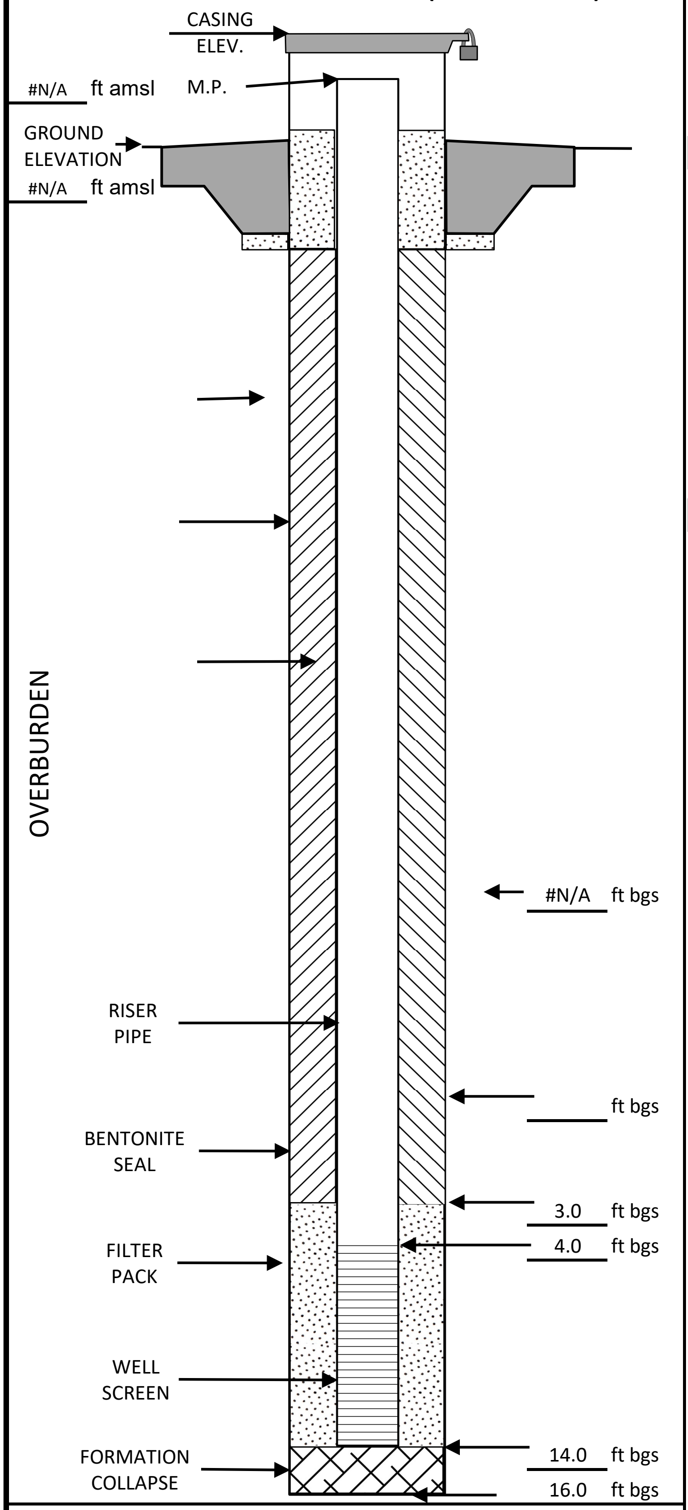
RAMBOLL

WELL COMPLETION LOG

Well ID: MW-25
Northing: 1106069.06
Easting: 975743.390

Site Name: Accurate Die
Site Location: Faytteville, NY
Project #: 1940100888
Client: Ramboll
Drilling Subcontractor: Parratt-Wolff, Inc.
Installation Inspector: Lee Penrod
Date Drilled: 2/12/2024
Date Installed: 2/12/2024
Date Developed: 2/21/2024

WELL CONSTRUCTION DETAIL (NOT TO SCALE)



ft bgs - Feet Below Ground Surface
in. - Inches
M.P. - Measuring Point
ft bmp - Feet Below Measuring Point
PVC - Polyvinyl Chloride

INSPECTION NOTES

Type of Well: Monitoring Well
Static Water Level: 7.72 ft bmp
Measuring Point: PVC

Borehole Advancement

Overburden

Method 1: Direct Push **Diameter:** 2.5" OD
Interval 1: 0.0 to 16.2 ft bgs
Method 2: #N/A **Diameter:** #N/A
Interval 2: #N/A to #N/A ft bgs
P. Casing: #N/A **Interval:** #N/A to #N/A ft bgs
Sampling Method:
Type: DT22 Macrocore **Diameter:** 1.375"
Weight: 140 lbs. **Fall:** 30 "
Interval: 0.0 to 16.2 ft bgs

Bedrock

Method: #N/A Diameter: #N/A in.
Interval: #N/A to #N/A ft bgs
P. Casing 2: #N/A Interval: #N/A to #N/A ft bgs
P. Casing 3: #N/A Interval: #N/A to #N/A ft bgs
Sampling Method:
Type: #N/A Diameter: #N/A in.
Interval: #N/A to #N/A ft bgs

Well Construction

Riser Pipe
Material: PVC **Diameter:** 1" ID
Interval: 4 to 0 ft bgs **Joint:** Flush

Screen:
Material: PVC **Diameter:** 1" ID
Slot Size: 0.020" **Joint:** Flush
Interval: 14 to 4 ft bgs

Sump:
Material: #N/A **Diameter:** #N/A
Interval: #N/A to #N/A ft bgs **Joint:** Flush

Filter Pack:
Type: US Silica Filpro Sand **Grade:** #1
Interval: 14 to 3 ft bgs

Seal(s):
Type: Bentonite Seal **Interval:** 3.0 to 0.0 ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs

Surface Completion:
Type: #N/A

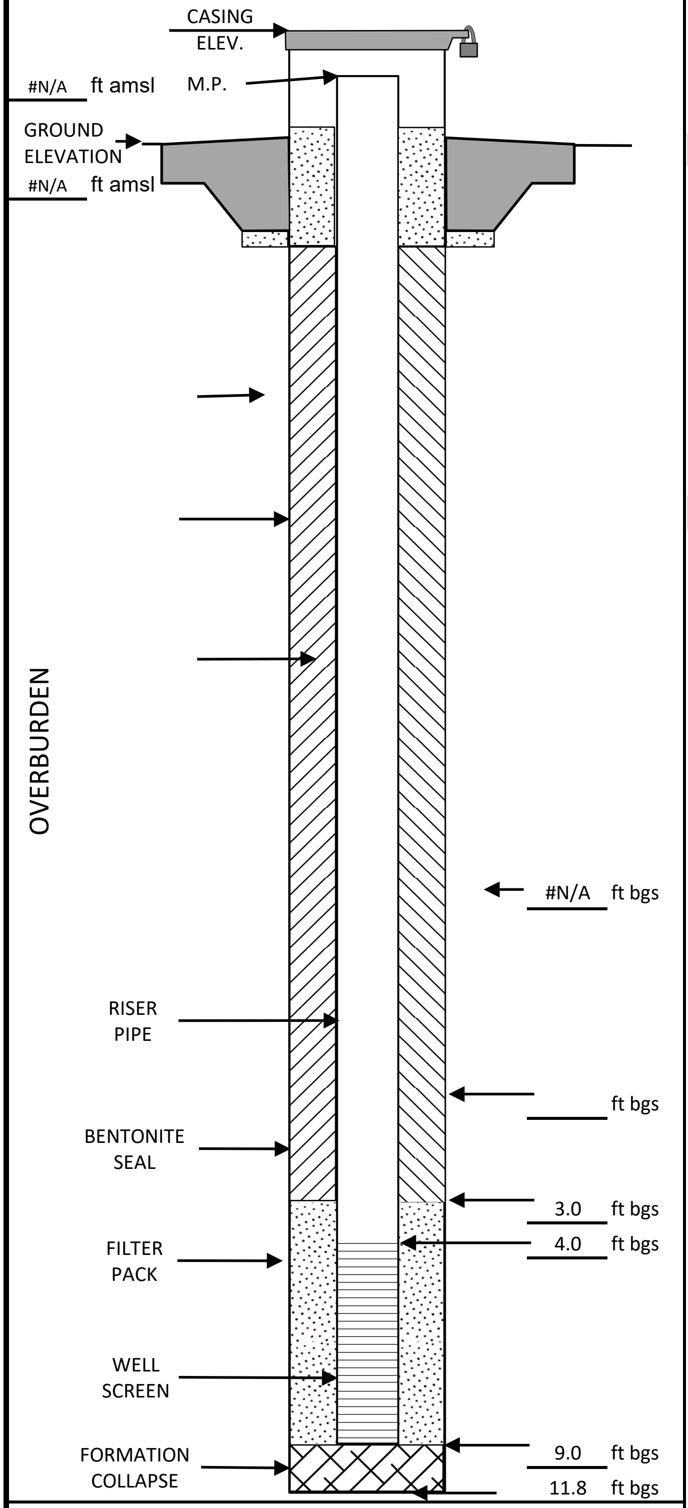
Additional Notes:
Elevations expressed in feet above the NAVD88; Horizontal coordinates expressed in NAD83 Missouri Central State Plane feet.

WELL COMPLETION LOG

Well ID: MW-26
Northing: 1105848.33
Easting: 975664.910

Site Name: Accurate Die
Site Location: Faytteville, NY
Project #: 1940100888
Client: Ramboll
Drilling Subcontractor: Parratt-Wolff, Inc.
Installation Inspector: Lee Penrod
Date Drilled: 2/12/2024
Date Installed: 2/12/2024
Date Developed: 2/21/2024

WELL CONSTRUCTION DETAIL (NOT TO SCALE)



ft bgs - Feet Below Ground Surface
in. - Inches
M.P. - Measuring Point
ft bmp - Feet Below Measuring Point
PVC - Polyvinyl Chloride

INSPECTION NOTES

Type of Well: Monitoring Well
Static Water Level: 9.55 ft bmp
Measuring Point: PVC

Borehole Advancement

Overburden

Method 1: Direct Push **Diameter:** 2.5" OD
Interval 1: 0.0 to 11.8 ft bgs
Method 2: #N/A **Diameter:** #N/A
Interval 2: #N/A to #N/A ft bgs
P. Casing: #N/A **Interval:** #N/A to #N/A ft bgs
Sampling Method:
Type: DT22 Macrocore **Diameter:** 1.375"
Weight: 140 lbs. **Fall:** 30 "
Interval: 0.0 to 11.8 ft bgs

Bedrock

Method: #N/A Diameter: #N/A in.
Interval: #N/A to #N/A ft bgs
P. Casing 2: #N/A Interval: #N/A to #N/A ft bgs
P. Casing 3: #N/A Interval: #N/A to #N/A ft bgs
Sampling Method:
Type: #N/A Diameter: #N/A in.
Interval: #N/A to #N/A ft bgs

Well Construction

Riser Pipe

Material: PVC **Diameter:** 1" ID
Interval: 4 to 0 ft bgs **Joint:** Flush

Screen:

Material: PVC **Diameter:** 1" ID
Slot Size: 0.020" **Joint:** Flush
Interval: 9 to 4 ft bgs

Sump:

Material: #N/A **Diameter:** #N/A
Interval: #N/A to #N/A ft bgs **Joint:** Flush

Filter Pack:

Type: US Silica Filpro Sand **Grade:** #1
Interval: 9 to 3 ft bgs

Seal(s):

Type: Bentonite Seal **Interval:** 3.0 to 0.0 ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs
Type: #N/A **Interval:** #N/A to #N/A ft bgs

Surface Completion:

Type: #N/A

Additional Notes:

Elevations expressed in feet above the NAVD88; Horizontal coordinates expressed in NAD83 Missouri Central State Plane feet.

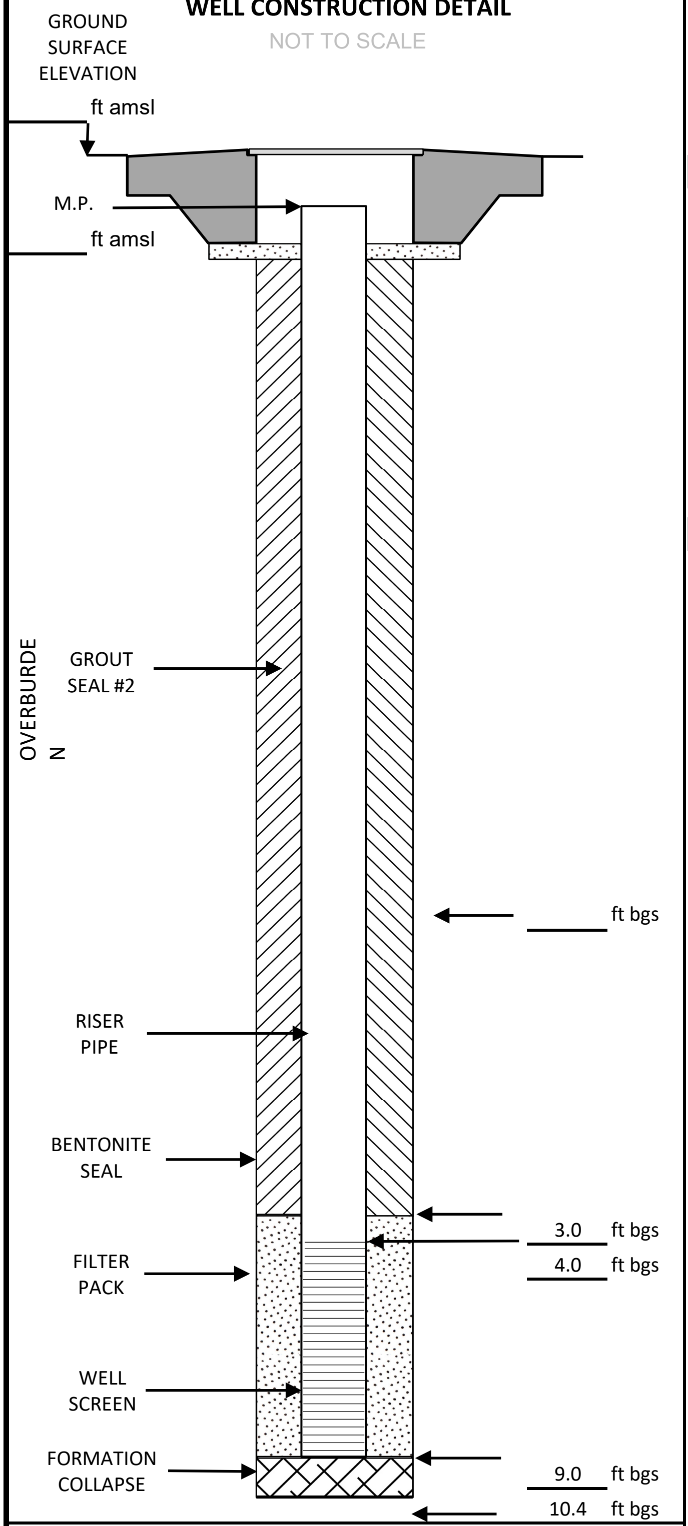
WELL COMPLETION LOG

Well ID:	MW-27
Northing:	1105169.06
Easting:	975953.680

Site Name:	Accurate Die	Client:	Ramboll	Date Drilled:	2/12/2024
Site Location:	Faytteville, NY	Drilling Subcontractor:	Parratt-Wolff, Inc.	Date Installed:	2/12/2024
Project #:	1940100888	Installation Inspector:	Lee Penrod	Date Developed:	2/21/2024

WELL CONSTRUCTION DETAIL

NOT TO SCALE



ft bgs - Feet Below Ground Surface in. - Inches M.P. - Measuring Point

ft bmp - Feet Below Measuring Point PVC - Polyvinyl Chloride

INSPECTION NOTES

Type of Well: Monitoring Well

Static Water Level: DRY ft bmp

Measuring Point: PVC

Borehole Advancement

Overburden

Method 1: Direct Push **Diameter:** 2.5" OD

Interval 1: 0.0 to 10.4 ft bgs

Method 2: ____ **Diameter:** ____

Interval 2: ____ to ____ ft bgs

P. Casing: ____ **Interval:** ____ to ____ ft bgs

Sampling Method:

Type: DT22 Macrocore **Diameter:** 1.375"

Weight: 140 lbs. **Fall:** 30"

Interval: 0.0 to 10.4 ft bgs

Bedrock

Method: N/A Diameter: N/A in.

Interval: N/A to N/A ft bgs

P. Casing 2: N/A Interval: N/A to N/A ft bgs

P. Casing 3: N/A Interval: N/A to N/A ft bgs

Sampling Method:

Type: N/A Diameter: N/A in.

Interval: N/A to N/A ft bgs

Well Construction

Riser Pipe

Material: PVC **Diameter:** 1" ID

Interval: 4 to 0 ft bgs **Joint:** Flush

Screen:

Material: PVC **Diameter:** 1" ID

Slot Size: 0.020" **Joint:** Flush

Interval: 9 to 4 ft bgs

Sump:

Material: N/A **Diameter:** N/A

Interval: N/A to N/A ft bgs **Joint:** Flush

Filter Pack:

Type: US Silica Filpro Sand **Grade:** #1

Interval: 9 to 3 ft bgs

Seal(s):

Type: Bentonite Seal **Interval:** 3.0 to 0.0 ft bgs

Type: ____ **Interval:** ____ to ____ ft bgs

Type: ____ **Interval:** ____ to ____ ft bgs

Type: N/A **Interval:** ____ to ____ ft bgs

Surface Completion:

Type: Heavy Duty Flush Mount

Additional Notes:

Elevations expressed in feet above the NAVD88; Horizontal coordinates expressed in NAD83 Missouri Central State Plane feet.

APPENDIX B - MEMBRANE INTERFACE PROBE REPORT

02/20/2020

FINAL DATA REPORT

High Resolution Site Characterization

MIHPT

547 East Genesee Street
Fayetteville NY
203201014

Prepared for:
Ramboll
333 West Washington
Street Syracuse, New York
13221

TABLE OF CONTENTS

PROGRAM NARRATIVE

Cascade Technical Services (Cascade) is pleased to present this data report to Apex Companies for the MIHPT services provided between 01/09/2020 and 01/10/2020 at the Shoppes of Foxchase on Duke Street in Alexandria, Virginia.

All field work, including the operation of the MIP, HPT and EC was conducted by trained professionals and all quality assurance/quality control (QA/QC) measurements associated with these data were found to be within the tolerances set forth in the SOPs with no exceptions. These QA/QC measurements and tests conducted during this field program included: MIP response test, HPT transducer test and the EC dipole test.

Additional information regarding the MIP, HPT and EC is provided in the reference material included in this report.

I certify that the data package is in compliance with the terms and conditions of the contract and meets Cascade's data quality standards, with the exceptions detailed above (if any). Release of the data contained in this package has been authorized by the data manager or his/her designee, as verified by the following signature.

William B Carlson

Brad Carlson
Regional Manager, Site Characterization

DATA SUMMARY TABLE

Provided below is a summary of MIHPT information and any deviations from the standard operating procedure that occurred during the field activities.

Location	Date	Time	Total Depth (ft bgs)	Response Test	Comments / Deviations
MIP-1A	20-Jan-20	15:29:21	21.55	Pass	None
MIP-2	21-Jan-20	14:43:46	16.05	Pass	None
MIP-3	21-Jan-20	16:46:32	16.00	Pass	None
MIP-4	21-Jan-20	12:36:55	25.00	Pass	None
MIP-5	22-Jan-20	16:26:09	20.75	Pass	None
MIP-6	23-Jan-20	07:52:20	18.65	Pass	None

PROJECT DETAILS

This section provides information regarding the Cascade personnel present at the site during the field activities and the specific equipment used during field activities.

Cascade Personnel

The following personnel were present during field activities at the Site:

- Zach Fordley, HRSC Specialist
- Luke Taylor, DPT Rig Operator

Cascade Equipment

The following HRSC equipment was utilized during field activities at the Site:

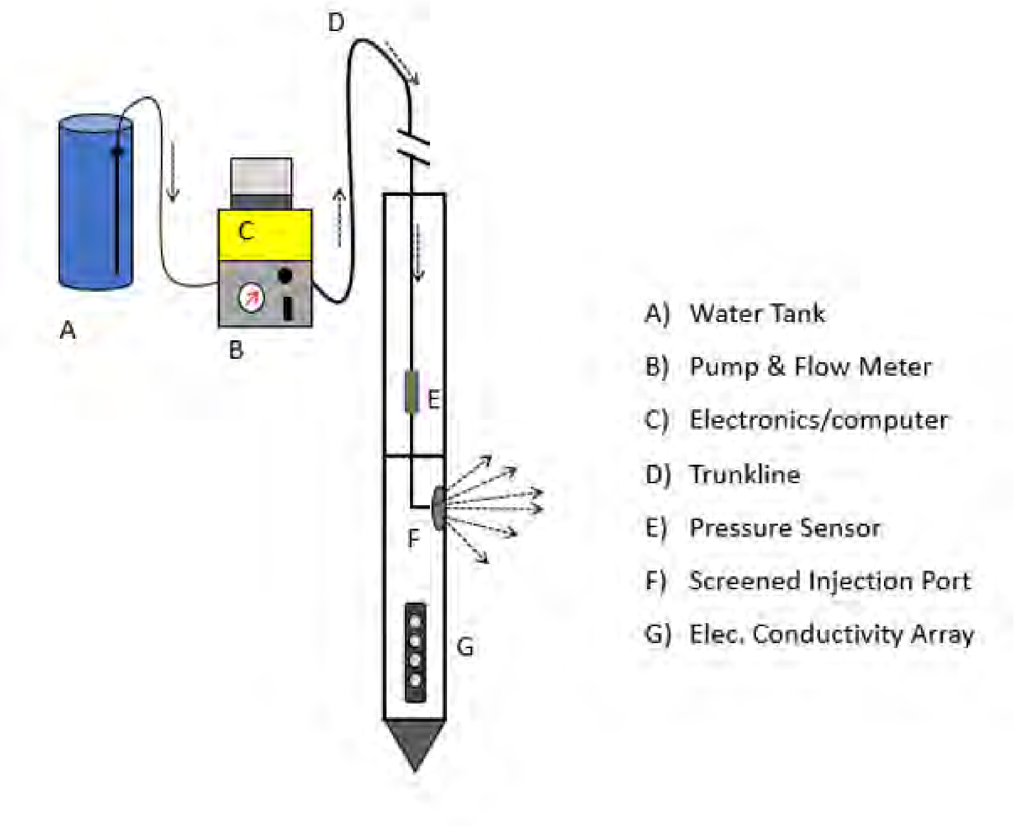
- Geoprobe 78 Series direct push drill rig
- 1.75-inch O.D. MH6534 MIHPT probe
- Geoprobe 78 Series direct push drill rig
- Geoprobe MP6500 MIP Controller (Nitrogen Flow and Heater)
- Geoprobe FI 6000 Computer
- HP 5890 Gas Chromatograph
- Electrical Conductivity
- ECD (Electron Capture Detector)
- XSD (Halogen Specific Detector)
- PID (Photo Ionization Detector) 10.2 eV Lamp
- FID (Flame Ionization Detector)
- 1.75" O.D. MIHPT Probe
- 150-foot MIHPT trunkline
- 1.75-inch O.D. drive rods
- Ultra-High Purity Nitrogen
- Ultra-High Purity Hydrogen

REFERENCE MATERIAL

This section provides information useful in understanding and interpreting the data logs generated as part of this HRSC investigation.

HPT System Overview

The hydraulic profiling tool creates a log of the relative formation permeability versus depth in real time as the probe is advanced into the subsurface. It operates by injecting clean water at a constant flow rate from an aboveground reservoir through the direct push rods and out into the surrounding soil via an injection port on the side of the probe. Simultaneously, sensors record the flow rate, the back pressure required by the pump to maintain that flow rate, and the current depth of the probe. These measurements are collected by the onboard software and an estimated hydraulic conductivity (K) value is calculated and plotted alongside the other measurements in real time.



Generalized schematic of the HPT tool. Source: Geoprobe HPT Standard Operating Procedure

HPT Data Interpretation

The injection pressure, which is monitored and plotted with depth, is an indication of the hydraulic properties of the soil. A relatively low-pressure response indicates a relatively easier ability to easily transmit water, which is likely correlated with a large grain size. Conversely, a relatively high-pressure response indicates more difficulty in transmitting water, and thus, a smaller grain size.

The HPT system collects depth, electrical conductivity, advancement rate, hydraulic pressure, and flow information. Additional detail regarding each of these parameters is provided below.

Pressure - Pressure data is collected in pounds per square inch (PSI). Pressure is an indication of hydraulic pressure applied to the subsurface by the HPT system. The system collects both the minimum and maximum pressures over each vertical interval.

Flow - Flow data is collected in milliliters per minute (mL/min). Flow is an indication of the rate water that is pumped out of the membrane at the HPT probe. The system collects both the minimum and maximum flow over each vertical interval.

Estimated Hydraulic Conductivity (est. K) – Hydraulic conductivity, symbolically represented as K, is an in-situ property that describes the ease with which water can move through pore spaces or fractures. It is dependent on the intrinsic permeability of the material and on the degree of saturation. With respect to the HPT system, the estimated K values are only applicable to the saturated portion of the formation. The estimated K value is calculated using the HPT pressure and flow data. It is also necessary to collect HPT response test data before and after each boring. Additionally, it is necessary to conduct at least one pressure dissipation test during the logging operation, below the static water table level.

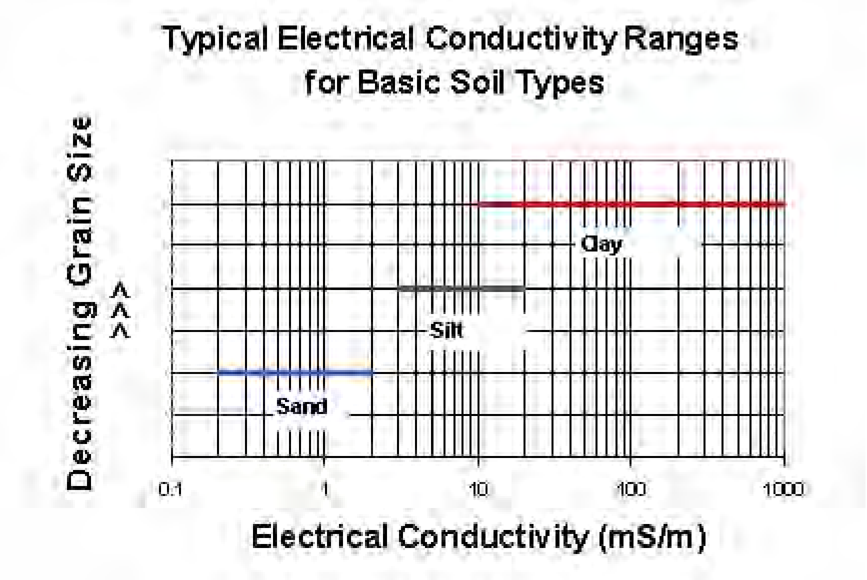
HPT Reference Testing and Dissipation Tests

Reference testing is done to ensure that the HPT pressure transducer is working correctly and to evaluate the condition of the HPT injection screen. The HPT reference test also calculates atmospheric pressure which is required to obtain static water level readings and to determine the estimated K values for the log. HPT reference test utilizes a test tube to specifications such that a valve is located 6 inches above the HPT injection screen and the top of the tube is 6 inches above the valve. When the tube is filled completely with water, the 12 inches of water will supply an additional 0.433 psi of pressure on the injection screen (in addition to atmospheric pressure). When the valve (located 6 inches from the top of the tube and 6 inches from the injection screen) is opened, only 0.217 psi of additional pressure is applied to the HPT injection screen. Therefore, the accuracy of the pressure transducer can be assessed by comparing the pressure reading when the tube is filled and when the tube is filled to the valve. There should be a 0.217 psi difference, this value is checked with and without flow. A tolerance of ±10% is applied for a passing test.

Dissipation tests are conducted to determine the additional static pressure added to the HPT pressure values from water in the formation. To conduct a dissipation test, advancement of the tooling is stopped, the HPT pump is stopped, and flow drops to zero. The pressure applied to the HPT pressure transducer by the injection of water into the formation begins to dissipate. This pressure should dissipate to a value equal to atmospheric pressure plus the static water pressure applied by water in the formation. In post-processing of the HPT log, the dissipation value and the atmospheric pressure determined during HPT reference testing can be used to remove the influence of atmospheric pressure and formational static water pressure from the HPT pressure values. Thereby correcting the HPT pressure to values that only indicates the hydraulic properties of the subsurface material.

EC Data Interpretation

In a general sense, the electrical conductivity of a soil varies with grain size. This correlation can be utilized to gather an understanding of the subsurface from the EC data. The EC measured in the subsurface can also vary based on changes in mineralogy, groundwater geochemistry, and contamination. It is important, then, to confirm the accuracy of the EC data for this use by collecting confirmatory soil borings from your site.



Relationship between electrical conductivity and grain size. Source: Geoprobe Electrical Conductivity System Standard Operating Procedure

MIP System Overview

The MIP is commonly used for quickly determining the locations of volatile organic compound (VOC) source zones and plumes. The MIP is most valuable in terms of its ability to provide “spatial correspondence”, meaning that where the MIP detector response show peaks, there is likely to be elevated soil and groundwater concentrations. The MIP can also be used to provide extremely valuable data to streamline subsequent investigative tasks and improve the overall efficiency and accuracy of the site investigation. Vertical profiles, cross sectional views and 3D images of contaminant distribution can all be produced from the electronic data generated by the MIP logs. The unique capability of providing reliable, real-time information allows for informed and timely decision making in the field. The MIP works by heating the soils and groundwater adjacent to the probe to 120 degrees C. This volatilizes the VOCs and allows the VOCs to transfer through a Teflon membrane via a combination of concentration and pressure gradients. These VOCs are then swept into a nitrogen gas loop that carries these vapors to a series of detectors housed at the surface. Continuous chemical profiles are generated from each hole. Electrical conductivity of the soil is also measured, and these logs can be compared to the chemical logs to better understand the relationship between the lithology and the contaminant distribution. The MIP technology is only appropriate for VOCs. The following section discusses the various detection systems that are commonly used with the MIP system.

Geoprobe Image: MIHPT probe, HPT sensor (run inside connection tube), connection tube and drivehead which connects to the drive rods. The MIHPT trunkline connects the down-hole probe to the up-hole instruments.

Detector Overview

- ECD – Electron Capture Detector uses a radioactive Beta emitter (electrons) to ionize some of the carrier gas and produce a current between a biased pair of electrodes. When organic molecules contain electronegative functional groups, such as halogens, phosphorous, and nitro groups pass by the detector, they capture some of the electrons and reduce the current measured between the electrodes.

- XSD – The Halogen Specific Detector converts compounds containing halogens to their oxidation products and free halogen atoms by oxidative pyrolysis. These halogen atoms are adsorbed onto the activated platinum surface of the detector probe assembly resulting in an increase thermionic emission. This emission current provides a corresponding voltage that is measured via an electrometer circuit in the detector controller.

- PID – Photo Ionization Detector sample stream flows through the detector's reaction chamber where it is continuously irradiated with high energy ultraviolet light. When compounds are present that have a lower ionization potential than that of the irradiation energy (10.2 electron volts with standard lamp) they are ionized. The ions formed are collected in an electrical field, producing an ion current that is proportional to compound concentration. The ion current is amplified and output by the gas chromatograph's electrometer.

- FID – Flame Ionization Detector consists of a hydrogen / air flame and a collector plate. The effluent from the GC (trunkline) passes through the flame, which breaks down organic molecules and produces ions. The ions are collected on a biased electrode and produce an electric signal.

[To Be Written]

MIP Data Interpretation

- Depth - Data is collected every 0.05 feet, or twenty points per foot.

- Electrical Conductivity - Electrical Conductivity data is measured/collected in milli-siemens per Meter (ms/M). The conductivity of soils is different for each type of media. Finer grained sediments, such as silts or clays, will typically have a higher EC signal. While coarser grained sediments, sands and gravel, will typically have a lower EC signal.

- Rate of Penetration - Rate of penetration (ROP) is measured/collected in feet per minute (ft/min). Speed is an indication of the advancement rate of the MIP probe. In order to allow for adequate heating of the MIP tooling, the MIP’s ROP should not exceed one foot per minute.

- Temperature - Temperature data is measured/collected in Degrees Celsius. Temperature is an indication of the physical temperature of the MIP block. Minimum and Maximum temperature is collected at each vertical interval. Cascade's temperature protocol indicates that the MIP probe temperature shall maintain a minimum temperature of 90 Degrees Celsius.

- Pressure - Pressure data is measured/collected in PSI. The pressure readings represent the pressure being delivered to the MIP’s nitrogen gas line. Deviations greater than of 1.5 PSI outside of the starting pressure indicate a system leak or obstruction is present.

- Detector (XSD, ECD, PID, FID) - Detector responses are measured/collected in micro Volts (uV). Detector responses are an indication of relative contaminant responses. Minimum and Maximum detector responses are collected at each vertical interval.

Confirmatory soil borings are recommended following an MIP investigation. The confirmatory program should be designed to include a small number of boring locations advanced in the immediate vicinity of the MIP locations.

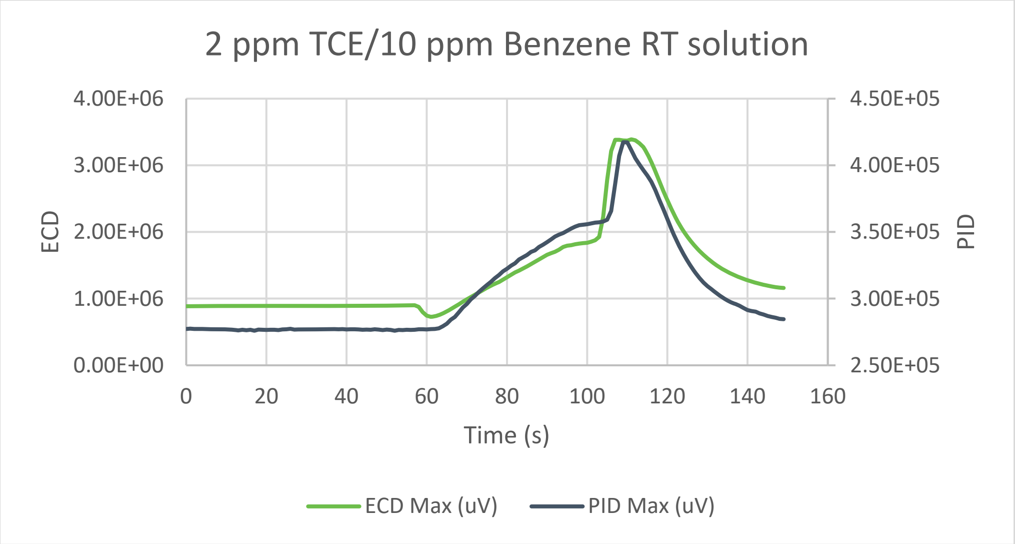
Delineation of NAPL impacts can be achieved using an Optical Image Profiler (OIP), or more traditional methods of collecting soil and groundwater samples.

Response Testing

Response testing (RT) is an integral part of ensuring the quality of data from the MIP system. Response testing is conducted before and after each log. This ensures the validity of the data and the integrity of the system. The RT provides a traceable indication that the MIP system detectors are adequately responding and allows the carrier gas trip time to be calculated on the physical components of the system.

Cascade uses acceptance criteria to evaluate the RTs. The acceptable criteria for an RT is defined for specified concentrations of RT solution and a specified N2 trunkline flow rate. Documenting the RTs will provide a level of quality assurance for each MIP project and will also allow operators and data reviewers to identify systems in need of maintenance.

The trip time is measured by recording the time between the moment when the VOA is placed over the membrane and the response of the detectors, as viewed on the MIP data acquisition unit. The baseline and peak response value are also recorded for comparison with other MIP response tests. The trip time is entered manually into the data acquisition system account for the time it takes for compounds in the subsurface to travel the length of the trunkline during the MIP boring.



CASCADE

DRILLING | TECHNICAL SERVICES

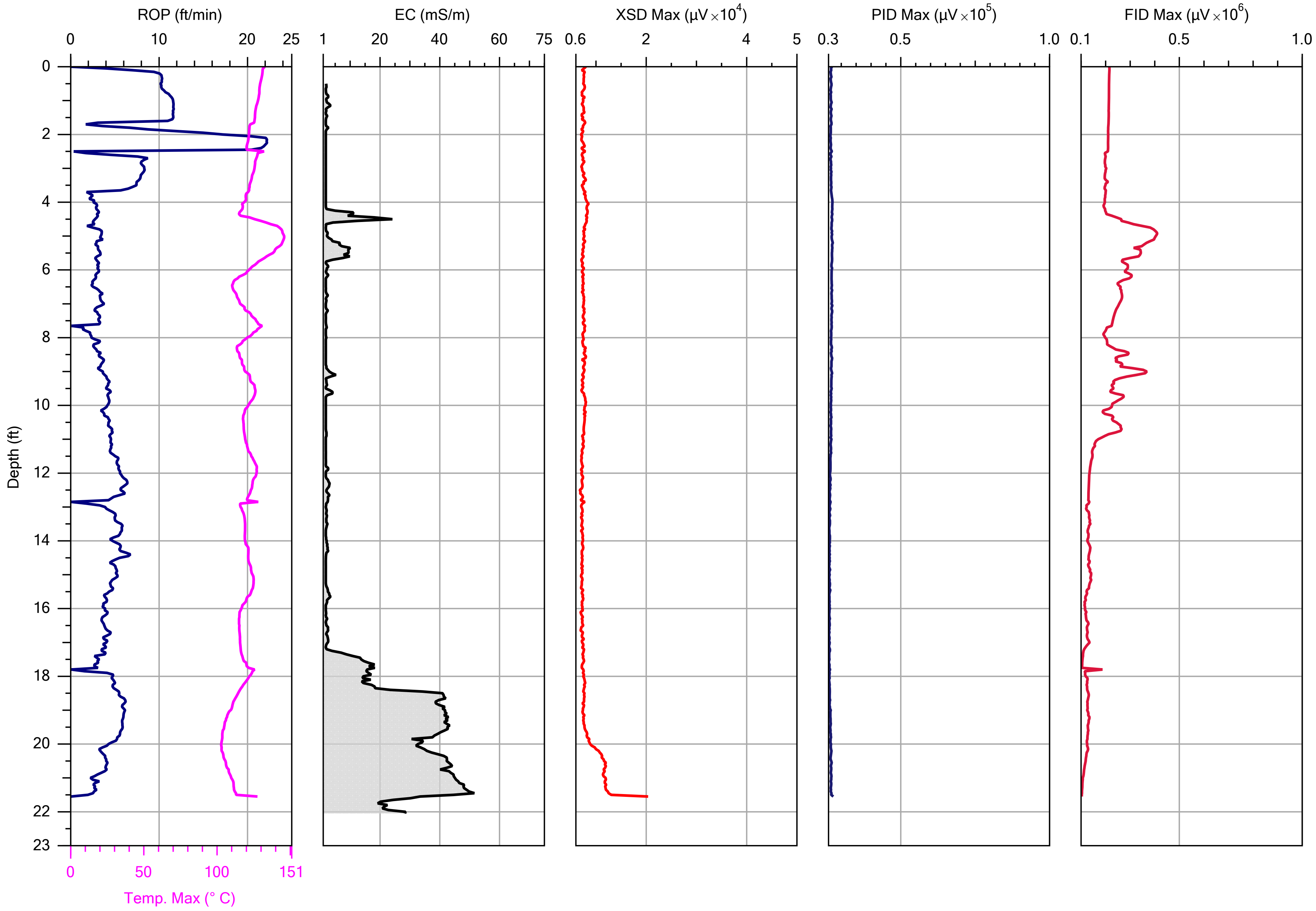
SITE PLAN


Ramboll
MIP Site Investigation
Legend
● MIP Location
MIP-4
MIP-6
MIP-5
MIP-1
MIP-3
MIP-2
Google Earth
©2021 Google
N
100 ft

CASCADE

DRILLING | TECHNICAL SERVICES

INVESTIGATION DATA PLOTS



CASCADE
DRILLING | TECHNICAL SERVICES

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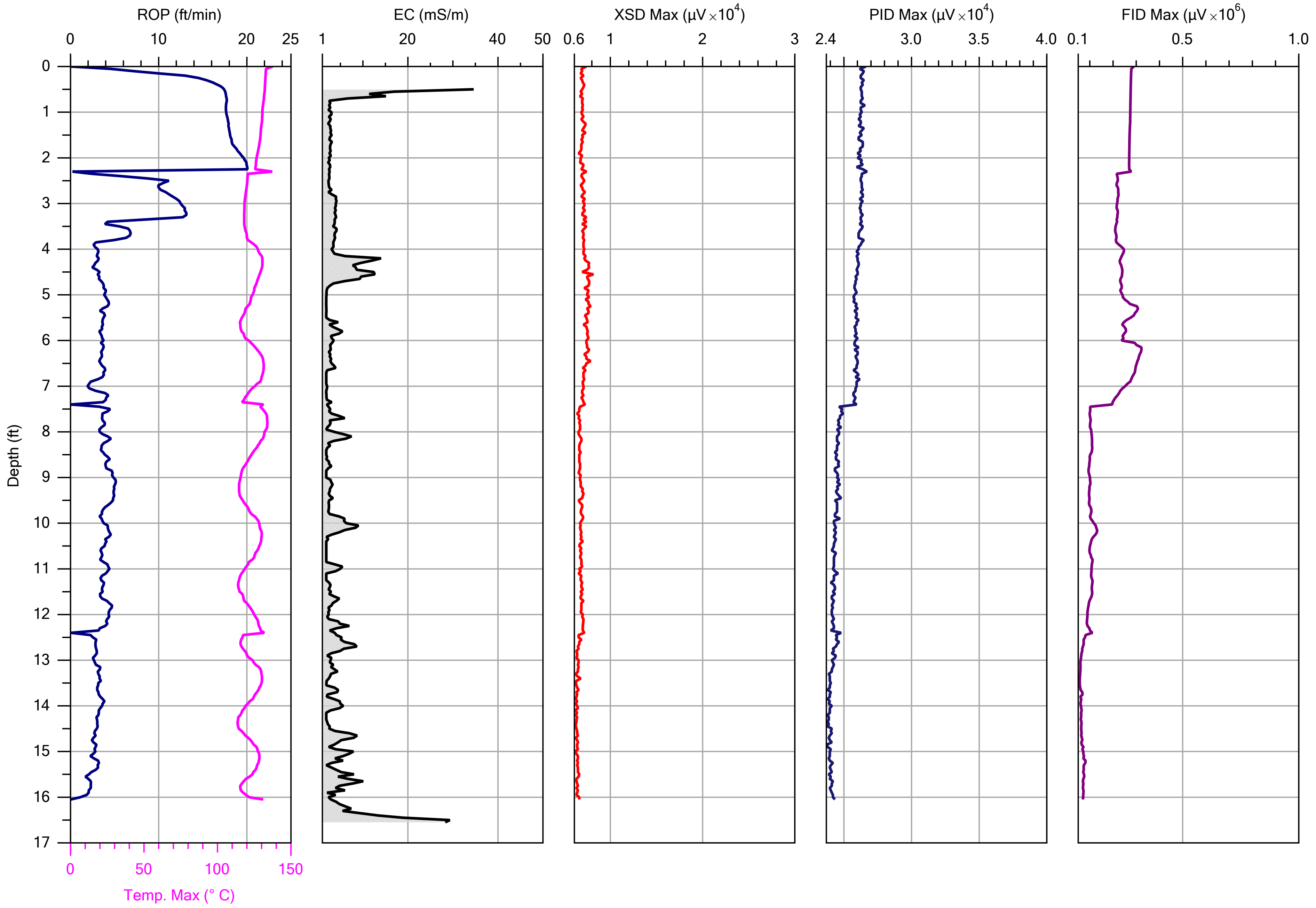
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY



CASCADE
DRILLING | TECHNICAL SERVICES

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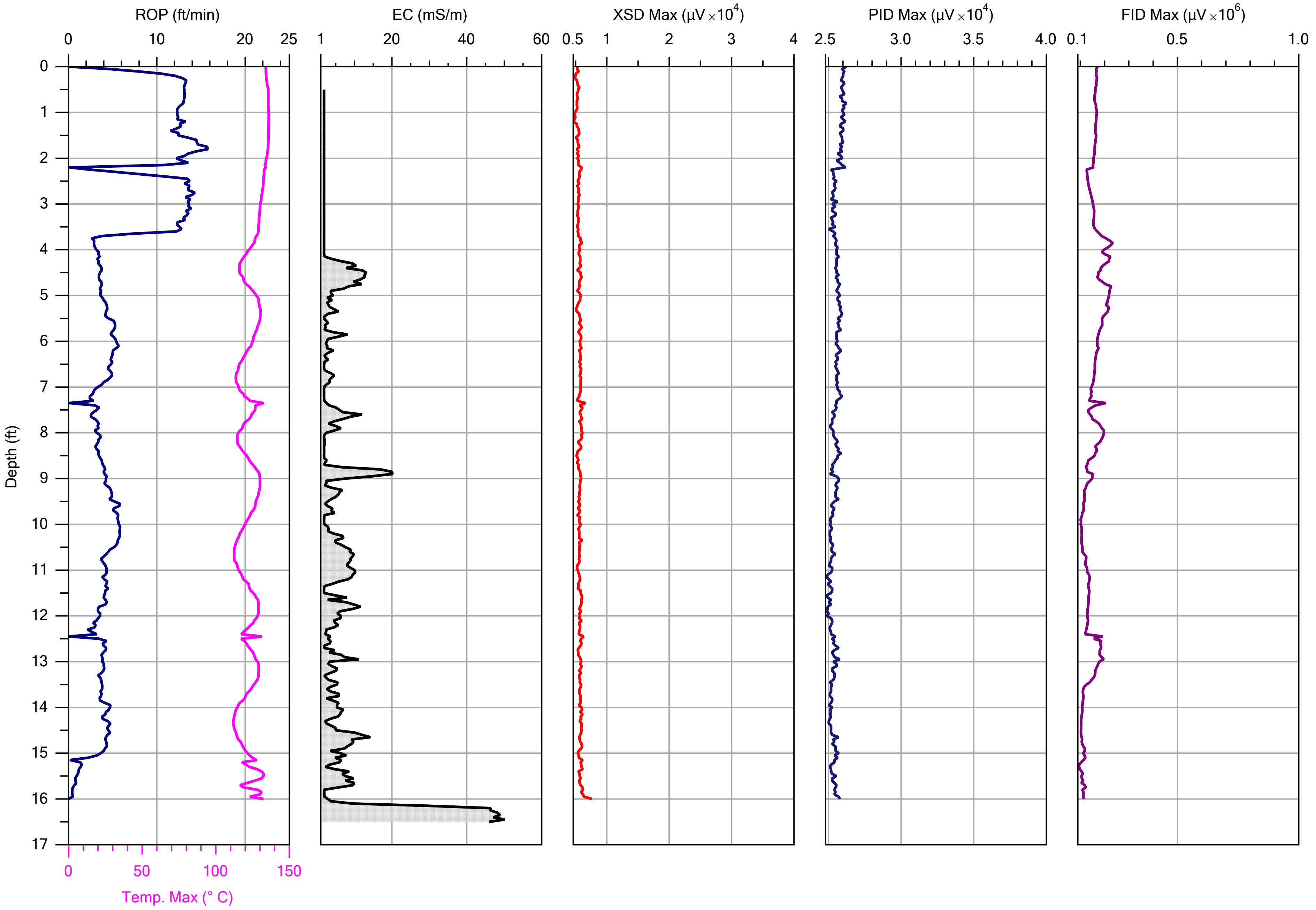
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY



CASCADE
DRILLING | TECHNICAL SERVICES

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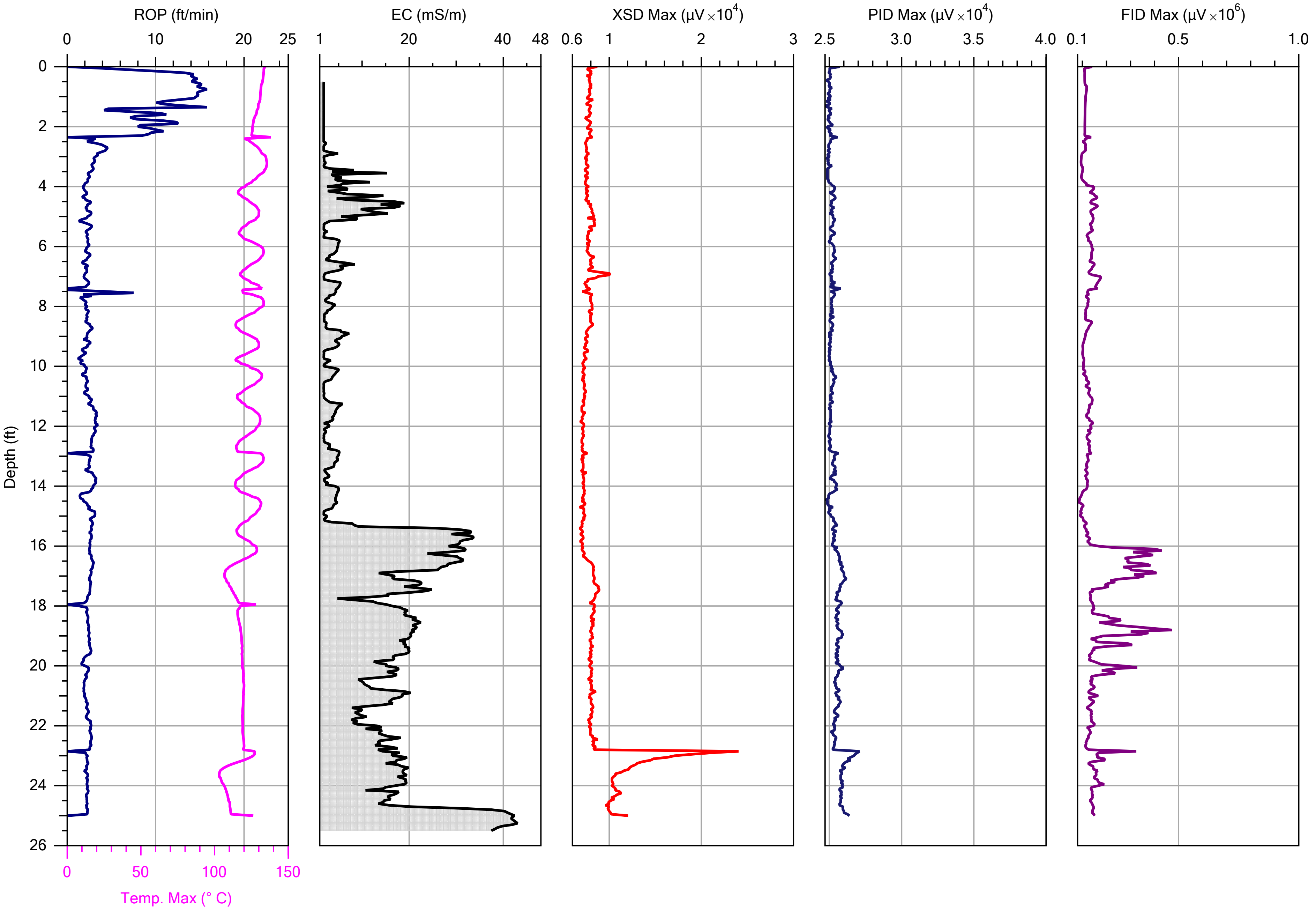

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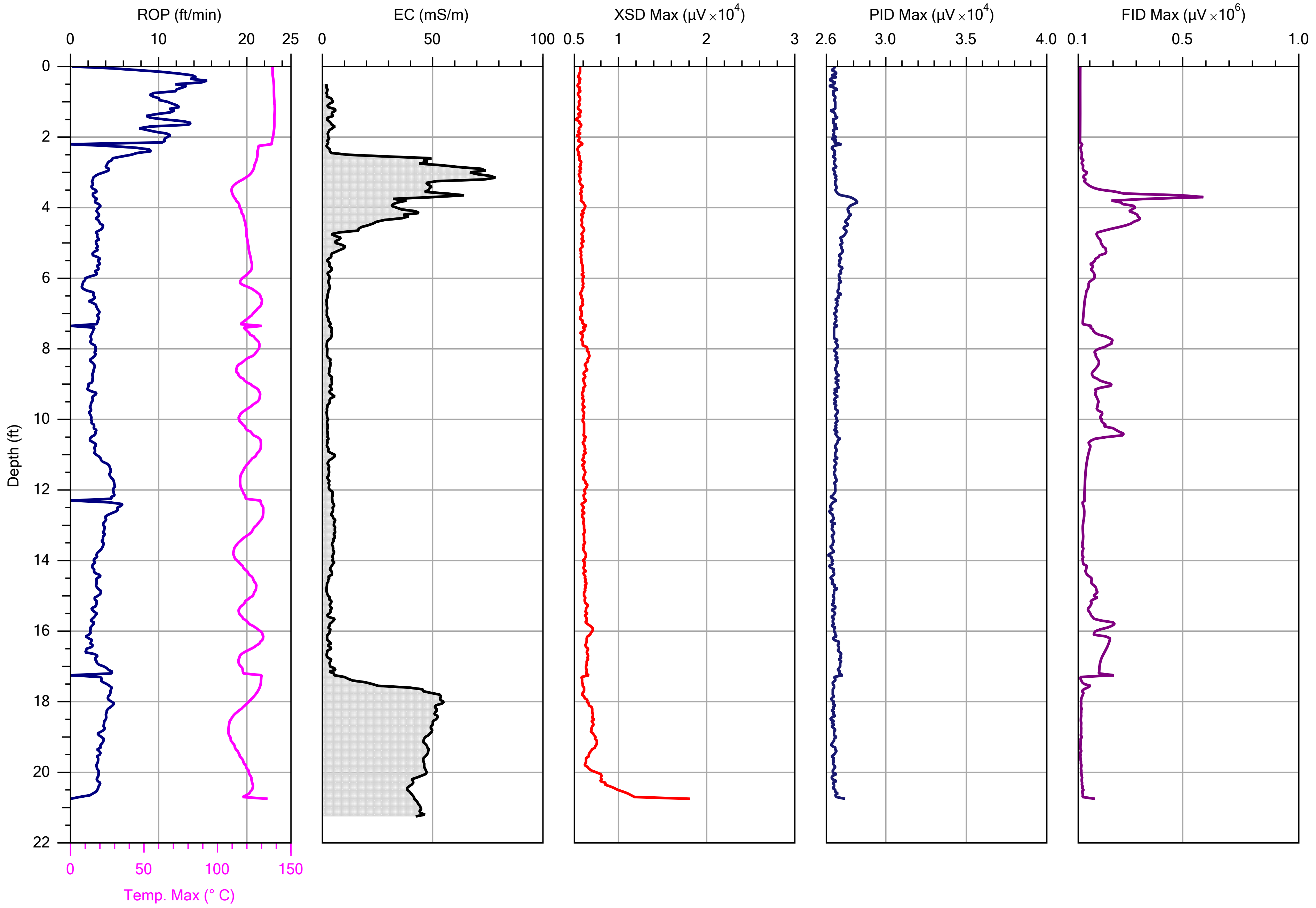
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY



CASCADE
DRILLING | TECHNICAL SERVICES

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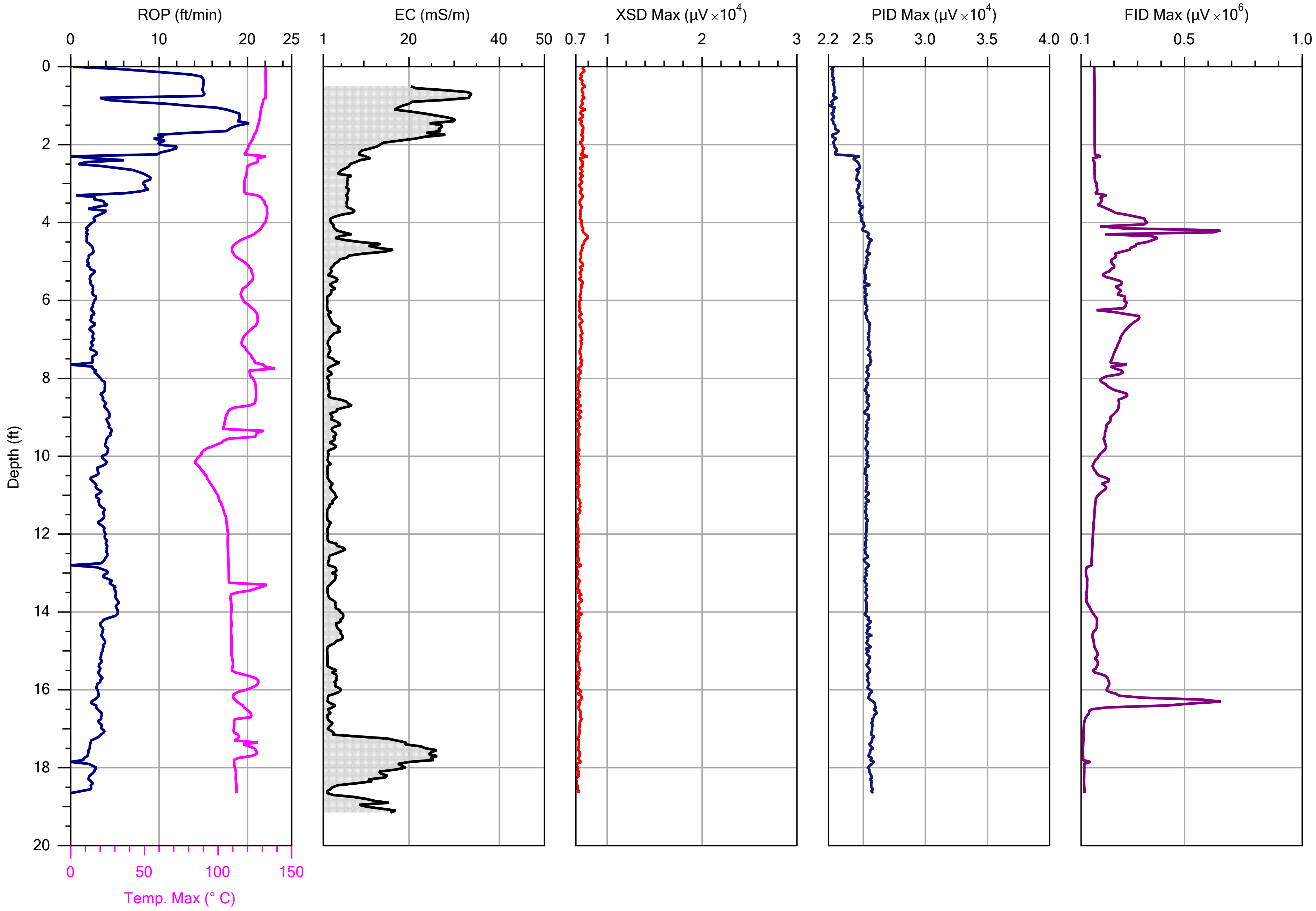
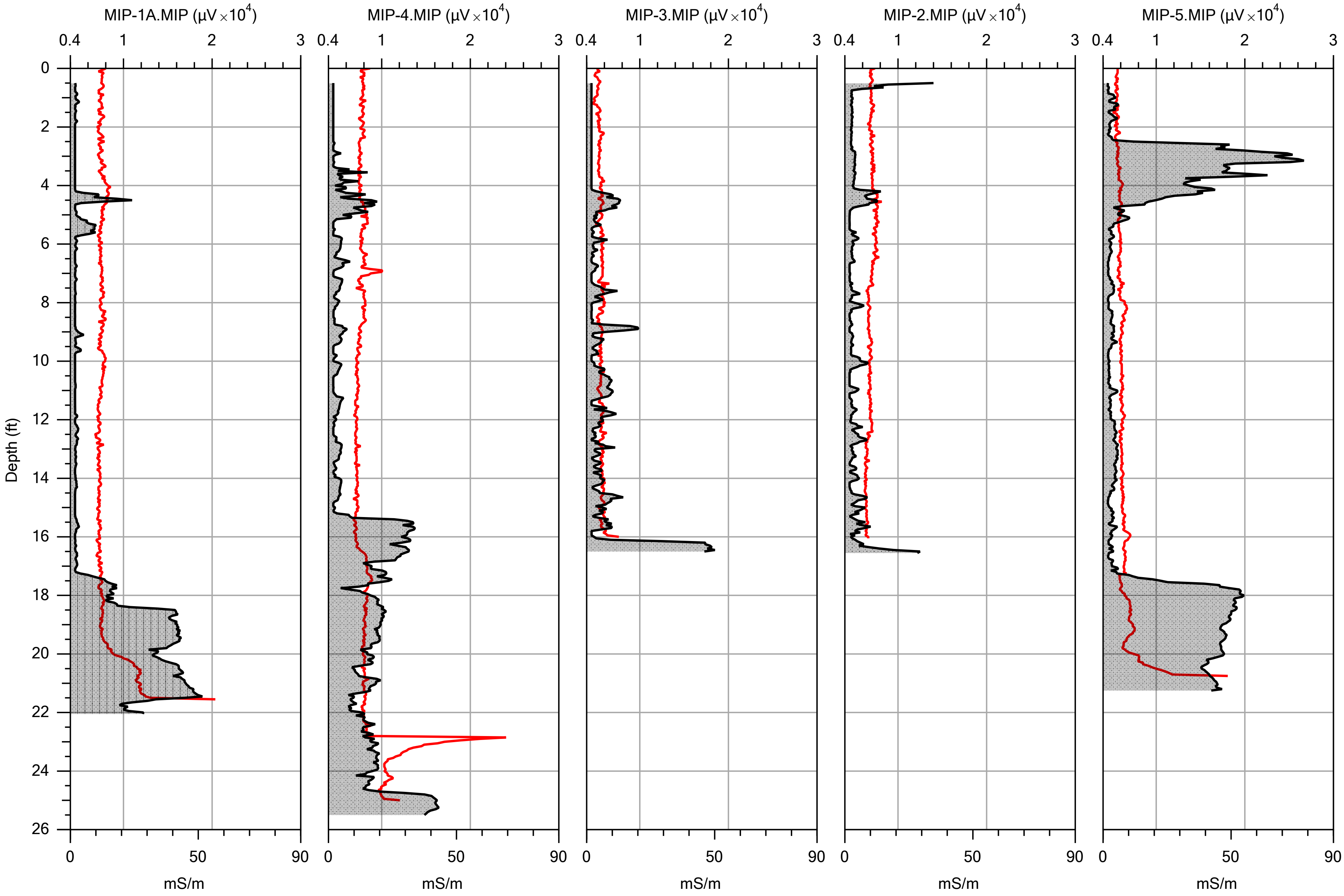
Company: Cascade	Operator: L Taylor	Date: 01/22/20
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY



Company: Cascade	Operator: L Taylor	File: MIP-6.MIP
		Date: 01/23/20
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY

CASCADE
DRILLING | TECHNICAL SERVICES

Point To Point Comparison



XSD Max / EC

Company: Cascade

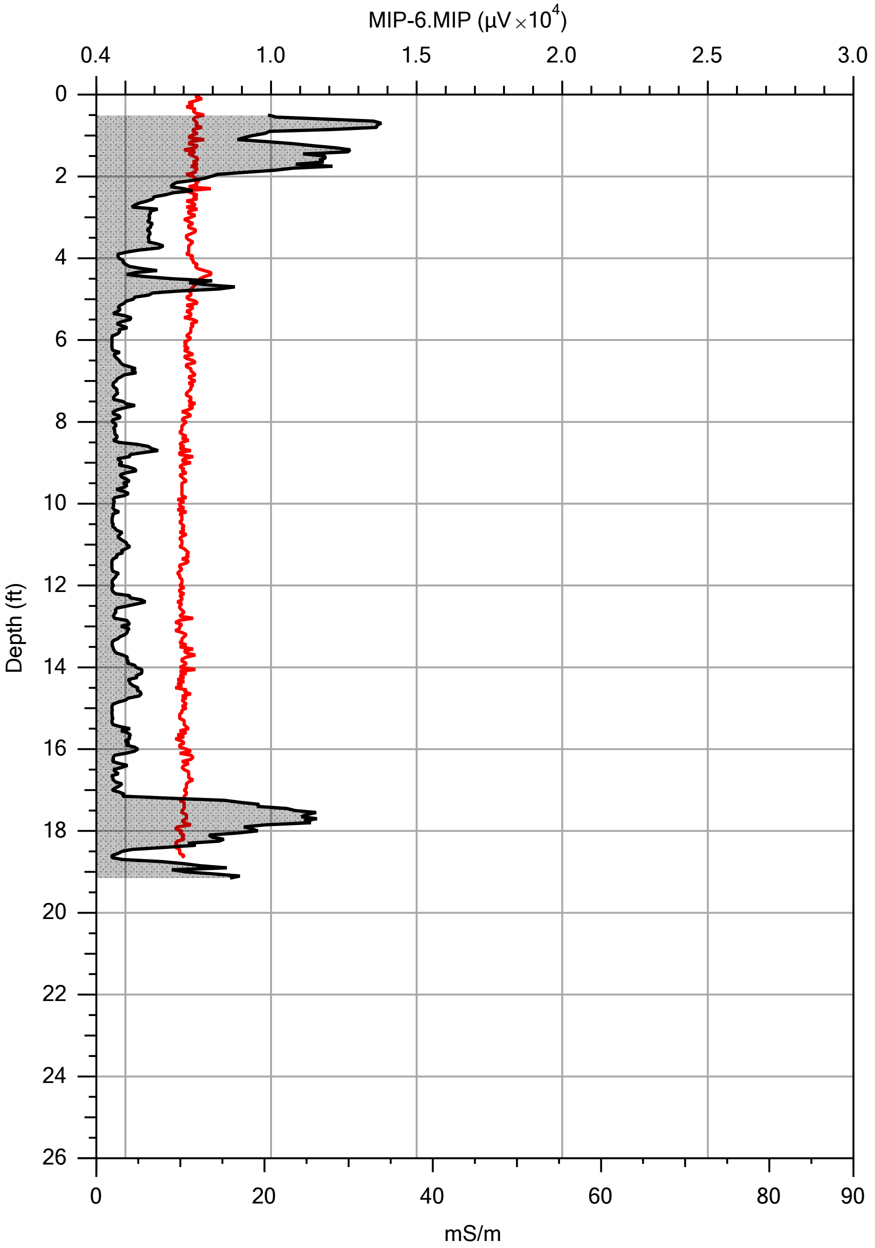
Operator: L Taylor

Project ID: 203-20-1014

Client: Ramboll

MIP-1A.MIP	01/20/20
MIP-4.MIP	01/21/20
MIP-3.MIP	01/21/20
MIP-2.MIP	01/21/20
MIP-5.MIP	01/22/20

CASCADE
DRILLING | TECHNICAL SERVICES



XSD Max / EC

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Company: Cascade	Operator: L Taylor	Date: 01/23/20
Project ID: 203-20-1014	Client: Ramboll	Location: Fayetteville, NY

APPENDIX D - DATA USABILITY SUMMARY REPORT

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Data Validation Services
120 Cobble Creek Road P. O. Box 208
North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

July 17, 2020; Revised February 22, 2021

David Carnevale
Ramboll
333 West Washington St
East Syracuse, NY 13221

RE: Validation of the Accurate Die Casting Site Analytical Data
Data Usability Summary Report (DUSR)
ALS Environmental SDG Nos. R1911150, R1911151, R1911244, R1911245, R1911272,
R1911273, R1911301, R1911302, R1911313, R1911358, R1911359, R2000757,
R2000804, R2000872, R2000907, and R2000946

Dear Mr. Carnevale:

Review has been completed for the data packages generated by ALS Environmental (ALS) that pertain to soil samples collected between 11/12/19 and 02/03/19 at the Accurate Die Casting site. Fifty two soil samples and three field duplicates were processed for Target Compound List (TCL) semivolatiles, Aroclor PCBs, Target Analyte List (TAL) metals, and total cyanide. Twelve soil samples, three soil field duplicates, three aqueous samples, and one aqueous field duplicate were processed for Target Compound List (TCL) volatiles, TCL semivolatiles, Aroclor PCBs, Target Analyte List (TAL) metals, and total cyanide. Two of the soil samples and three separate soil samples and a field duplicate were also processed for per- and poly fluorinated alkyl substances (PFAS) by a modified USEPA method 537 and 1,4-dioxane by USEPA method 8270D Selective Ion Monitoring (SIM), and three of them were also processed for Total Organic Carbon (TOC). Forty nine soil samples and three field duplicates were processed for TCL volatiles. One of these and a separate field duplicate were also processed for PFAS and 1,4-dioxane, two others were also processed for five TCL semvolatiles and Aroclor PCBs, and another was also processed for total lead. Equipment and trip blanks were also processed. Analytical methodologies are those of the USEPA SW846.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the September 2014 site characterization QAPP, USEPA national and regional validation documents, and the specific requirements of the analytical methodology. The following items were reviewed:

- Data Completeness
- Case Narrative
- Custody Documentation
- Holding Times
- Surrogate, Isotopic Dilution, and Internal Standard Recoveries
- Method/Preparation Blanks
- Matrix Spike Recoveries/Duplicate Correlations

* Blind Field Duplicate Correlations
* Laboratory Control Sample (LCS)
* Instrumental Tunes
* Initial and Continuing Calibration Standards
* Serial Dilution Evaluation
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

In summary, most of the results for the samples are usable either as reported or with minor qualification. However, the results for five semivolatile analytes in one soil sample, four semivolatiles analytes in one soil sample, and two semivolatiles in a third soil sample are rejected and not usable; matrix effects are suspected. Additionally, detections of acetone and methyl acetate found in the samples are suspect and removed from consideration as sample components, due to established contamination of those two analytes in the containers provided for sample collection. Matrix effects did not significantly impact analyte recovery or precision.

With the exception of the acetone and methyl acetate data, accuracy, precision, data completeness, representativeness, reproducibility, sensitivity, and comparability are acceptable. The following text discusses issues of concern.

Validation qualifier definitions and client sample identifications are attached to this text. Also included in this report are the client EDDs with recommended qualifiers/edits applied in red.

The laboratory modifications to the USEPA method 537 are significant, including acceptance ranges, consistent in many respects to the advances in the available monitoring compounds. Validation actions are based on the laboratory procedures, in consideration that the laboratory undergoes NYS DOH certifications and NYS SOP review.

Sample identifications stated in this report do not include the date suffix.

Chains-of-Custody/Sample Receipt

A discrepancy between container label and custody entry was resolved at sample receipt.

Blind Field Duplicate

The blind field duplicate evaluations were performed on locations SS-16_18, SS-01_1-2, SS-03_18, SS-12_18, SW-02, SED-02, SB-20-7-3-5, SB-MIP-6-8-10, and SB-20-5-9-11. Correlations fall within laboratory guidelines, with the following exceptions, results for which are qualified in the indicated parent sample and its duplicate:

- Trichloroethene, barium, calcium, and copper in SS-03_18
- Total cyanide in SED-02

Additional items of note regarding the field duplicate evaluations are:

- The evaluation for volatiles in SS-12_18 is not applicable, as the parent sample was processed at the medium level, and the duplicate was processed at the low level, thus showing matrix effects.
- The parent sample SW-02 showed an atypically elevated concentration (>200 ppb) of bis(2-ethylhexyl)-phthalate, where its field duplicate shows a concentration of only 14 ppb. The parent sample was reextracted, but beyond a usable holding time. Contamination is suspected, and the initial result is used, as a non-detection with that higher concentration used as a reporting limit.
- The volatile container for SB-20-5-9-11 was received broken, and therefore there is no volatile analysis for that sample. The field duplicate of that sample (FD-1-020320) may be considered representative of the volatile constituency of that location.

<u>TCL Volatile Analyses by EPA 8260C</u>

Acetone.and methyl acetate show anomalous results in the project samples and associated field QC. Outlying precision correlations were observed between field duplicates and between sample matrix spikes, with concentration variances up to an order of magnitude. There are also very significant variances between the detected concentrations determined in the low and medium level analyses in each of several samples. Upon inquiry, ALS provided summary information of a bottle study conducted during the timeframe of the collection of this project's samples, performed on methanol and deionized water certified containers provided by their supplier. Significantly elevated concentrations of the forementioned compounds, as well as detections of 2-butanone and non-target ethers and alcohols, were noted on the results forms that ALS forwarded. The evaluation for external contamination of acetone and methyl acetate in the project samples includes the potential contamination contribution from the provided containers, in which they were consistently detected. Consequently, all reported acetone and methyl acetate detected concentrations in the project samples are at levels within the revised validation action limits for consideration as external contamination. The reporting limits for the affected results are to be revised to reflect the values of the originally reported concentrations. With the potential contamination, sample constituency is not known below those original concentrations.

In addition to the acetone and methyl acetate discussed above, the following low level detected results are considered external contamination and edited to reflect non-detection due to presence in the associated blanks:

- 2-Butanone in SS-06_8, SS-15_5, SS-16_18, and samples reported in SDGs R1911150, R1911313, and R1911358. Other detections of 2-butanone should be used with caution as it was also detected in one of the three containers in the ALS bottle study.
- Toluene in SS-03_5, SS-03_18, SS-11_18, FD-02, SED-01, and samples reported in SDG R1911244
- Chloromethane in samples reported in R1911358

Due to low responses of internal standard d4-1,4-dichlorobenzene, results for the eight associated analytes have been qualified as estimated in the following samples: SS-13_5, SS-12_5, and FD-03.

The matrix spikes of SB-16_5, SS-03_5, SS-12_5, SW-01, SED-01 (medium level), SB-20-12-6-10-012920, and SB-20-8-10-020320 show recoveries and duplicate correlations that are within validation guidelines, with the exception of erratic recoveries for acetone and methyl acetate that are explained by the container contamination issue discussed above.

Calibration standards showed acceptable responses, with the following exceptions, results for which are qualified as estimated in the indicated associated samples:

- Bromoform, carbon tetrachloride, and dibromochloromethane (21%D to 30%D) in TB-01_11122019
- Bromomethane (22%D to 37%D) in SS-12-18_11152019, EB-02_11142019, TB-03_11142019, TB-011620, TB-012820, SB-20-12-6-10-012920, SB-20-11-3-5-012920, SB-20-4-3-5-012920, SB-20-1-8-10-012920, TB-1-012920, SB-20-14-7-9-013020, SB-MIP-5-3-5-013020, SB-MIP-3-7-9-013020, SB-MIP-3-22-24-013020, and TB-1-020320
- Bromoform, bromomethane, carbon tetrachloride, and dibromochloromethane (21%D to 30%D) in EB-03_11152019, TB-04_11152019, and in all samples reported in SDG R1911358
- 1,1,2,2-Tetrachloroethane and bromomethane (22%D to 30%D) in SB-20-6-11-13-012720, SB-20-10-6-10-012720, SB-20-7-3-5-012820, SB-20-9-3-5-012820, SB-20-8-7-9-012820, SB-20-13-8-10-012820, FD-1-012820, SB-MIP-1-8-10-013120, SB-MIP-1-23-25-013120, SB-MIP-6-8-10-013120, SBMIP-6-23-25-013120, SB-MIP-4-3-5-013120, SB-MIP-4-23-25-013120, SB-20-15-2-4-020320, SB-20-2-8-10-020320, and FD-1-020320
- 1,2-Dichloroethane (21%D) in SB-20-6-11-13-012720 and SB-MIP-5-20-22-013020

Tentatively Identified Compounds (TICs) that are silanes or column bleed have been removed from consideration as sample components.

TCL Semivolatile (SVOA) and 1,4-Dioxane Analyses by EPA8270D (Full Scan and SIM)

Results for the following analytes are rejected and not usable in the indicated samples due to lack of recovery in the matrix spikes of those samples:

- 3,3-Dichlorobenzidine, 2,2'-oxybis(1-chloropropane), hexachlorobutadiene, hexachloroethane, and hexachlorocyclopentadiene in SS-12_2-12
- 2,4-Dinitrophenol, 4,6-dinitro-2-methylphenol, hexachlorocyclopentadiene, and hexachloroethane in SED-01
- 2,4-Dinitrophenol and 4,6-dinitro-2-methylphenol in SB-20-16-9-12

Recoveries and correlations for other analytes in those parent samples noted above are within laboratory acceptance ranges.

The matrix spikes of SVOA on SS-16_2-12, SS-03_2-12, SW-01, and SB-20-12-6-10, and 1,4-dioxane on SS-03_6-12 and SB-20-16-9-12 show acceptable and recoveries within validation guideline, with the exception of those rejected (noted above). However, the laboratory uses acceptance ranges that involve a lower recovery limit of only 10% for almost all of the analytes. This indicates an atypically wide allowance for matrix accuracy. Section 9.4 of the governing SW846 method 8000D suggests review of in-house methods for reasonableness and consistency with DQOs. With the exceptions noted above, most of the project sample analyte recoveries are well above that lower limit, and no qualification is made on the basis of the wider acceptance ranges.

The result for dibenz(a,h)anthracene in SW-02 is qualified as estimated due to outlying recoveries (48%D) in the associated LCSs:

Calibration standards showed acceptable responses, with the following exceptions, results for which are qualified as estimated in the indicated associated samples: pentachlorophenol (29%D to 39%D) in SS-07_2-12_11122019, SS-07_12-24_11122019, SS-10_0-2_11122019, SS-10_02-12_11122019, SS-05_0-2_11122019, SS-05_2-12_11122019, SS-05_12-24_11122019, SS-10_12-24_11122019, EB-01_11132019, SS-08_12-24_11132019, SS-09_0-2_11132019, SS-09_2-12_11132019, SS-09_12-24_11132019, FD-01_11132019, SB-20-6-11-13-012720, SB-20-10-6-10-012720, SB-20-11-3-5-012920, SB-20-4-3-5-012920, SB-20-1-8-10-012920, SB-20-14-7-9-013020, and in all samples reported in SDG R1911150, R1911244, and R2000946.

Tentatively Identified Compounds (TICs) that are aldol condensates (often flagged as "A"), extraction artifacts (including volatile chlorinated solvents) or are also detected in the associated method blanks (should have been flagged as "B") have been removed from consideration as sample components.

TCL Aroclor PCBs by EPA 8082A

Matrix spikes of Aroclors 1106 and 1260 were evaluated for SS-16_2-12, SS-03_2-12, SS-12_2-12, SW-01, SED-01, SB-20-12-6-10, and SB-20-16-9-12. Recoveries and correlations within are validation guidelines.

Surrogate and internal standard responses are within laboratory acceptance ranges. Blanks show no contamination. Calibration standard responses are within validation guidelines.

PFAS by Modified EPA Method 537

PFAS compounds are identified by their common acronyms in this report. The EDDs reference both the technical names and the acronyms.

Matrix spike recoveries and correlations of SS-03_6-12 and SB-20-8-7-9 are within laboratory acceptance ranges.

Holding times were met. Blanks show no contamination. Isotopic dilution surrogate standards and internal standard recoveries are within validation guidelines. LCS recoveries are compliant.

TAL Metals by EPA 6010B, 7470A, and 7471B

The detected results for cadmium in SB-20-15-2-4 and SB-20-16-9-12 are considered external contamination and edited to reflect non-detection due to presence in the associated preparation blank.

Matrix spikes/duplicate evaluations were performed on SS-07_0-2, SS-10_0-2, SS-16_2-12, SS-03_2-12, SS-12_2-12, SW-01, SED-01, SB-20-12-6-10, and SB-20-16-9-12. They show recoveries and correlations within validation guidelines, with the following exceptions, results for which are qualified as estimated in the indicated parent sample:

Parent Sample	Element	Outlying % Recoveries	Outlying % RPD
SS-10_0-2_11122019	Antimony	54,54	
SS-03_2-12_11142019	Antimony	63,63	
	Arsenic	70,53	
SED-01_111820219	Magnesium		58
SB-20-12-6-10-012920	Antimony	64,66	
SB-20-16-9-12-020320	Antimony	68,64	

The ICP serial dilution evaluations of SS-10_0-2, SS-10_12-24, SS-16_2-12, SS-03_2-12, SS-12_2-12, FD-03, SW-01, SED-01, SB-20-10-6, FD-01, SB-20-12-6-10, and SB-20-16-9-12 show acceptable correlations, with the following exceptions, results for which are qualified as estimated in the indicated samples:

Parent Sample	Element	%Difference
SB-20-10-6-10-012720	potassium	25
SB-20-12-6-10-012920	potassium	16

Wet Chemistry Analyses for Total Cyanide and TOC by 9012B and Lloyd Kahn

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were found acceptable for the validated samples, unless noted specifically within this text.

Detected results for total cyanide reported in SDG L1911244 that are flagged with the "B" qualified are considered external contamination and edited to reflect non-detection, sometimes at a slightly elevated reporting limits, due to presence in the associated method blanks. This includes the majority of the reported detections.

The response for TOC in SED-03 exceeds the calibration range. The reanalysis was performed beyond the holding time. The initial result is used, but qualified as estimated.

Total cyanide matrix spikes of SS-06_2-12, SS-16_2-12, SS-15_12-24, SS-03_2-12, SS-12_2-12, SW-01, SB-20-12-6-10, and SB-20-16-9-12 show recoveries and correlations show recoveries and correlations within the laboratory acceptance range, but it is noted that the range is exceptionally wide, at 10% to 159%.

TOC matrix spikes of SED-01 show recoveries and correlations within validation guidelines.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments:	Validation Qualifier Definitions Sample Identifications Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Summaries

Client: O'Brien & Gere Engineers, Incorporated
Project: Accurate Die/25179.60243

Service Request:R1911150

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911150-001	SS-02_0-2_11122019	11/12/2019	0750
R1911150-002	SS-02_5_11122019	11/12/2019	0810
R1911150-003	SS-02_2-12_11122019	11/12/2019	0820
R1911150-004	SS-02_18_11122019	11/12/2019	0830
R1911150-005	SS-02_12-24_11122019	11/12/2019	0840
R1911150-006	SS-06_0-2_11122019	11/12/2019	0945
R1911150-007	SS-06_8_11122019	11/12/2019	0950
R1911150-008	SS-06_2-12_11122019	11/12/2019	0955
R1911150-009	SS-06_18_11122019	11/12/2019	1005
R1911150-010	SS-06_12-24_11122019	11/12/2019	1010
R1911150-011	SS-07_0-2_11122019	11/12/2019	1105

Client: O'Brien & Gere Engineers, Incorporated **Service Request:**R1911151

Project: Accurate Die/21579.60243

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911151-001	SS-07_5_11122019	11/12/2019	1110
R1911151-002	SS-07_2-12_11122019	11/12/2019	1115
R1911151-003	SS-07_18_11122019	11/12/2019	1120
R1911151-004	SS-07_12-24_11122019	11/12/2019	1130
R1911151-005	SS-10_0-2_11122019	11/12/2019	1245
R1911151-006	SS-10_5_11122019	11/12/2019	1250
R1911151-007	SS-10_02-12_11122019	11/12/2019	1300
R1911151-008	SS-05_0-2_11122019	11/12/2019	1355
R1911151-009	SS-05_5_11122019	11/12/2019	1400
R1911151-010	SS-05_2-12_11122019	11/12/2019	1405
R1911151-011	SS-05_18_11122019	11/12/2019	1410
R1911151-012	SS-05_12-24_11122019	11/12/2019	1425
R1911151-013	SS-10_18_11122019	11/12/2019	1525
R1911151-014	SS-10_12-24_11122019	11/12/2019	1530
R1911151-015	TB-01_11122019	11/12/2019	

Client: O'Brien & Gere Engineers, Incorporated
Project: Accurate Die/21579.60243

Service Request:R1911244

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911244-001	SS-16_0-2_11132019	11/13/2019	0950
R1911244-002	SS-16_5_11132019	11/13/2019	0955
R1911244-003	SS-16_2-12_11132019	11/13/2019	1010
R1911244-004	SS-16_18_11132019	11/13/2019	1030
R1911244-005	SS-16_12-24_11132019	11/13/2019	1035
R1911244-006	SS-15_0-2_11132019	11/13/2019	1125
R1911244-007	SS-15_5_11132019	11/13/2019	1130
R1911244-008	SS-15_2-12_11132019	11/13/2019	1135
R1911244-009	SS-15_18_11132019	11/13/2019	1145
R1911244-010	SS-15_12-24_11132019	11/13/2019	1210
R1911244-011	SS-13_0-2_11132019	11/13/2019	1320
R1911244-012	SS-13_5_11132019	11/13/2019	1325
R1911244-013	SS-13_2-12_11132019	11/13/2019	1330
R1911244-014	SS-13_18_11132019	11/13/2019	1335
R1911244-015	SS-13_12-24_11132019	11/13/2019	1340
R1911244-016	SS-8_0-2_11132019	11/13/2019	1430
R1911244-017	SS-8_5_11132019	11/13/2019	1435
R1911244-018	SS-8_2-12_11132019	11/13/2019	1440

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911245-001	SS-08_18_11132019	11/13/2019	1445
R1911245-002	SS-08_12-24_11132019	11/13/2019	1450
R1911245-003	SS-09_0-2_11132019	11/13/2019	1545
R1911245-004	SS-09_5_11132019	11/13/2019	1550
R1911245-005	SS-09_2-12_11132019	11/13/2019	1555
R1911245-006	SS-09_18_11132019	11/13/2019	1600
R1911245-007	SS-09_12-24_11132019	11/13/2019	1605
R1911245-008	FD-01_11132019	11/13/2019	
R1911245-009	EB-01_11132019	11/13/2019	0900
R1911245-010	TB-02_11132019	11/13/2019	

Client: O'Brien & Gere Engineers, Incorporated

Project: Former Accurate Die Shallow Soil/21579.60243

Service Request:R1911272

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911272-001	SS-03_6-12_11142019	11/14/2019	1000
R1911272-002	SS-01_0-2_11142019	11/14/2019	1225
R1911272-003	SS-14_12-24_11142019	11/14/2019	1430
R1911272-004	EB-02_11142019	11/14/2019	1145
R1911272-005	FB-01_11142019	11/14/2019	1500
R1911272-006	FD-01_11142019	11/14/2019	

Client: O'Brien & Gere Engineers, Incorporated **Service Request:**R1911273
Project: Accurate Die/21579.60243

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911273-001	SS-03_6-12_11142019	11/14/2019	1000
R1911273-002	SS-01_0-2_11142019	11/14/2019	1225
R1911273-003	SS-14_12-24_11142019	11/14/2019	1430
R1911273-004	EB-02_11142019	11/14/2019	1145
R1911273-005	FD-01_11142019	11/14/2019	0000

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911301-001	SS-03_0-2_11142019	11/14/2019	0905
R1911301-002	SS-03_5_11142019	11/14/2019	0910
R1911301-003	SS-03_2-12_11142019	11/14/2019	1015
R1911301-004	SS-03_18_11142019	11/14/2019	1020
R1911301-005	SS-03_12-24_11142019	11/14/2019	1040
R1911301-006	SS-01_0-2_11142019	11/14/2019	1225
R1911301-007	SS-01_5_11142019	11/14/2019	1230
R1911301-008	SS-01_2-12_11142019	11/14/2019	1240
R1911301-009	SS-01_18_11142019	11/14/2019	1245
R1911301-010	SS-01_12-24_11142019	11/14/2019	1250
R1911301-011	SS-14_0-2_11142019	11/14/2019	1345
R1911301-012	SS-14_5_11142019	11/14/2019	1350
R1911301-013	SS-14_2-12_11142019	11/14/2019	1355
R1911301-014	SS-14_18_11142019	11/14/2019	1420
R1911301-015	SS-14_12-24_11142019	11/14/2019	1430
R1911301-016	SS-11_0-2_11142019	11/14/2019	1515
R1911301-017	SS-11_5_11142019	11/14/2019	1520

Client: O'Brien & Gere Engineers, Incorporated
Project: Accurate Die/21579.60243

Service Request:R1911302

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911302-001	SS-11_2-12_11142019	11/14/2019	1525
R1911302-002	SS-11_18_11142019	11/14/2019	1530
R1911302-003	SS-11_12-24_11142019	11/14/2019	1535
R1911302-004	FD-02_11142019	11/14/2019	
R1911302-005	EB-02_11142019	11/14/2019	1145
R1911302-006	TB-03_11142019	11/14/2019	

Client: O'Brien & Gere Engineers, Incorporated **Service Request:**R1911313
Project: Accurate Die/21579.60243

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911313-001	SS-12_0-2_11152019	11/15/2019	0920
R1911313-002	SS-12_5_11152019	11/15/2019	0925
R1911313-003	SS-12_2-12_11152019	11/15/2019	0930
R1911313-004	SS-12_18_11152019	11/15/2019	0935
R1911313-005	SS-12_12-24_11152019	11/15/2019	0945
R1911313-006	SS-04_0-2_11152019	11/15/2019	1105
R1911313-007	SS-04_5_11152019	11/15/2019	1110
R1911313-008	SS-04_2-12_11152019	11/15/2019	1115
R1911313-009	SS-04_18_11152019	11/15/2019	1120
R1911313-010	SS-04_12-24_11152019	11/15/2019	1125
R1911313-011	SS-17_0-2_11152019	11/15/2019	1215
R1911313-012	SS-17_5_11152019	11/15/2019	1220
R1911313-013	SS-17_2-12_11152019	11/15/2019	1225
R1911313-014	SS-17_18_11152019	11/15/2019	1230
R1911313-015	SS-17_12-24_11152019	11/15/2019	1235
R1911313-016	FD-03_11152019	11/15/2019	
R1911313-017	EB-03_11152019	11/15/2019	0900
R1911313-018	TB-04_11152019	11/15/2019	

Client:	O'Brien & Gere Engineers, Incorporated
Project:	Accurate Die/25179.60243

Service Request: R1911358

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911358-001	SW-01_11182019	11/18/2019	0955
R1911358-002	SW-02_11182019	11/18/2019	1135
R1911358-003	SW-03_11182019	11/18/2019	1320
R1911358-004	FD-01_11182019	11/18/2019	
R1911358-005	EB-01_11182019	11/18/2019	1250
R1911358-006	TB-01_11182019	11/18/2019	

Client: O'Brien & Gere Engineers, Incorporated
Project: Accurate Die/25179.60243

Service Request:R1911359

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1911359-001	SED-01_11182019	11/18/2019	1015
R1911359-002	SED-02_11182019	11/18/2019	1150
R1911359-003	SED-03_11182019	11/18/2019	1330
R1911359-004	FD-01_11182019	11/18/2019	

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2000757-001	SB-20-3-10-12-012720	1/27/2020	1305
R2000757-002	SB-20-6-11-13-012720	1/27/2020	1450
R2000757-003	SB-20-10-6-10-012720	1/27/2020	1615
R2000757-004	TB-011620	1/27/2020	

Client: O'Brien & Gere Engineers, Incorporated **Service Request:** R2000804

Project: Accurate Die/21579.60243

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2000804-001	SB-20-7-3-5-012820	1/28/2020	1000
R2000804-002	SB-20-9-3-5-012820	1/28/2020	1140
R2000804-003	SB-20-8-7-9-012820	1/28/2020	1445
R2000804-004	SB-20-13-8-10-012820	1/28/2020	1600
R2000804-005	FD-1-012820	1/28/2020	
R2000804-006	FB-1-012820	1/28/2020	1440
R2000804-007	TB-012820	1/28/2020	

Client: O'Brien & Gere Engineers, Incorporated **Service Request:**R2000872
Project: Accurate Die/74480

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2000872-001	SB-20-12-6-10-012920	1/29/2020	1015
R2000872-002	SB-20-11-3-5-012920	1/29/2020	1145
R2000872-003	SB-20-4-3-5-012920	1/29/2020	1430
R2000872-004	SB-20-1-8-10-012920	1/29/2020	1600
R2000872-005	TB-1-012920	1/29/2020	

Client: O'Brien & Gere Engineers, Incorporated **Service Request:**R2000907
Project: Accurate Die/74480

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2000907-001	SB-20-14-7-9-013020	1/30/2020	1100
R2000907-002	SB-MIP-5-3-5-013020	1/30/2020	1400
R2000907-003	SB-MIP-5-20-22-013020	1/30/2020	1430
R2000907-004	SB-MIP-3-7-9-013020	1/30/2020	1600
R2000907-005	SB-MIP-3-22-24-013020	1/30/2020	1615
R2000907-006	TB-1-013020	1/30/2020	1000
R2000907-007	SB-MIP-1-8-10-013120	1/31/2020	0930
R2000907-008	SB-MIP-1-23-25-013120	1/31/2020	0945
R2000907-009	SB-MIP-6-8-10-013120	1/31/2020	1030
R2000907-010	SBMIP-6-23-25-013120	1/31/2020	1045
R2000907-011	SB-MIP-4-3-5-013120	1/31/2020	1245
R2000907-012	SB-MIP-4-23-25-013120	1/31/2020	1250
R2000907-013	FD-1-013120	1/31/2020	
R2000907-014	FB-1-013120	1/31/2020	1035
R2000907-015	TB-1-013120	1/31/2020	1030

Client: O'Brien & Gere Engineers, Incorporated **Service Request:** R2000946

Project: Former Accurate Die Shallow Soil/21579.60243

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R2000946-001	SB-20-15-2-4-020320	2/3/2020	1020
R2000946-002	SB-20-16-9-12-020320	2/3/2020	1145
R2000946-003	SB-20-5-9-11-020320	2/3/2020	1330
R2000946-004	SB-20-2-8-10-020320	2/3/2020	1430
R2000946-005	FD-1-020320	2/3/2020	
R2000946-007	TB-1-020320	2/3/2020	
R2000946-008	FB-1-020320	2/3/2020	1030

Data Validation Services

120 Cobble Creek Road   P. O. Box
208 North Creek, NY 12853
Phone (518) 251-4429
harry@frontiernet.net

May 10, 2024; Revised May 21, 2024

Yuri Veliz
Ramboll
333 West Washington St
Syracuse, NY   13202

RE: Former Accurate Die Casting
Data Usability Summary Report (DUSR); Validation of Analytical Laboratory Data Packages
Eurofins SDG Nos. 480-217228-1 and 460-217246-1

Dear Mr. Veliz:

Review has been completed for the data packages generated by Eurofins, Inc. that pertain to aqueous samples collected between 02/20/24 and 03/01/24 at the Former Accurate Die Casting site. Thirteen samples and a field duplicate were processed for a modified Target Compound List (TCL) of semivolatiles, Tentatively Identified Compounds (TICs), TCL pesticides, herbicides, TCL Aroclor PCBs, TAL metals, and total cyanide.   Eleven of those samples, the field duplicate, and six additional samples were processed for TCL volatile analytes. Trip blanks and sample matrix spikes were also processed. The analytical methodologies are those of the USEPA SW846.

The data packages submitted by the laboratory contain full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

- Data Completeness
- Case Narrative
- Custody Documentation/Sample Receipt
- Holding Times
- Surrogate and Internal Standard Recoveries
- Method, Calibration, and Trip Blanks
- Matrix Spike Recoveries/Duplicate Correlations
- Blind Field Duplicate Correlations
- Laboratory Control Sample (LCS) Recoveries
- Instrumental Tunes
- Initial and Continuing Calibration Standards
- Method Compliance
- Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data packages.

In summary, results for the samples are usable either as reported or with minor qualification. Data completeness, accuracy, precision, representativeness, reproducibility, sensitivity, and comparability are acceptable.

Validation data qualifier definitions and client sample identifications are attached to this text. Also included in this report are the client EDDs with recommended qualifiers/edits applied in red.

Blind Field Duplicates

The blind field duplicate evaluation was performed at location MW-5-030124. Correlations fall within validation guidelines, with the exceptions of those for aluminum, iron, and manganese (42%RPD to 53%RPD). The results for those three elements in the parent sample and its duplicate have been qualified as estimated in value.

Volatile Analyses by EPA 8260C

Due to presence in the associated trip blank, the detection of chloroform in MW-15-022124 is considered external contamination and has been edited to reflect non-detection at the reporting limit.

Matrix spikes of MW-11-030124 show recoveries and correlations within validation guidelines, with the exception of the recoveries for trichloroethene (53% and 70%). The result for that compound in the parent sample has been qualified as estimated in value.

LCS recoveries are within validation guidelines.

Surrogate and internal standard recoveries are compliant. Calibration standards show responses within validation guidelines.

Semivolatile Analyses by EPA8270D

LCS recoveries are within validation guidelines, with the exceptions of those for 2,4,5-trichlorophenol, 2,4,6-trichlorophenol, 4-nitrophenol, and 2,4-dichlorophenol in those associated with MW-22-022224, MW-25-022224, MW-18-022224, MW-17-022224, MW-2-022224, and MW-26-022224 (37% to 49%; 45%RPD to 55%RPD). The results for those compounds in those samples have been qualified as estimated.

Calibration standards show responses within validation guidelines, with the exceptions of the following, the results for which have been qualified as estimated in the indicated associated samples: hexachlorocyclopentadiene and pentachlorophenol (42%D and 60%D) in MW-22-022224, MW-25-022224, MW-18-022224, MW-17-022224, MW-2-022224, and MW-26-022224.

Matrix spikes of MW-11-030124 show recoveries and correlations within validation guidelines. Surrogate and internal standard recoveries are compliant.

The method blank associated with MW-12-022124, MW-13-022124, and MW-23-022124 contains ten TICs, most of which are also present in the associated samples. The sample TICs that are also contained in the method blank are considered external and removed from consideration as sample components.

TICs identified as toluene and trichloroethylene are volatile target analytes. Although they have not been removed as sample components, the results for these compounds should only be considered from the volatile fraction.

Pesticides, Herbicides, and Aroclor PCB Analyses by USEPA 8081B, 8151A, and 8082A

The detected result for methoxychlor in MW-23-022124 exhibits elevated dual column quantitative correlations, and is therefore qualified as estimated.

The detected result for a-BHC in MW-11-030124 is considered external contamination and edited to reflect non-detection due to presence in the associated method blank.

The matrix spike evaluations were performed for pesticides, herbicides, and Aroclors 1016 and 1260 on MW-11-030124. Recoveries and correlations are within validation guidelines.

The detected result for 4,4'-DDT in MW-11-030124 is qualified as estimated, with a high bias, due to elevated recovery (133%) in the associated LCS.

Surrogate and internal standard recoveries are within validation guidelines.

Calibration standards show responses within validation guidelines. LCS recoveries are within required ranges. Blanks show no contamination.

TAL Metals by EPA 6010C and 7470A

The matrix spikes and/or duplicate evaluation was performed for TAL analytes on MW-11-030124, and show recover and correlations within validation guidelines.

Due to presence in the associated method blank, the following detected results in the associated samples are considered external contamination and edited to reflect non-detection:

- Copper in MW-2-022224, MW-17-022224, MW-18-022224, MW-22-022224, and MW-26-022224
- Manganese in MW-18-022224
- Zinc in MW-2-022224, MW-18-022224, MW-22-022224, MW-25-022224, and MW-26-022224

The ICP serial dilution determination of MW-11-030124 shows correlations that are within validation guidelines.

Calibration and low level standard responses are compliant.

Total Cyanide by EPA 9012B

Review was conducted for method compliance, holding times, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were found acceptable for the validated sample, unless noted specifically within this text.

Matrix spike recovery and/or duplicate correlation evaluations were performed on MW-11-030124 and MW-18-022224. Recoveries and correlations are within validation guidelines.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,

Judy Harry

Judy Harry

Attachments: Validation Data Qualifier Definitions
Sample Identifications
Qualified Laboratory EQuIS EDDs

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

Sample Identification Summary

Sample Summary

Client: O'Brien & Gere Inc of North America
Project/Site: Former Accurate Die Cast

Job ID: 480-217228-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217228-1	MW-13-022024	Water	02/20/24 11:30	02/21/24 10:30
480-217228-2	MW-10-022024	Water	02/20/24 12:10	02/21/24 10:30
480-217228-3	MW-18-022024	Water	02/20/24 14:45	02/21/24 10:30
480-217228-4	WW-24-022024	Water	02/20/24 15:10	02/21/24 10:30
480-217228-5	MW-11-022024	Water	02/20/24 15:55	02/21/24 10:30
480-217228-6	Trip Blank-022024	Water	02/20/24 00:00	02/21/24 10:30

Sample Summary

Client: Ramboll Americas Engineering Solutions
Project/Site: Former Accurate Die Cast

Job ID: 480-217246-1
SDG: 480-217246-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-217246-3	MW-12-022124	Water	02/21/24 12:40	02/22/24 10:30
480-217246-4	MW-15-022124	Water	02/21/24 13:40	02/22/24 10:30
480-217246-5	MW-27-022124	Water	02/21/24 15:50	02/22/24 10:30
480-217246-6	MW-23-022124	Water	02/21/24 15:40	02/22/24 10:30
480-217246-7	TRIP BLANK-022124	Water	02/21/24 00:00	02/22/24 10:30
480-217307-1	MW-22-022224	Water	02/22/24 11:00	02/24/24 10:50
480-217307-2	MW-25-022224	Water	02/22/24 11:45	02/24/24 10:50
480-217307-3	MW-18-022224	Water	02/22/24 11:55	02/24/24 10:50
480-217307-4	MW-17-022224	Water	02/22/24 14:10	02/24/24 10:50
480-217307-5	MW-2-022224	Water	02/22/24 16:00	02/24/24 10:50
480-217307-6	MW-26-022224	Water	02/22/24 16:30	02/24/24 10:50
480-217307-7	TB-022224	Water	02/22/24 00:00	02/24/24 10:50
480-217442-1	MW-11-030124	Water	03/01/24 10:00	03/02/24 10:00
480-217442-2	MW-5-030124	Water	03/01/24 11:30	03/02/24 10:00
480-217442-3	FD-01-030124	Water	03/01/24 00:00	03/02/24 10:00
480-217442-4	TB-01-030124	Water	03/01/24 00:00	03/02/24 10:00

DATA VALIDATION REPORT

Accurate Diecasting

SDG: 200-74487-1

Chemical Analyses Performed by:

Eurofins Burlington

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

Ramboll Americas Engineering Solutions

January 22, 2025

5 Brilliant Avenue, Pittsburgh, PA 15215
412.408.3288 I www.eds-pa.com

ENVIRONMENTAL
DATA SERVICES, LTD.

EXECUTIVE NARRATIVE

Sample Delivery Groups: 200-74487-1
Laboratory: Eurofins Burlington
Site: Accurate Diecasting
Sampling dates: 07/24/2024
Number of Samples: 11
Test Method: EPA TO-15
Analysis: Volatile Organic Compounds

Validation Level: Level 4

Validation Guidelines: National Functional Guidelines for Organic Superfund Methods Data Review, OLEM 9240.0-51 EPA 540-R-20-005 November 2020.

Client Sample ID	Laboratory Sample ID	Matrix
SV-01-072424	200-74487-1	Air
SV-03-072424	200-74487-3	Air
SV-04-072424	200-74487-4	Air
SV-05-072424	200-74487-5	Air
SV-06-072424	200-74487-6	Air
SV-07-072424	200-74487-7	Air
SV-08-072424	200-74487-8	Air
SV-09-072424	200-74487-9	Air
SV-10-072424	200-74487-10	Air
AA-072424	200-74487-11	Air
DUP-072424	200-74487-12	Air

Table 1 provides a summary of the major and minor data quality issues identified in this data set. All data are acceptable except those results which have been qualified with “R”, rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

All data users should note two facts. First, an "R" flag means that the associated value is unusable due to significant quality control (QC) problems, the data is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on any data tables even as a last resort. Second, no analyte concentration, even if it passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

DATA ASSESSMENT

1. NARRATIVE AND COMPLETENESS REVIEW:

The case narrative was reviewed, and the data package was checked for completeness. No discrepancies were noted.

2. SAMPLE DELIVERY AND CONDITION:

The samples arrived at the laboratory in acceptable condition. Proper custody was documented.

3. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detect results are flagged "R", rejected. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. MASS SPECTROMETER TUNING:

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

No problems were found for this criterion.

5. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial and continuing calibration should meet the minimum relative response factor (RRF) criteria as listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review. If the RRF is less than minimum RRF specified, professional judgment is used, and all detects in the sample will be qualified as "J" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation and Percent Difference

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent difference (%D) compares the response factor of the continuing calibration check to the mean RRF from the initial calibration.

Percent RSD must be less than maximum %RSD listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review for all target analytes. In cases where linear and non-linear regressions are used, correlation coefficients must be greater than 0.995. For the opening or closing continuing calibration verification (CCV), the %D must be within the inclusive opening or closing maximum %D limits for all target compounds. A value outside of these limits indicates potential detection and quantitation errors. If the %RSD exceeds quality control criteria, detects may be qualified as "J", and professional judgment is used to qualify non-detects. If the %D exceeds quality control criteria, the positive results are flagged as estimated, "J", and non-detects are flagged "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks; i.e. method, trip, field, or rinse blanks; are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

A) Method blank contamination

No problems were found for this criterion.

B) Field/Equipment blank contamination

No sample was submitted as a field blank in association with the samples in this sample delivery group (SDG).

C) **Trip blank contamination**

No sample was submitted as a trip blank in association with the samples in this SDG.

D) **Storage Blank contamination**

No storage blank was submitted in association with these samples.

7. SURROGATES:

All samples are spiked with system monitoring compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery limits were outside quality control limits established by the laboratory, qualifications were applied to all the samples and analytes as shown below.

No problems were found for this criterion.

8. COMPOUND IDENTIFICATION AND QUANTIFICATION:

Compound Identification

The compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit the sample peak must be within ±0.06 RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

Target compound identifications were reviewed at the Stage 4 level. No anomalies were identified.

Tentatively Identified Compounds (TICs) were not required and were not evaluated.

Compound Quantification

Target compound result quantitation was reviewed at the Stage 4 level. No anomalies were identified.

Manual integrations were reviewed at the Stage 4 level. No anomalies were identified.

9. VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS:

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified “NJ,” tentatively identified. If the non-target compound is reported as an unknown, the result is qualified “J,” estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to “unknown” and the result is qualified “J,” estimated.

Volatile TICs were not reported for this SDG.

10. MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY:

Matrix spike/matrix spike duplicate (MS/MSD) data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other quality control criteria for additional qualification of data.

No sample was submitted for MS/MSD or matrix duplicate evaluation in association with this SDG.

11. INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria are meant to ensure that the gas chromatograph/mass spectrometer (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than ±30 seconds from the associated continuing calibration standard. The area count must be within a (50-200%) range of the associated standard. If the area count is greater than 200%, non-detected results are not qualified and positive results are flagged as estimated with potential negative bias, "J-". If the area count is less than 50%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results are flagged "UJ". If the area count is less than 20%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results will be classified as unusable "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

12. FIELD DUPLICATES:

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 50% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values for field duplicate analyses that do not meet the technical criteria, the action was applied to only the parent sample and its duplicate.

Samples SV-09-072424 and DUP-072424 were submitted as a field duplicate pair in association with this SDG. Upon evaluation, adequate field precision was demonstrated with the exception of acetone and naphthalene. The results reported for the impacted analytes in the field duplicate samples have been qualified "J" or "UJ", as appropriate on this basis.

13. LABORATORY CONTROL SAMPLES:

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous/water, soil/sediment, wipe, and filter LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and quality assurance/quality control (QA/QC) procedures as employed for the samples. All LCS percent recoveries must fall within laboratory-specified limits. Qualifications were applied to the samples and analytes as shown below.

The LCS evaluations were performed at the appropriate frequency. No problems were found for this criterion.

14. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used.

Dilutions were performed on samples associated with this SDG as required to quantitate concentrations of target analytes within the calibration range or due to high concentrations of non-target analytes. Elevated reporting limits have been reported in these cases.

15. OTHER PROBLEMS:

No problems were found for this criterion.

Table 1 Major and Minor Findings

	Were acceptance criteria met?		
	Yes	No	
TO-15 / TO-15 SIM Volatiles		**Major**	**Minor**
Holding Time	x		
Sample Delivery and Condition	x		
Mass Spectrometer Tuning	x		
Sample Delivery and Condition	x		
Response Factor	x		
Percent Relative Standard Deviation and Percent Difference	x		
Internal Standards	x		
Method Blank	x		
Field/Equipment Blank	NA		
Trip Blank	NA		
Storage Blank	NA		
Surrogates	NA		
Compound Identification	x		
Volatile Tentatively Identified Compounds	NA		
Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate	NA		
Field Duplicate			x
Laboratory Control Samples	x		
Other Quality Control Data out of Specification	x		

Major = Major data quality issue identified resulting in rejection of data.
Minor = Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.
NA = Not applicable

Table 2 Data Validation Qualifiers

Qualifier	**Definition**
U	The analyte was analyzed for but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

DATA VALIDATION REPORT

Accurate Diecasting

SDG: 200-74947-1

Chemical Analyses Performed by:

Eurofins Burlington

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

Ramboll Americas Engineering Solutions

January 22, 2025

EXECUTIVE NARRATIVE

Sample Delivery Groups: 200-74947-1
Laboratory: Eurofins Burlington
Site: Accurate Diecasting
Sampling dates: 08/29/2024
Number of Samples: 1
Test Method: EPA TO-15
Analysis: Volatile Organic Compounds

Validation Level: Level 4

Validation Guidelines: National Functional Guidelines for Organic Superfund Methods Data Review, OLEM 9240.0-51 EPA 540-R-20-005 November 2020.

Client Sample ID	Laboratory Sample ID	Matrix
SV-02-082924	200-74947-1	Air

Table 1 provides a summary of the major and minor data quality issues identified in this data set. All data are acceptable except those results which have been qualified with “R”, rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

All data users should note two facts. First, an "R" flag means that the associated value is unusable due to significant quality control (QC) problems, the data is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on any data tables even as a last resort. Second, no analyte concentration, even if it passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

DATA ASSESSMENT

1. NARRATIVE AND COMPLETENESS REVIEW:

The case narrative was reviewed, and the data package was checked for completeness. No discrepancies were noted.

2. SAMPLE DELIVERY AND CONDITION:

The samples arrived at the laboratory in acceptable condition. Proper custody was documented.

3. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detect results are flagged "R", rejected. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. MASS SPECTROMETER TUNING:

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

No problems were found for this criterion.

5. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial and continuing calibration should meet the minimum relative response factor (RRF) criteria as listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review. If the RRF is less than minimum RRF specified, professional judgment is used, and all detects in the sample will be qualified as "J" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation and Percent Difference

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent difference (%D) compares the response factor of the continuing calibration check to the mean RRF from the initial calibration.

Percent RSD must be less than maximum %RSD listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review for all target analytes. In cases where linear and non-linear regressions are used, correlation coefficients must be greater than 0.995. For the opening or closing continuing calibration verification (CCV), the %D must be within the inclusive opening or closing maximum %D limits for all target compounds. A value outside of these limits indicates potential detection and quantitation errors. If the %RSD exceeds quality control criteria, detects may be qualified as "J", and professional judgment is used to qualify non-detects. If the %D exceeds quality control criteria, the positive results are flagged as estimated, "J", and non-detects are flagged "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion with the following exceptions.

The observed %RSDs for 1,2,4-trichlorobenzene and naphthalene were outside acceptance limits in the initial calibration associated with the sample in this sample delivery group (SDG). The results reported for the impacted analytes in the associated sample were not detected and have been qualified estimated "UJ" on this basis.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks; i.e. method, trip, field, or rinse blanks; are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

A) Method blank contamination

No problems were found for this criterion requiring qualification of sample results.

B) Field/Equipment blank contamination

No sample was submitted as a field blank in association with the samples in this SDG.

C) Trip blank contamination

No sample was submitted as a trip blank in association with the samples in this SDG.

D) Storage Blank contamination

No storage blank was submitted in association with these samples.

7. SURROGATES:

All samples are spiked with system monitoring compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery limits were outside quality control limits established by the laboratory, qualifications were applied to all the samples and analytes as shown below.

No problems were found for this criterion.

8. COMPOUND IDENTIFICATION AND QUANTIFICATION:

Compound Identification

The compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit the sample peak must be within ±0.06 RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

Target compound identifications were reviewed at the Stage 4 level. No anomalies were identified.

Tentatively Identified Compounds (TICs) were not required and were not evaluated.

Compound Quantification

Target compound result quantitation was reviewed at the Stage 4 level. No anomalies were identified.

Manual integrations were reviewed at the Stage 4 level. No anomalies were identified.

9. VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS:

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified “NJ,” tentatively identified. If the non-target compound is reported as an unknown, the result is qualified “J,” estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to “unknown” and the result is qualified “J,” estimated.

Volatile TICs were not reported for this SDG.

10. MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY:

Matrix spike/matrix spike duplicate (MS/MSD) data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other quality control criteria for additional qualification of data.

No sample was submitted for MS/MSD or matrix duplicate evaluation in association with this SDG.

11. INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria are meant to ensure that the gas chromatograph/mass spectrometer (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than ±30 seconds from the associated continuing calibration standard. The area count must be within a (50-200%) range of the associated standard. If the area count is greater than 200%, non-detected results are not qualified and positive results are flagged as estimated with potential negative bias, "J-". If the area count is less than 50%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results are flagged “UJ”. If the area count is less than 20%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results will be classified as unusable "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

12. FIELD DUPLICATES:

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 50% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values for field duplicate analyses that do not meet the technical criteria, the action was applied to only the parent sample and its duplicate.

No samples were submitted as a field duplicate pair in association with this SDG.

13. LABORATORY CONTROL SAMPLES:

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous/water, soil/sediment, wipe, and filter LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and quality assurance/quality control (QA/QC) procedures as employed for the samples. All LCS percent recoveries must fall within laboratory-specified limits. Qualifications were applied to the samples and analytes as shown below.

The LCS evaluations were performed at the appropriate frequency. No problems were found for this criterion.

14. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used.

Dilutions were performed on samples associated with this SDG as required to quantitate concentrations of target analytes within the calibration range or due to high concentrations of non-target analytes. Elevated reporting limits have been reported in these cases.

15. OTHER PROBLEMS:

No problems were found for this criterion.

Table 1 Major and Minor Findings

	Were acceptance criteria met?		
	Yes	No	
TO-15 / TO-15 SIM Volatiles		Major	Minor
Holding Time	x		
Sample Delivery and Condition	x		
Mass Spectrometer Tuning	x		
Sample Delivery and Condition	x		
Response Factor	x		
Percent Relative Standard Deviation and Percent Difference			x
Internal Standards	x		
Method Blank	x		
Field/Equipment Blank	NA		
Trip Blank	NA		
Storage Blank	NA		
Surrogates	NA		
Compound Identification	x		
Volatile Tentatively Identified Compounds	NA		
Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate	NA		
Field Duplicate	NA		
Laboratory Control Samples	x		
Other Quality Control Data out of Specification	x		

Major = Major data quality issue identified resulting in rejection of data.
Minor = Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.
NA = Not applicable

Table 2 Data Validation Qualifiers

Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

DATA VALIDATION REPORT

Accurate Diecasting

SDG: 200-75464-1

Chemical Analyses Performed by:

Eurofins Burlington

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

Ramboll Americas Engineering Solutions

January 22, 2025

EXECUTIVE NARRATIVE

Sample Delivery Groups: 200-75464-1
Laboratory: Eurofins Burlington
Site: Accurate Diecasting
Sampling dates: 10/15/2024
Number of Samples: 1
Test Method: EPA TO-15
Analysis: Volatile Organic Compounds

Validation Level: Level 4

Validation Guidelines: National Functional Guidelines for Organic Superfund Methods Data Review, OLEM 9240.0-51 EPA 540-R-20-005 November 2020.

Client Sample ID	Laboratory Sample ID	Matrix
SV-01-101524	200-75464-1	Air

Table 1 provides a summary of the major and minor data quality issues identified in this data set. All data are acceptable except those results which have been qualified with “R”, rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

All data users should note two facts. First, an "R" flag means that the associated value is unusable due to significant quality control (QC) problems, the data is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on any data tables even as a last resort. Second, no analyte concentration, even if it passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data, but any value potentially contains error.

DATA ASSESSMENT

1. NARRATIVE AND COMPLETENESS REVIEW:

The case narrative was reviewed, and the data package was checked for completeness. No discrepancies were noted.

2. SAMPLE DELIVERY AND CONDITION:

The samples arrived at the laboratory in acceptable condition. Proper custody was documented.

3. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimated, "J". The non-detect results are flagged "R", rejected. Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

4. MASS SPECTROMETER TUNING:

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

No problems were found for this criterion.

5. CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument can produce acceptable quantitative data. An initial calibration demonstrates that the instrument can give acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

A) Response Factor

The response factor measures the instrument's response to specific chemical compounds. All analytes for initial and continuing calibration should meet the minimum relative response factor (RRF) criteria as listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review. If the RRF is less than minimum RRF specified, professional judgment is used, and all detects in the sample will be qualified as "J" or "R". All non-detects for that compound will be rejected "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

B) Percent Relative Standard Deviation and Percent Difference

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent difference (%D) compares the response factor of the continuing calibration check to the mean RRF from the initial calibration.

Percent RSD must be less than maximum %RSD listed in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review for all target analytes. In cases where linear and non-linear regressions are used, correlation coefficients must be greater than 0.995. For the opening or closing continuing calibration verification (CCV), the %D must be within the inclusive opening or closing maximum %D limits for all target compounds. A value outside of these limits indicates potential detection and quantitation errors. If the %RSD exceeds quality control criteria, detects may be qualified as "J", and professional judgment is used to qualify non-detects. If the %D exceeds quality control criteria, the positive results are flagged as estimated, "J", and non-detects are flagged "UJ". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion with the following exceptions.

The observed %RSD for naphthalene was outside acceptance limits in the initial calibration associated with the sample in this sample delivery group (SDG). The result reported for the impacted analyte in the associated sample was not detected and has been qualified estimated "UJ" on this basis.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks; i.e. method, trip, field, or rinse blanks; are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field and rinse blanks measure cross-contamination of samples during field operations. Qualifications were applied to the samples and analytes as shown below.

A) Method blank contamination

No problems were found for this criterion requiring qualification of sample results.

B) Field/Equipment blank contamination

No sample was submitted as a field blank in association with the samples in this SDG.

C) Trip blank contamination

No sample was submitted as a trip blank in association with the samples in this SDG.

D) Storage Blank contamination

No storage blank was submitted in association with these samples.

7. SURROGATES:

All samples are spiked with system monitoring compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. If the measured surrogate recovery limits were outside quality control limits established by the laboratory, qualifications were applied to all the samples and analytes as shown below.

No problems were found for this criterion.

8. COMPOUND IDENTIFICATION AND QUANTIFICATION:

Compound Identification

The compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit the sample peak must be within ±0.06 RRT units of the standard compound and have an ion spectrum which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

Target compound identifications were reviewed at the Stage 4 level. No anomalies were identified.

Tentatively Identified Compounds (TICs) were not required and were not evaluated.

Compound Quantification

Target compound result quantitation was reviewed at the Stage 4 level. No anomalies were identified.

Manual integrations were reviewed at the Stage 4 level. No anomalies were identified.

9. VOLATILE TENTATIVELY IDENTIFIED COMPOUNDS:

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to 85% match, the results are qualified “NJ,” tentatively identified. If the non-target compound is reported as an unknown, the result is qualified “J,” estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to “unknown” and the result is qualified “J,” estimated.

Volatile TICs were not reported for this SDG.

10. MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY:

Matrix spike/matrix spike duplicate (MS/MSD) data are generated to determine the long-term precision and accuracy of the analytical method in various matrices. The MS/MSD data may be used in conjunction with other quality control criteria for additional qualification of data.

No sample was submitted for MS/MSD or matrix duplicate evaluation in association with this SDG.

11. INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria are meant to ensure that the gas chromatograph/mass spectrometer (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than ±30 seconds from the associated continuing calibration standard. The area count must be within a (50-200%) range of the associated standard. If the area count is greater than 200%, non-detected results are not qualified and positive results are flagged as estimated with potential negative bias, "J-". If the area count is less than 50%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results are flagged “UJ”. If the area count is less than 20%, positive results are flagged as estimated with potential positive bias, "J+", and non-detected results will be classified as unusable "R". Qualifications were applied to the samples and analytes as shown below.

No problems were found for this criterion.

12. FIELD DUPLICATES:

Field duplicates may be taken and analyzed as an indication of overall precision. These analyses measure both field and laboratory precision. A control limit of 50% for the Relative Percent Difference (RPD) shall be used for original and duplicate sample values for field duplicate analyses that do not meet the technical criteria, the action was applied to only the parent sample and its duplicate.

No samples were submitted as a field duplicate pair in association with this SDG.

13. LABORATORY CONTROL SAMPLES:

The Laboratory Control Sample (LCS) serves as a monitor of the overall performance of each step during the analysis, including the sample preparation. Aqueous/water, soil/sediment, wipe, and filter LCSs shall be analyzed for each analyte utilizing the same sample preparations, analytical methods, and quality assurance/quality control (QA/QC) procedures as employed for the samples. All LCS percent recoveries must fall within laboratory-specified limits. Qualifications were applied to the samples and analytes as shown below.

The LCS evaluations were performed at the appropriate frequency. No problems were found for this criterion.

14. DILUTIONS, RE-EXTRACTIONS & REANALYSIS:

Samples may be re-analyzed for dilution, re-extraction and for other QC reasons. In such cases, the best result values are used.

Dilutions were performed on samples associated with this SDG as required to quantitate concentrations of target analytes within the calibration range or due to high concentrations of non-target analytes. Elevated reporting limits have been reported in these cases.

15. OTHER PROBLEMS:

No problems were found for this criterion.

Table 1 Major and Minor Findings

	Were acceptance criteria met?		
	Yes	No	
TO-15 / TO-15 SIM Volatiles		Major	Minor
Holding Time	x		
Sample Delivery and Condition	x		
Mass Spectrometer Tuning	x		
Sample Delivery and Condition	x		
Response Factor	x		
Percent Relative Standard Deviation and Percent Difference			x
Internal Standards	x		
Method Blank	x		
Field/Equipment Blank	NA		
Trip Blank	NA		
Storage Blank	NA		
Surrogates	NA		
Compound Identification	x		
Volatile Tentatively Identified Compounds	NA		
Matrix Spike/Matrix Spike Duplicate/Matrix Duplicate	NA		
Field Duplicate	NA		
Laboratory Control Samples	x		
Other Quality Control Data out of Specification	x		

Major = Major data quality issue identified resulting in rejection of data.
Minor = Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.
NA = Not applicable

Table 2 Data Validation Qualifiers

Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the adjusted detection limit or quantitation limit, as appropriate.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.

APPENDIX E - SURVEY DATA

Sample	NORTHING (NAD 83)	EASTING (NAD 83)	GROUND ELEV (NAVD 88)	
SS-01	1104957.9	976222.4	546.3	1018
SS-02	1105278.9	975856.4	540.7	1000
SS-03	1105420.1	975806.6	531.8	1001
SS-04	1105664.4	975920.9	533.7	1002
SS-05	1105804.8	975677.6	526.0	1006
SS-06	1106082.2	975447.7	513.3	1005
SS-07	1106057.5	975775.9	527.3	1004
SS-08	1105916.5	975924.1	519.9	1003
SS-09	1105884.5	976041.5	519.9	1011
SS-10	1106089.9	976083.3	501.2	1010
SS-11	1105925.6	976339.1	513.6	1012
SS-12	1106045.5	976393.4	488.7	1009
SS-13	1105995.5	976623.1	497.2	1013
SS-14	1105704.6	976592.9	538.8	1015
SS-15	1105589.8	976274.8	537.8	1019
SS-16	1105462.8	976608.8	546.8	1016
SS-17	1105043.0	976524.8	549.7	1017
SW-01	1106213.3	976125.7	480.6	1007
SW-02	1106007.8	976334.3	484.9	1008
SW-03	1106126.4	976648.7	491.4	1014

Sample	NORTHING (NAD 83)	EASTING (NAD 83)	GROUND ELEV (NAVD 88)
MIP-1	1105270.3	976400.0	547.20
SB-MIP-1	1105274.2	976393.2	547.22
MIP-2	1105217.1	976365.1	546.87
MIP-3	1105231.7	976369.8	546.94
SB-MIP-3	1105234.9	976361.2	546.84
MIP-4	1105295.0	976323.7	546.93
SB-MIP-4	1105292.1	976328.9	547.24
MIP-5	1105267.3	976352.3	547.15
SB-MIP-5	1105265.6	976348.3	547.21
MIP-6	1105267.0	976388.5	547.23
SB-MIP-6	1105264.3	976377.4	547.17
SB-20-1	1105075.7	976204.0	547.19
SB-20-2	1105047.7	976101.3	547.15
SB-20-3	1105187.2	976258.0	546.95
SB-20-4	1105155.1	976098.4	547.07
SB-20-5	1105171.0	975953.1	542.8
SB-20-6	1105259.6	976244.1	547.12
SB-20-7	1105247.1	976173.1	547.10
SB-20-8	1105241.5	976146.3	547.20
SB-20-9	1105230.9	976088.4	547.14
SB-20-10	1105301.4	976236.5	547.14
SB-20-11	1105285.4	976159.2	547.27
SB-20-12	1105281.7	976138.9	547.18
SB-20-13	1105273.1	976081.0	547.15
SB-20-14	1105373.0	976008.4	547.09
SB-20-16	1105925.8	975878.1	519.5
SB-20-15	1105854.6	975902.8	526.0

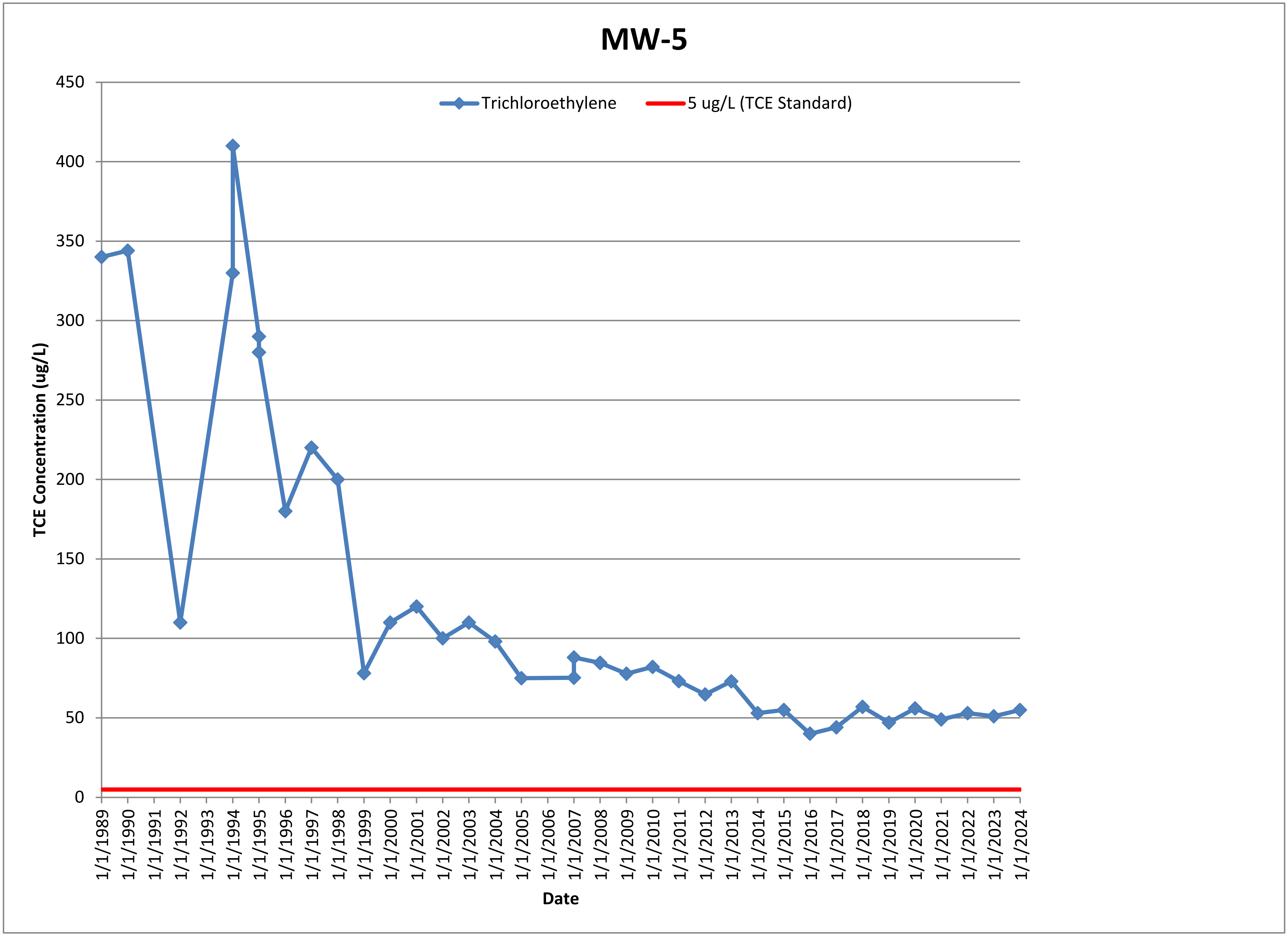
SAMPLE ID	NORTHING	EASTING	ELEVATION	DESCRIPTION
MW 1	1104843.44	976192.32	549.95	RIM
			549.76	T/PVC
			547.87	G
MW 2	1105426.57	975984.05	543.53	RIM
			543.33	T/PVC
			540.63	G
MW 5	1105640.93	976420.81	539.34	RIM
			539.05	T/PVC
			536.76	G
MW 6	1105794.17	976433.99	528.18	RIM
			528.08	T/PVC
			526.625	G
MW 7	1105851.91	976654.97	527.2	RIM
			526.93	T/PVC
			524.48	G
MW 8	1105629.6	976047.85	540.6	RIM
			540.47	T/PVC
			538.17	G
MW 9	1105573.2	976639.49	553.05	RIM
			552.7	T/PVC
			551.12	G
MW 10	1105359.74	976361.79	547.02	RIM
			546.17	T/PVC
			547.08	G
MW 11	1105449.51	976343.75	542.6	RIM
			542.5	T/PVC
			540.73	G
MW 12	1105719.88	976672.75	542.67	G
			542.47	MW12-LID
			540.78	MW12-RIM
MW 13	1105257.99	976396.06	547.85	RIM
			547.63	T/PVC
			547.68	G-CONC FLOOR
MW 14	1105284.83	976328.01	547.64	RIM
			547.4	T/PVC
			547.63	G-CONC FLOOR
MW 15	1104982.042	975961.99	547.7	RIM
			547.49	T/PVC
			544.74	G
MW 16	1104918.31	976295.91	549.72	RIM
			549.5	T/PVC
			547.03	G

Performed by: C.T. Male Associates, D.P.C.
Date: April 4,5 8, 2024

Hori. Datum: NAD 1983 - NYS Central Zone
Vert. Datum: NAVD 1988

MW 17	1105850.8	976233.22	518.24	RIM
			517.79	T/PVC
			515.42	G
MW 18	1105838.93	975914.39	527.21	RIM
			526.94	T/PVC
			525.24	G
MW 19	1105982.23	975936.53	520.47	RIM
			519.96	T/PVC
			518.33	G
MW 21	1105979.68	975940.84	520.74	RIM
			520.6	T/PVC
			518.45	G
MW 22	1105943.52	975829.97	522.35	RIM
			522.16	T/PVC
			520.3	G
MW 23	1105618.13	976048.07	540.61	RIM
			540.3	T/PVC
			538.46	G
MW 24	1106025.492	975934.26	519.72	RIM
			519.35	T/PVC
			517.31	G
MW 25	1106069.06	975743.39	524.16	RIM
			523.22	T/PVC
			520.62	G
MW 26	1105848.33	975664.91	531.34	RIM
			530.93	T/PVC
			528.16	G
MW 27	1105169.06	975953.68	542.8	RIM
			542.37	T/PVC
			542.8	G
COLLECTION MH	1105973.54	976003.16	518.61	RIM
			516.68	G
RECOVERY WELL 1	1105783.51	976425.72	528.88	RIM (NO PVC INSIDE)
			526.9	G
RECOVERY WELL 2	1105408.81	976338.07	543.81	RIM (NO PVC INSIDE)
			540.25	G
PZ 1	1105766.07	976484.56	532.89	RIM
			532.64	T/PVC
			531.15	G
PZ 2	1105798.77	976341.66	531.86	RIM
			531.74	T/PVC
			529.38	G

APPENDIX F - GROUNDWATER TCE CONCENTRATION TREND GRAPHS


MW-5
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
450
400
350
300
250
200
150
100
50
0
1/1/1989
1/1/1990
1/1/1991
1/1/1992
1/1/1993
1/1/1994
1/1/1995
1/1/1996
1/1/1997
1/1/1998
1/1/1999
1/1/2000
1/1/2001
1/1/2002
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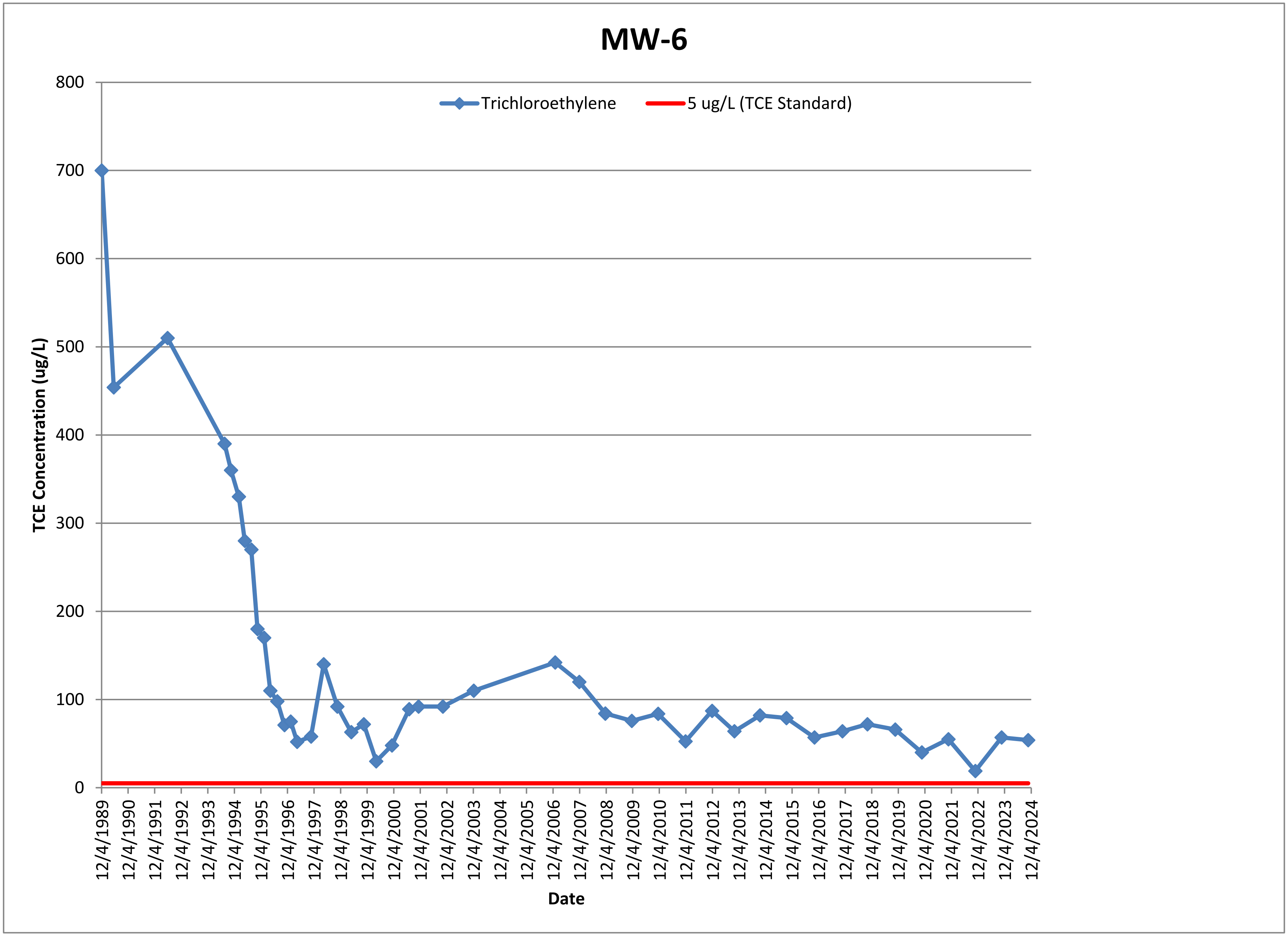
1/1/2010
1/1/2011
1/1/2012
1/1/2013
1/1/2014
1/1/2015
1/1/2016
1/1/2017
1/1/2018
1/1/2019
1/1/2020
1/1/2021
1/1/2022
1/1/2023
1/1/2024
Date


MW-6
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
800
700
600
500
400
300
200
100
0
12/4/1989
12/4/1990
12/4/1991
12/4/1992
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
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12/4/2007
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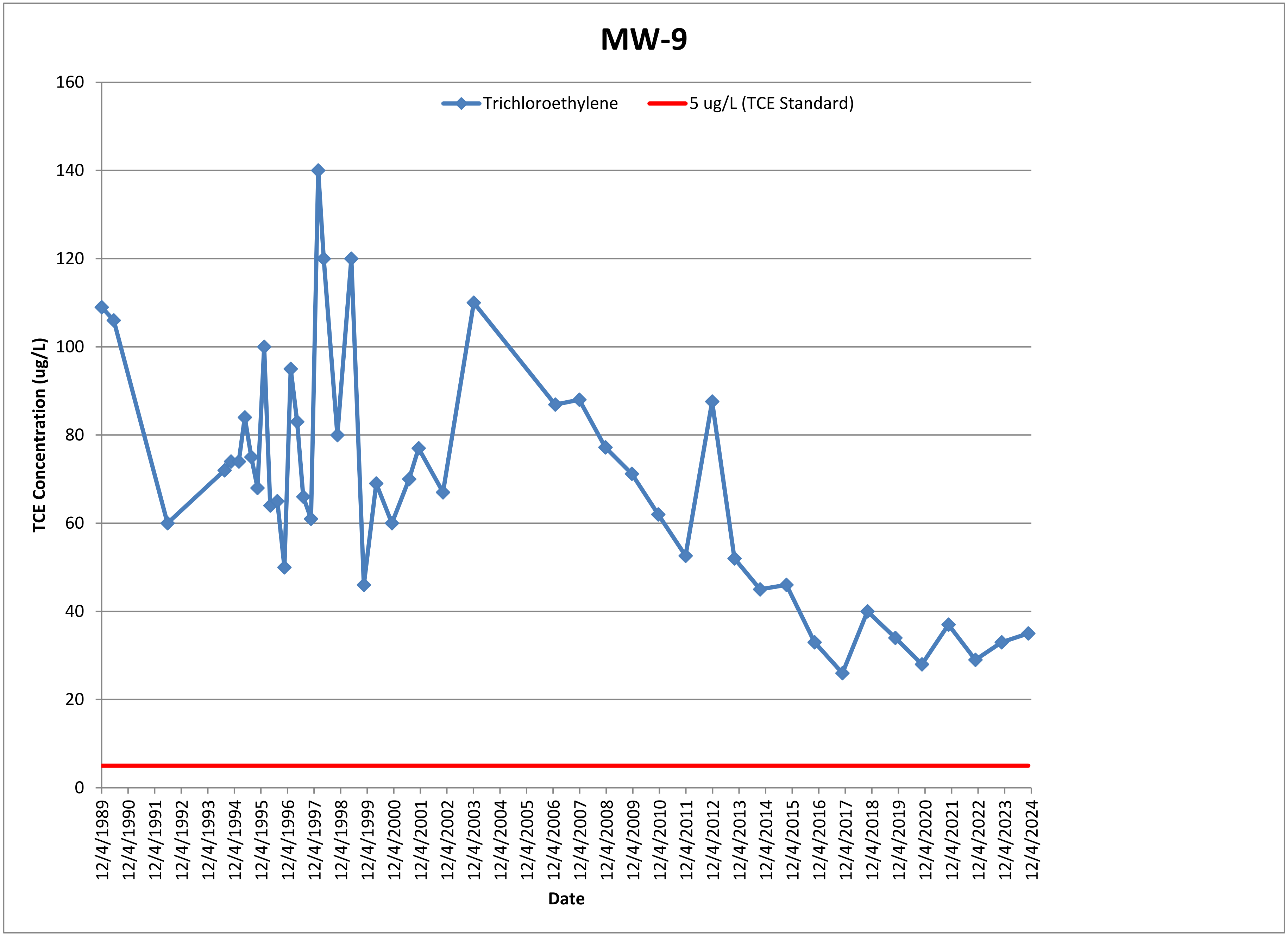
12/4/2011
12/4/2012
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-9
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
160
140
120
100
80
60
40
20
0
12/4/1989
12/4/1990
12/4/1991
12/4/1992
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
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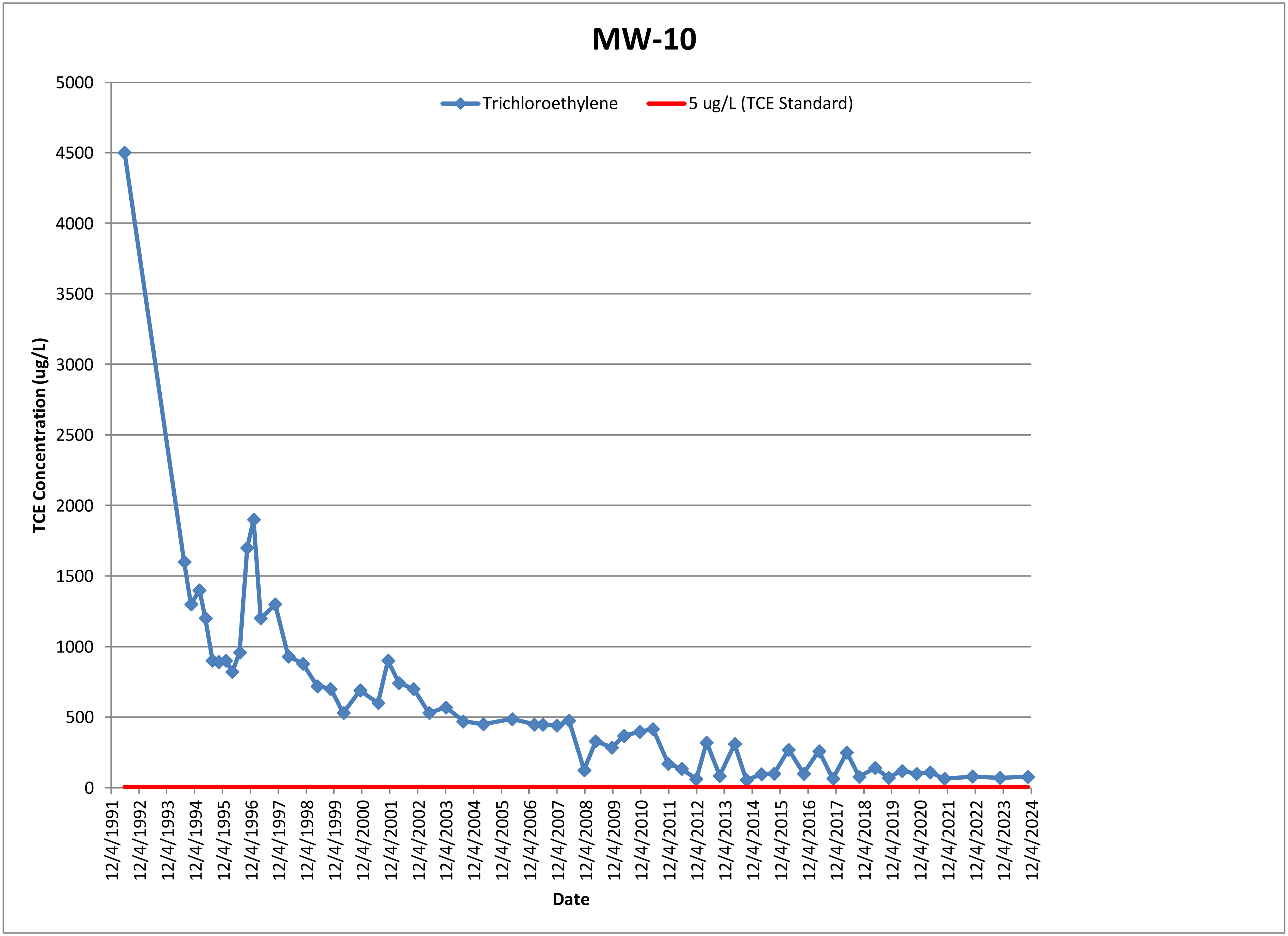
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-10
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
12/4/1991
12/4/1992
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
12/4/2005
12/4/2006
12/4/2007
12/4/2008
12/4/2009
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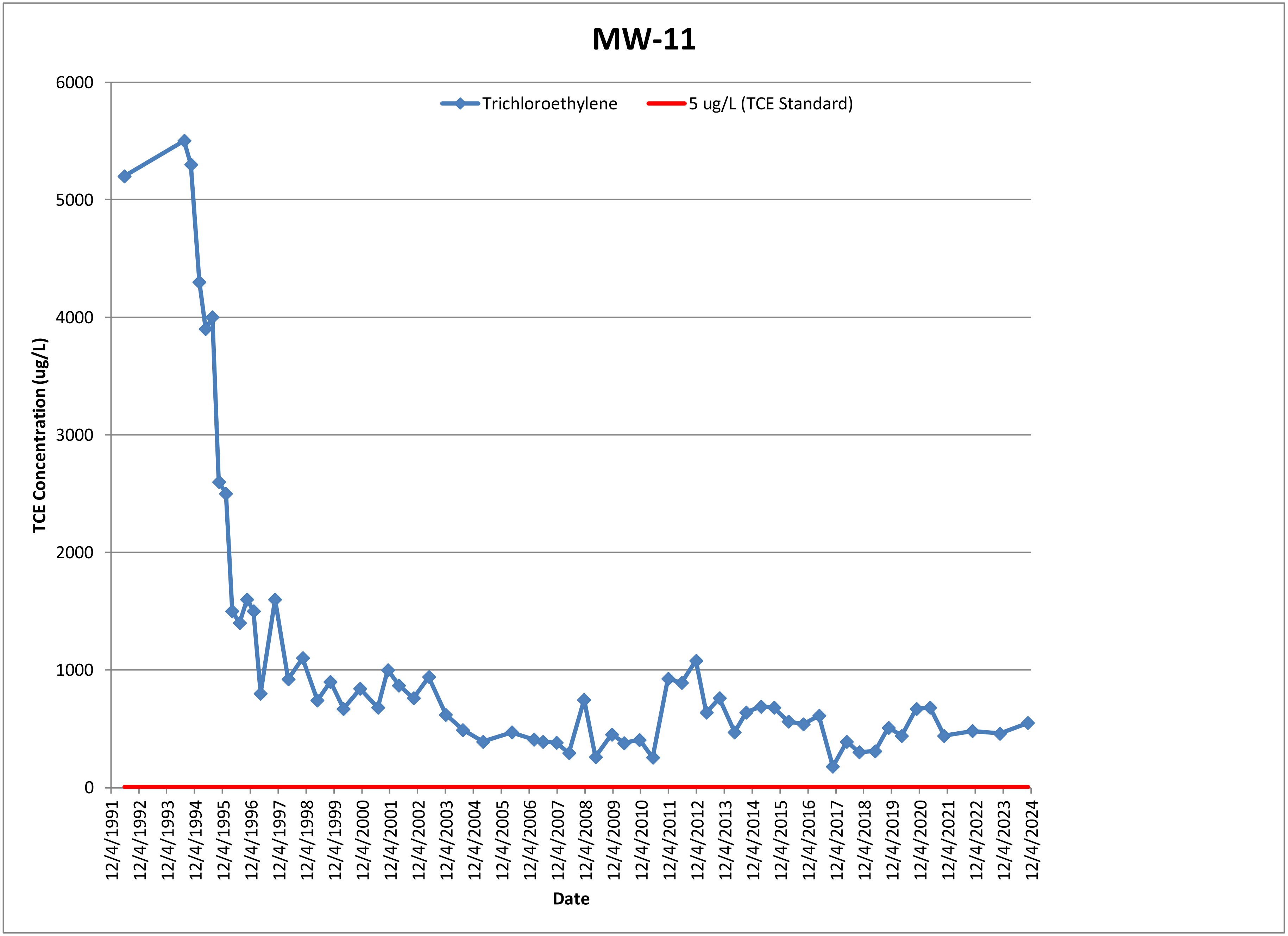
12/4/2011
12/4/2012
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-11
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
6000
5000
4000
3000
2000
1000
0
12/4/1991
12/4/1992
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
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12/4/2008
12/4/2009
12/4/2010
12/4/2011
12/4/2012
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
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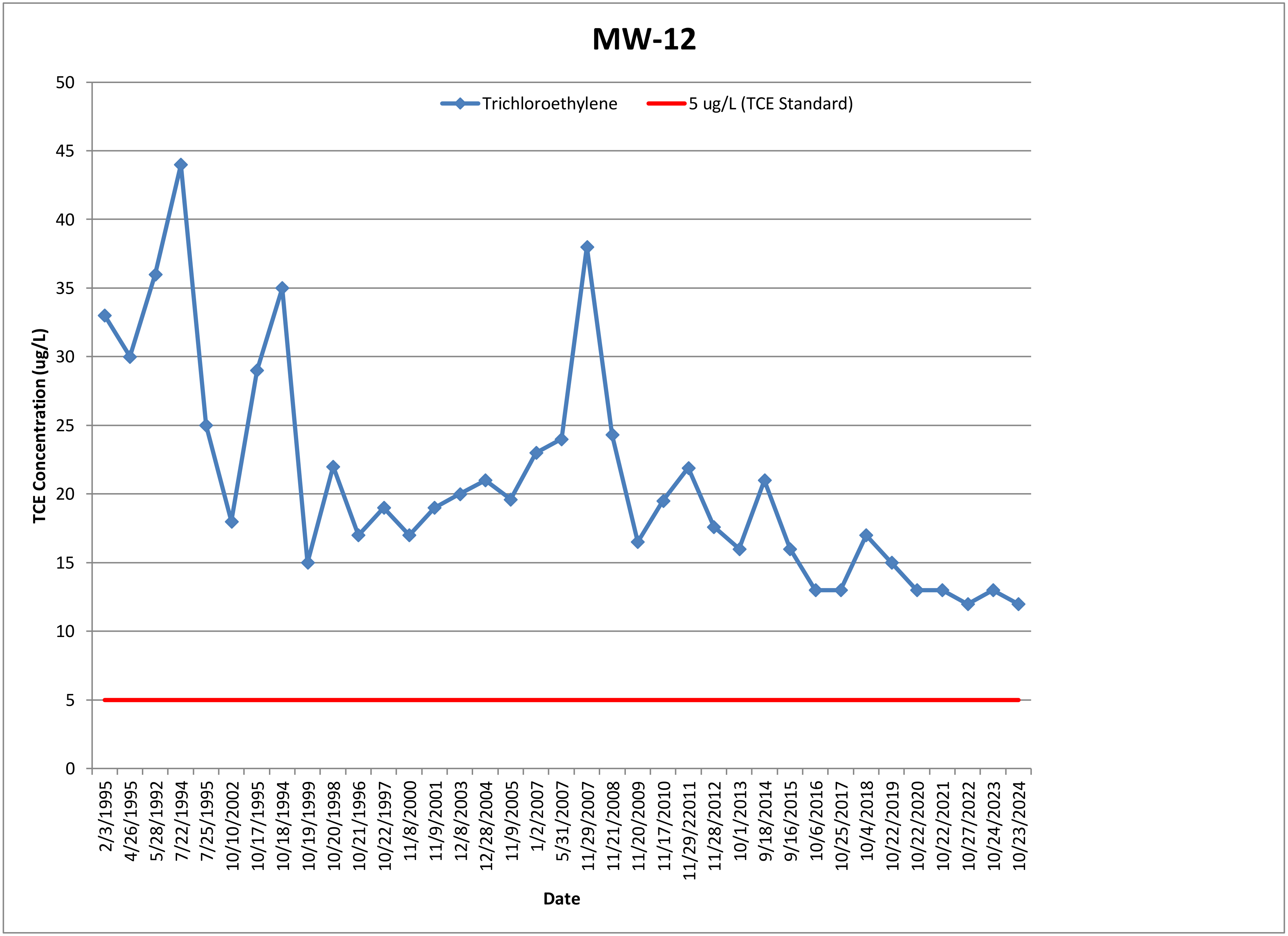
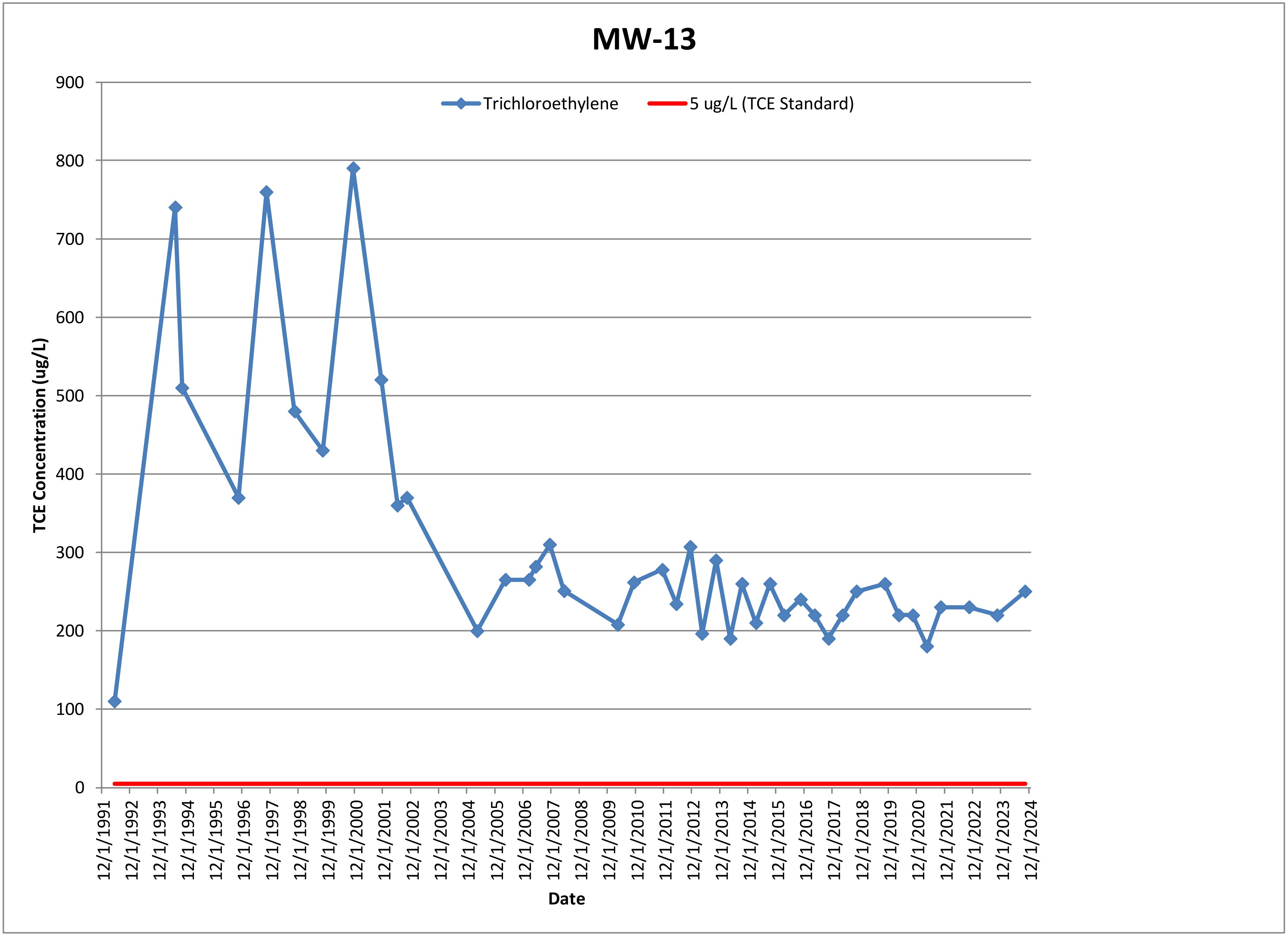
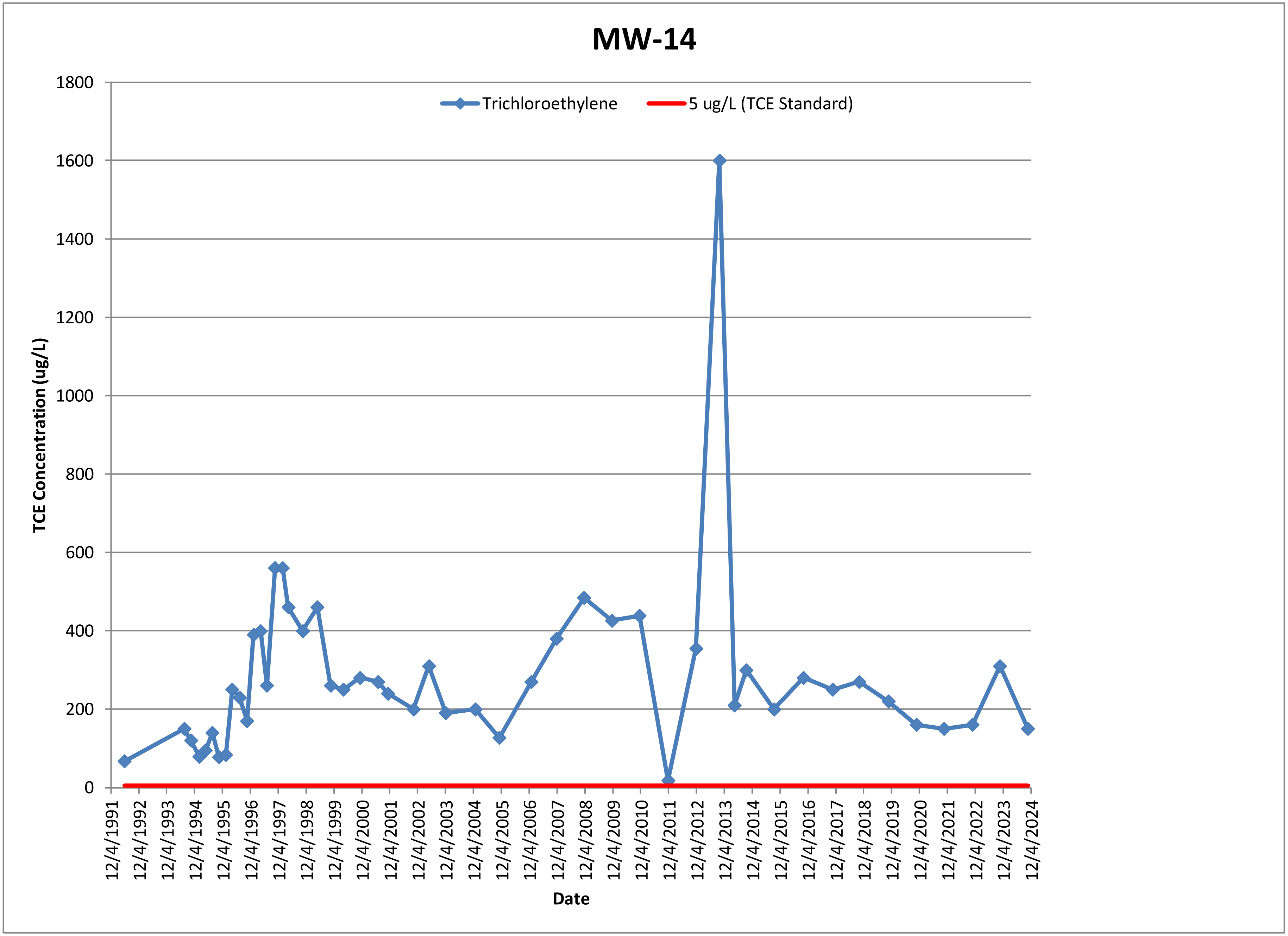
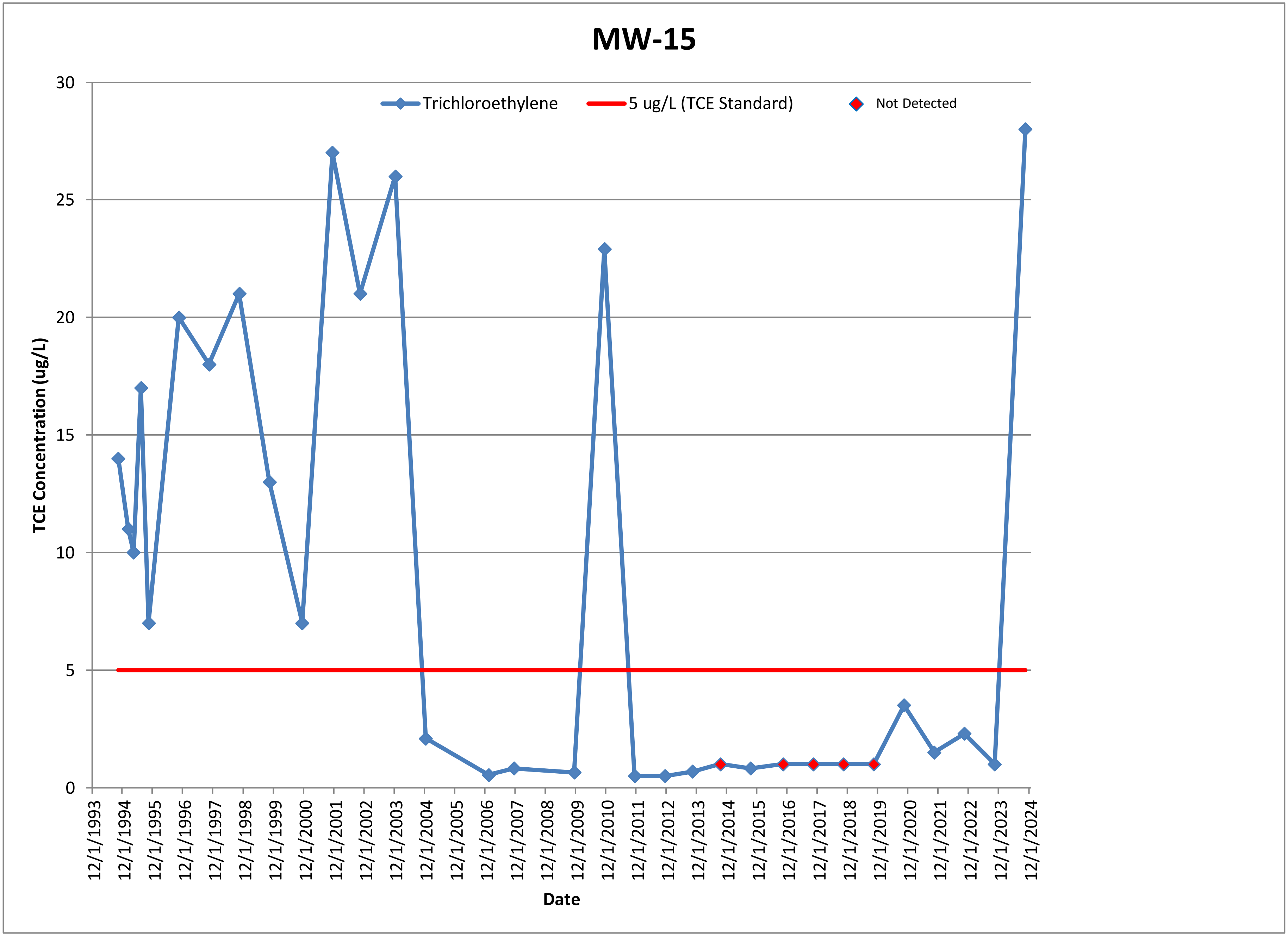
12/4/2023
12/4/2024
Date


MW-12
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
50
45
40
35
30
25
20
15
10
5
0
2/3/1995
4/26/1995
5/28/1992
7/22/1994
7/25/1995
10/10/2002
10/17/1995
10/18/1994
10/19/1999
10/20/1998
10/21/1996
10/22/1997
11/8/2000
11/9/2001
12/8/2003
12/28/2004
11/9/2005
1/2/2007
5/31/2007
11/29/2007
11/21/2008
11/20/2009
11/17/2010
11/29/22011
11/28/2012
10/1/2013
9/18/2014
9/16/2015
10/6/2016
10/25/2017
10/4/2018
10/22/2019
10/22/2020
10/22/2021
10/27/2022
10/24/2023
10/23/2024
Date


MW-13
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
900
800
700
600
500
400
300
200
100
0
12/1/1991
12/1/1992
12/1/1993
12/1/1994
12/1/1995
12/1/1996
12/1/1997
12/1/1998
12/1/1999
12/1/2000
12/1/2001
12/1/2002
12/1/2003
12/1/2004
12/1/2005
12/1/2006
12/1/2007
12/1/2008
12/1/2009
12/1/2010
12/1/2011
12/1/2012
12/1/2013
12/1/2014
12/1/2015
12/1/2016
12/1/2017
12/1/2018
12/1/2019
12/1/2020
12/1/2021
12/1/2022
12/1/2023
12/1/2024
Date


MW-14
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
1800
1600
1400
1200
1000
800
600
400
200
0
12/4/1991
12/4/1992
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
12/4/2005
12/4/2006
12/4/2007
12/4/2008
12/4/2009
12/4/2010
12/4/2011
12/4/2012
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-15
Trichloroethylene
5 ug/L (TCE Standard)
Not Detected
TCE Concentration (ug/L)
0
5
10
15
20
25
30
Date
12/1/1993
12/1/1994
12/1/1995
12/1/1996
12/1/1997
12/1/1998
12/1/1999
12/1/2000
12/1/2001
12/1/2002
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12/1/2012
12/1/2013
12/1/2014
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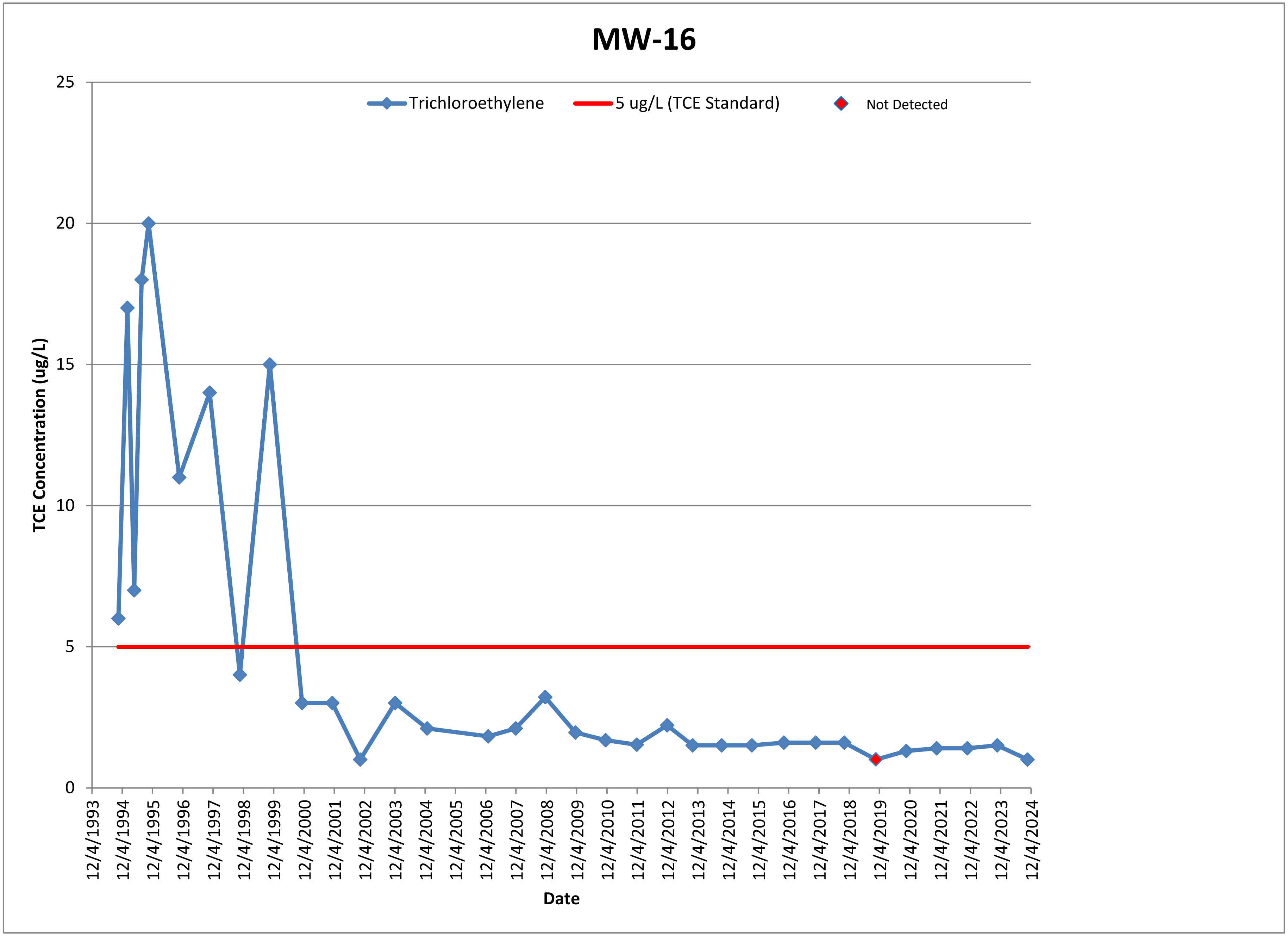
12/1/2016
12/1/2017
12/1/2018
12/1/2019
12/1/2020
12/1/2021
12/1/2022
12/1/2023
12/1/2024


MW-16
25
20
15
10
5
0
TCE Concentration (ug/L)
Trichloroethylene
5 ug/L (TCE Standard)
Not Detected
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
12/4/2005
12/4/2006
12/4/2007
12/4/2008
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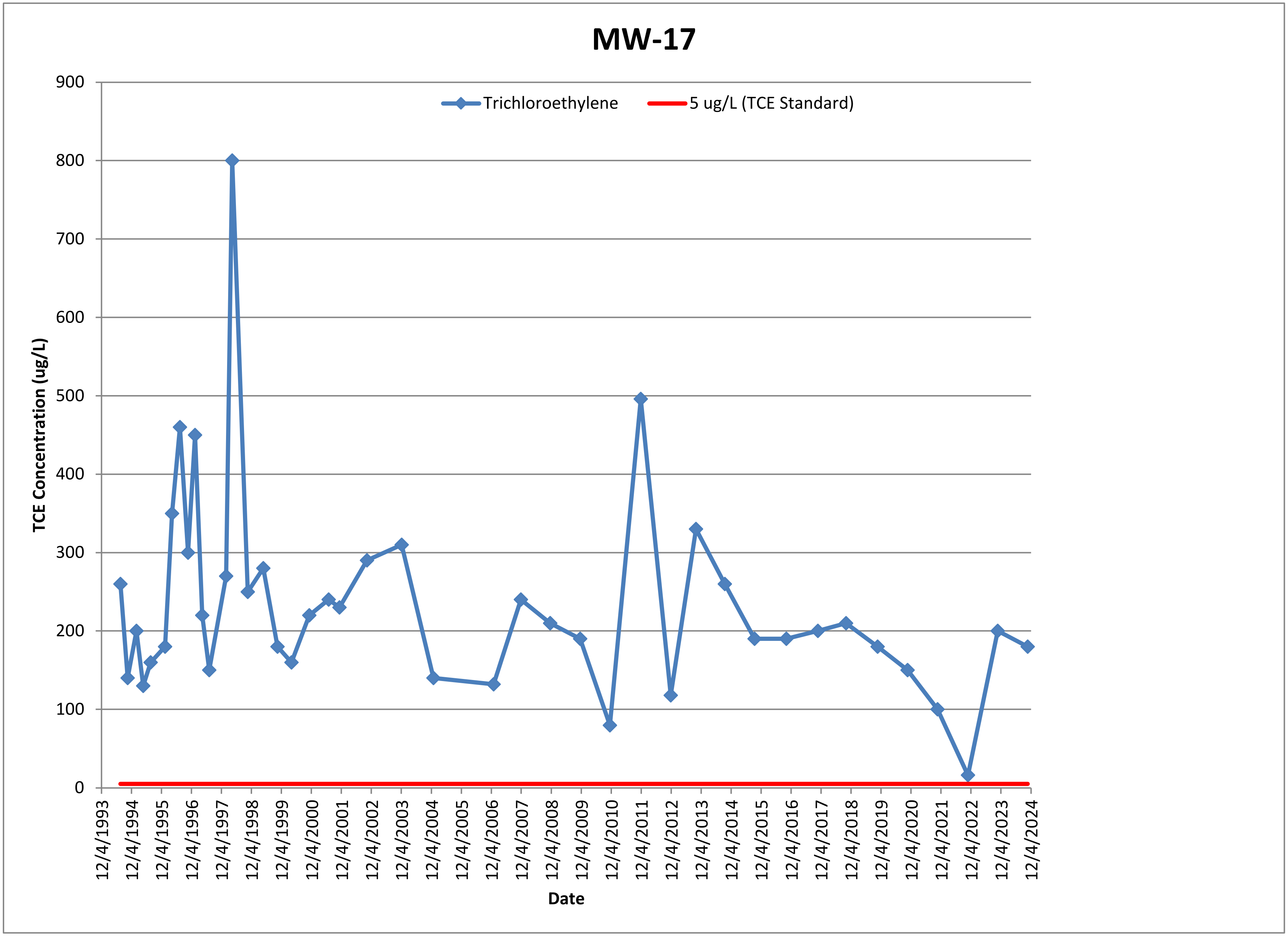
12/4/2010
12/4/2011
12/4/2012
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-17
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
900
800
700
600
500
400
300
200
100
0
12/4/1993
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
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12/4/2006
12/4/2007
12/4/2008
12/4/2009
12/4/2010
12/4/2011
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12/4/2013
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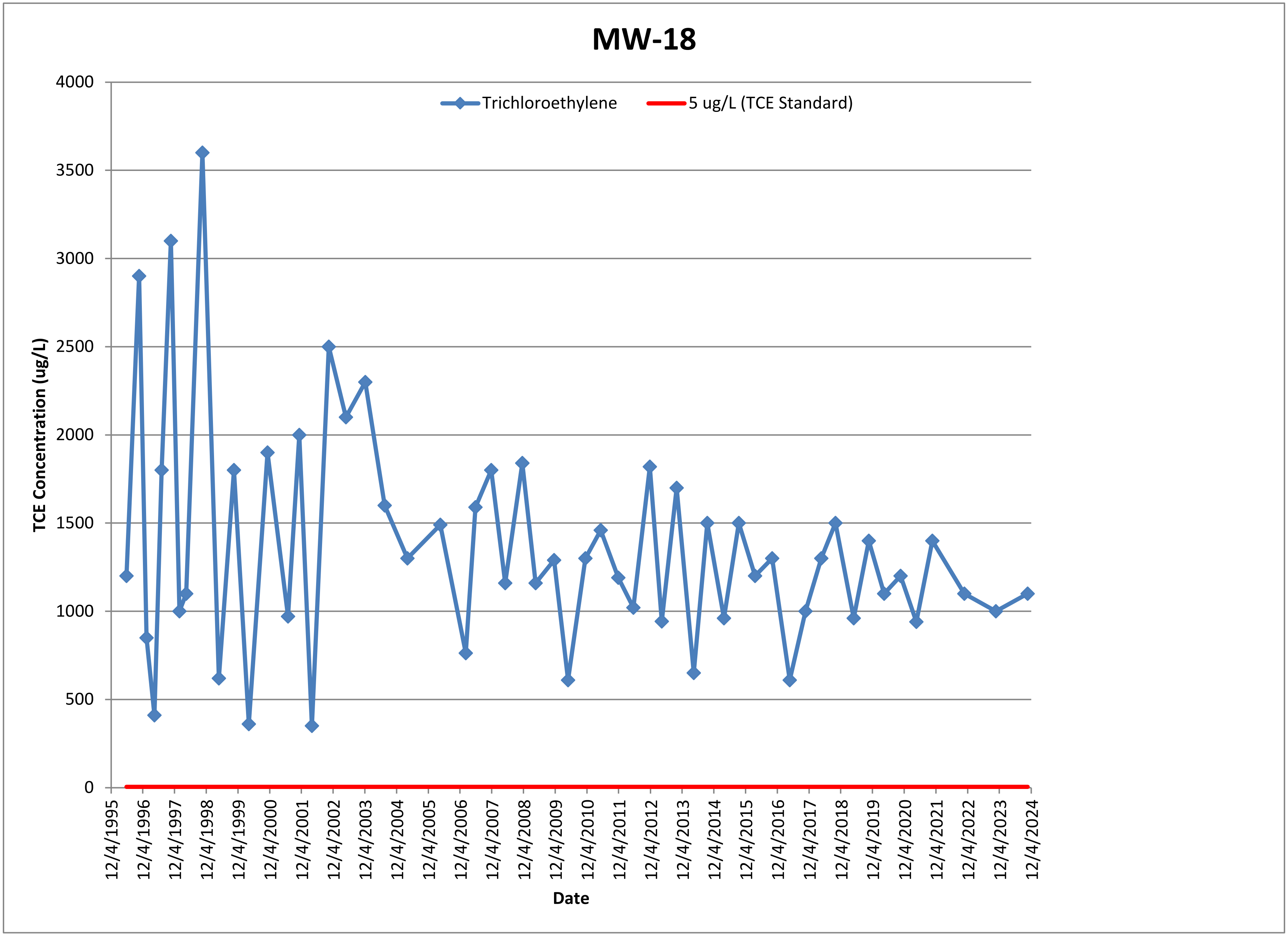
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-18
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
4000
3500
3000
2500
2000
1500
1000
500
0
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
12/4/2005
12/4/2006
12/4/2007
12/4/2008
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12/4/2010
12/4/2011
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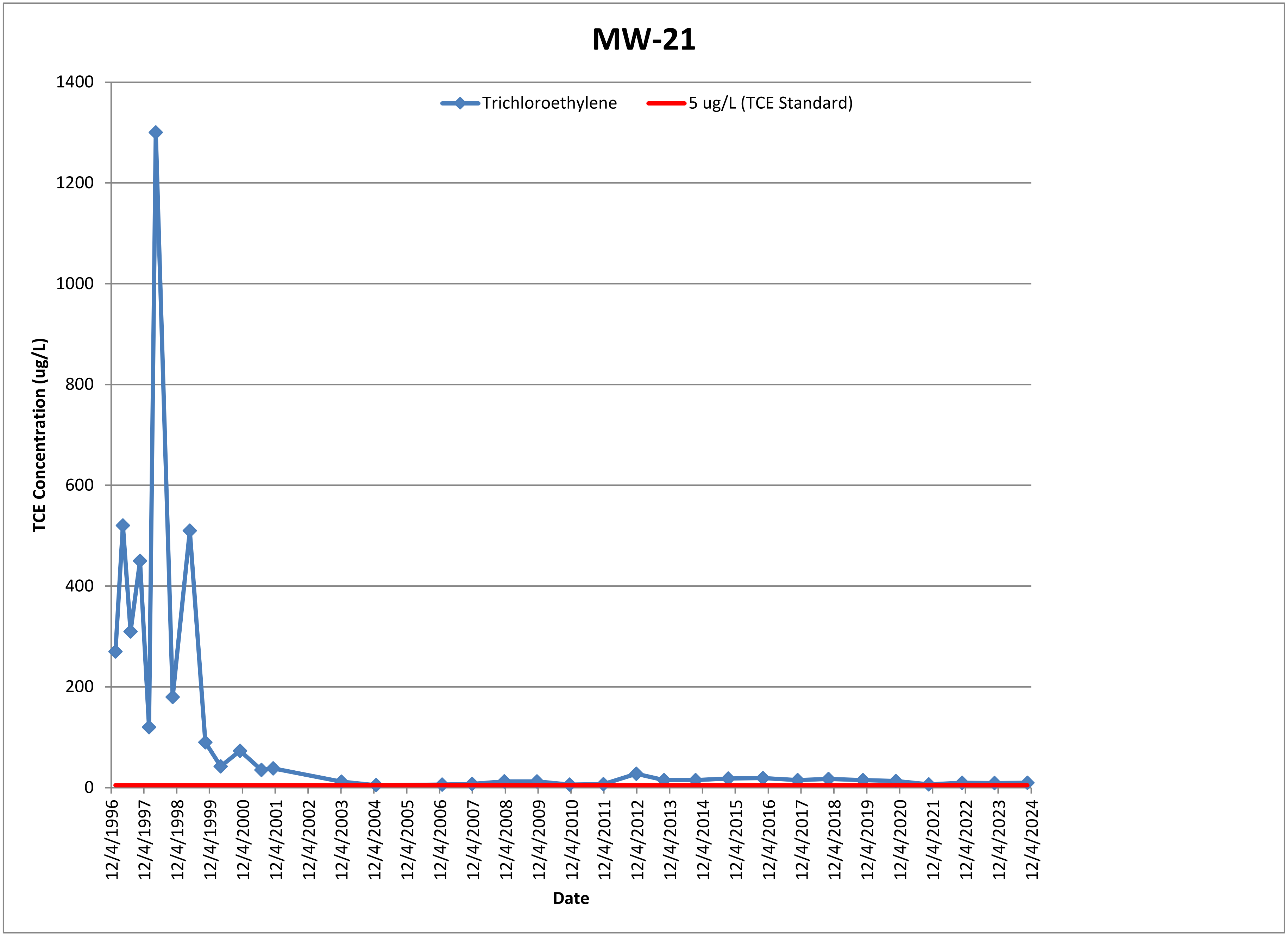
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-21
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
1400
1200
1000
800
600
400
200
0
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
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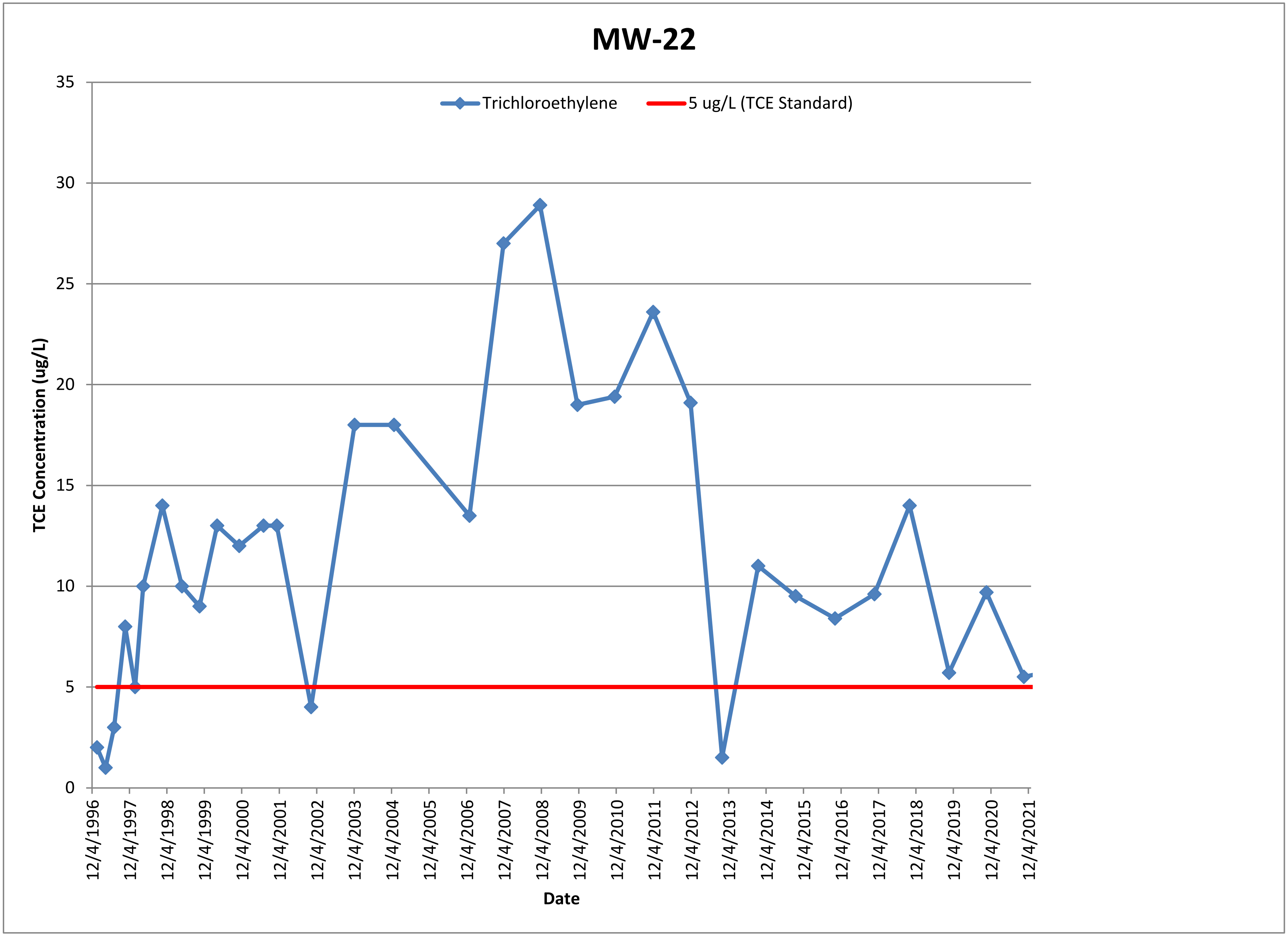
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date


MW-22
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
35
30
25
20
15
10
5
0
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
12/4/2001
12/4/2002
12/4/2003
12/4/2004
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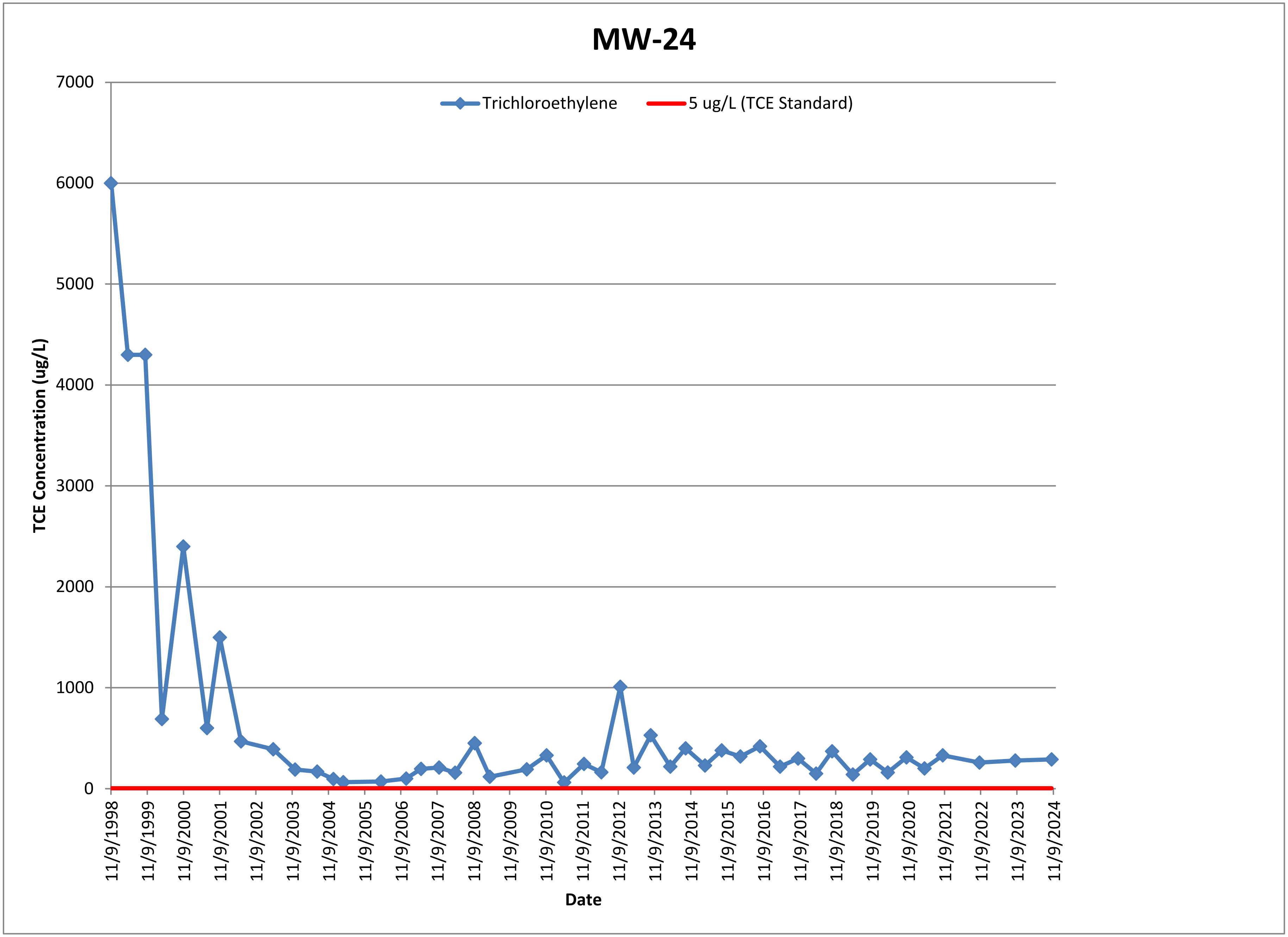
12/4/2013
12/4/2014
12/4/2015
12/4/2016
12/4/2017
12/4/2018
12/4/2019
12/4/2020
12/4/2021
Date


MW-24
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
11/9/1998
11/9/1999
11/9/2000
11/9/2001
11/9/2002
11/9/2003
11/9/2004
11/9/2005
11/9/2006
11/9/2007
11/9/2008
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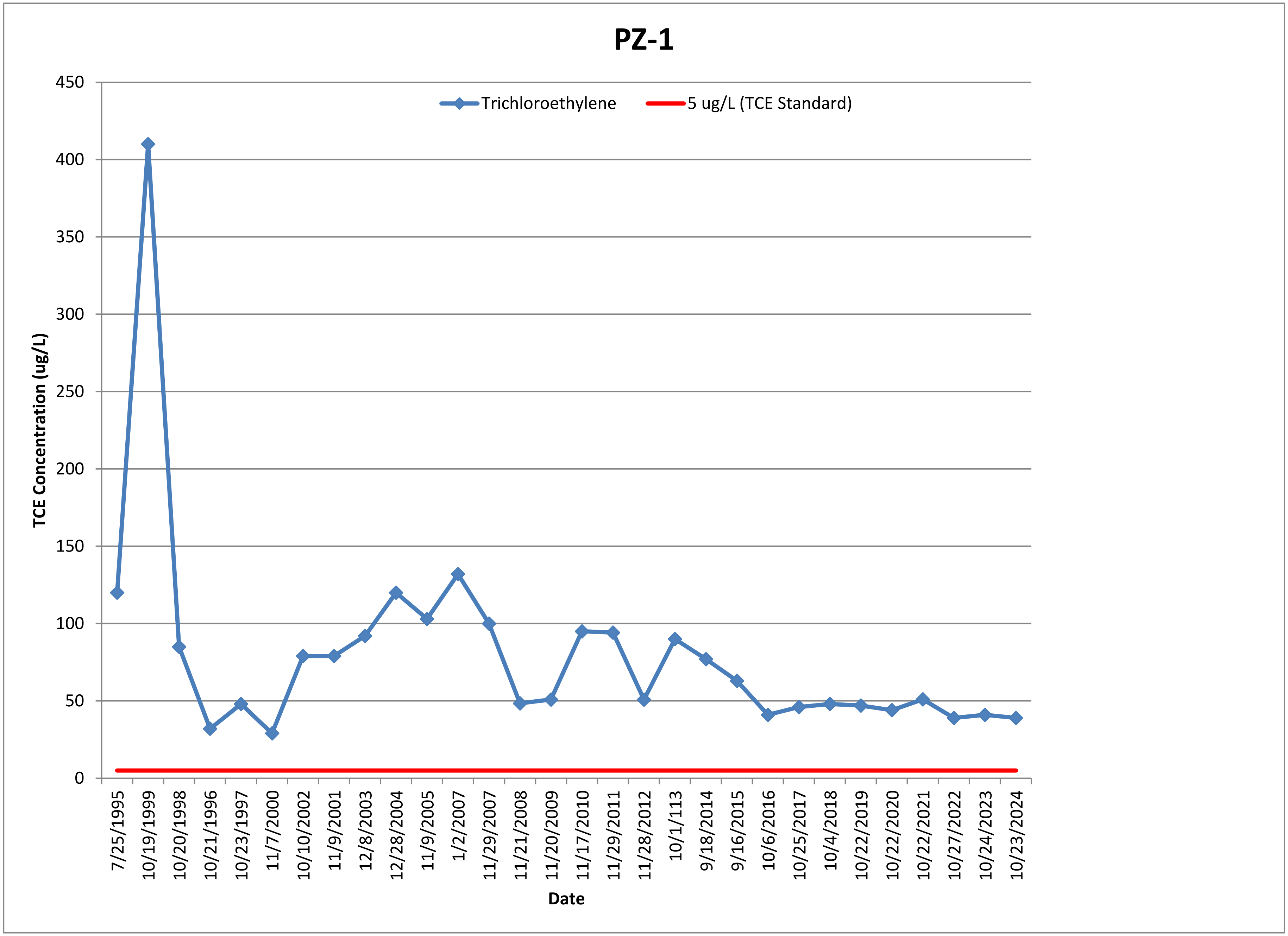
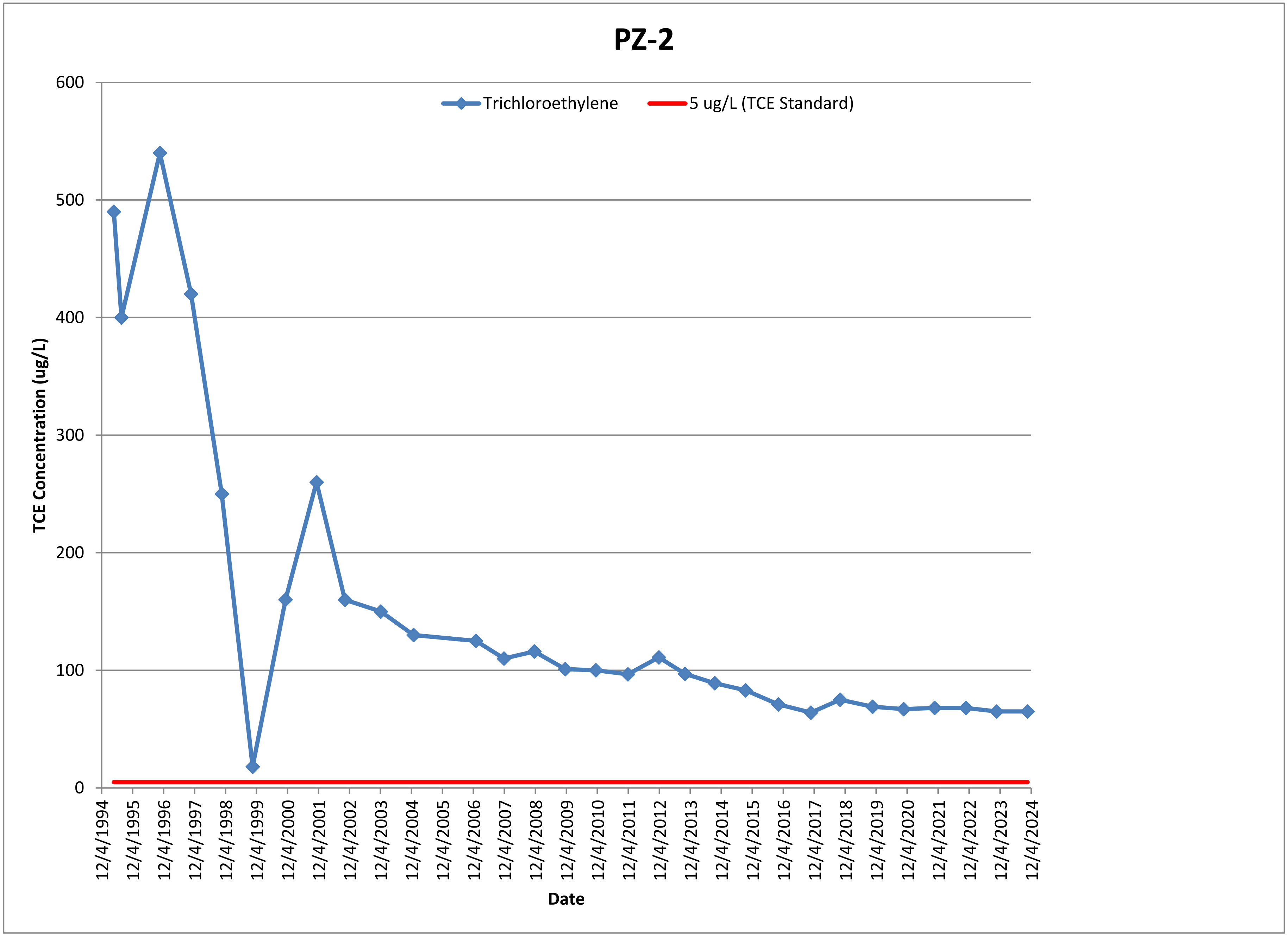
11/9/2012
11/9/2013
11/9/2014
11/9/2015
11/9/2016
11/9/2017
11/9/2018
11/9/2019
11/9/2020
11/9/2021
11/9/2022
11/9/2023
11/9/2024
Date


PZ-1
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
450
400
350
300
250
200
150
100
50
0
7/25/1995
10/19/1999
10/20/1998
10/21/1996
10/23/1997
11/7/2000
10/10/2002
11/9/2001
12/8/2003
12/28/2004
11/9/2005
1/2/2007
11/29/2007
11/21/2008
11/20/2009
11/17/2010
11/29/2011
11/28/2012
10/1/113
9/18/2014
9/16/2015
10/6/2016
10/25/2017
10/4/2018
10/22/2019
10/22/2020
10/22/2021
10/27/2022
10/24/2023
10/23/2024
Date


PZ-2
Trichloroethylene
5 ug/L (TCE Standard)
TCE Concentration (ug/L)
600
500
400
300
200
100
0
12/4/1994
12/4/1995
12/4/1996
12/4/1997
12/4/1998
12/4/1999
12/4/2000
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12/4/2021
12/4/2022
12/4/2023
12/4/2024
Date

APPENDIX G

2024 SUPPLEMENTAL RI SAMPLING LOGS

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW - 2
Northing:
Easting:

Site Name: Alluvak Die
Site Location: Fayetteville, NY
Project #: 1940100888

Sampling Method: low-flow
Equipment Used: Geo Pump Peristaltic Pump
Pump/Controller ID#: 34 797

Field Personnel: SLH
Date: 2/22/24
Weather: 42°F, Rain

Well information:

Installed Depth of Well*: — ft. bmp.
Measured Depth of Well*: 18.02 ft. bmp.
Depth to Water*: 11.57 ft. bmp.
Length of Water Column (LWC): 6.45 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

- ☐ 1 in. = 0.041 gal/ft
- ☒ 2 in. = 0.163 gal/ft
- ☐ 4 in. = 0.653 gal/ft
- ☐ 6 in. = 1.469 gal/ft
- ☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 1.05 gal.
Pump Intake Depth*: 15.52 ft. bmp.

Start Purge Time: 14:40

Initial Observations: *Color* ~~none~~ clear *Odor* none *Sheen/Free Product* none

Elapsed Time *Minutes*	Depth to Water *ft bmp*	Temperature *Celsius*	pH *SU*	Specific Conductivity *µS/cm*	ORP *mV*	Dissolved Oxygen *mg/L*	Turbidity *NTU*	Flow Rate *ml/min*	Other
				Select Units from Dropdown Menus					
0	11.71	8.6	7.67	446.7	118.7	8.28	37.5	300	
5	11.75	8.7	7.65	446.9	114.8	8.18	41.1	300	
10	11.75	8.8	7.48	445.7	123.3	5.51	34.3	300	
15	11.75	9.0	7.40	446.1	127.4	3.74	28.1	300	
20	11.76	8.9	7.36	447.2	128.9	3.13	14.5	300	
25	11.75	9.0	7.34	448.7	129.5	2.65	9.11	300	
30	11.75	9.0	7.33	450.0	129.2	2.46	5.62	300	
35	11.75	9.1	7.32	450.8	128.4	2.26	6.32	300	
40	11.75	9.1	7.29	451.7	128.0	1.85	4.22	300	
45	11.75	9.1	7.29	452.6	127.3	1.77	5.61	300	
50	11.75	9.1	7.30	453.6	126.2	1.73	6.65	300	
55	11.75	9.1	7.28	454.6	125.6	1.53	5.47	300	
60	11.75	9.0	7.27	455.6	124.6	1.54	4.71	300	
65	11.75	9.0	7.28	455.9	122.7	1.45	4.45	300	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 15:45
Total volume of groundwater purged: 4 gal.

DO Titrataion: NA mg/L

Final Observations: *Color* clear *Odor* none *Sheen/Free Product* none

Analytical Sample ID: MV-2-022224 **Date:** 2/22/24 **Time:** 16:00

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
40 mL	VOA Vial	3	NO	HCl	Eurofins Test America
250 mL	Amber glass	6	NO	none	"
250 mL	Poly.	1	NO	nitric Acid	"
250 mL	Poly	1	NO	NaOH	"
1 L	Amber glass	2	NO	none	"

Notes:

RAMBOLL

Conventional Groundwater Sampling Log

Well ID: MW-5
Northing:
Easting:

Site Name: Act-Die
Site Location:
Project #:

Sampling Method: Bailing
Equipment Used:
Pump/Controller ID#:

Field Personnel: VCF / YV
Date: 2/21/24
Weather: 34 / Sunny

Well information:

Installed Depth of Well*: ft. bmp.
Measured Depth of Well*: 40.70 ft. bmp.
Depth to Water*: 29.65 ft. bmp.
Water Column Length: 11.05 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

* Measurement Point:
___ Well Casing
___ Protective Casing
___ Other:

Well Volume: 1.80 gal.
Pump Intake Depth*: ft. bmp.

Initial Observations

Start Purge Time: 0940

Color: clear **Odor:** ND **Sheen/Free Product:** ND

Elapsed Time	Depth to Water ft bmp	Volume Purged	Temperature	pH	Specific Conductivity uS/cm	Other
Initial	29.655	-	10.7	7.38	646	
1	29.7	2	10.4	7.23	662	
2	29.7	4	10.4	7.16	644	
3	29.7	6	10.5	7.20	642	

indicate units

Final Observations

End Purge Time: 1020 **Final Water Level:** 29.70 ft bmp. **Total Volume Purged:** 6 gal.

Color: Light Gray **Odor:** ND **Sheen/Free Product:** ND

Analytical Sample ID: MW-5-022124 **Date:** 2-21-24 **Time:** 1030

Container Size	Container Type	Quantity	Field Filtered?	Preservative	Analysis	Laboratory

Notes:

RAMBOLL

~~Low-Flow~~ Groundwater Sampling Log

Well ID: MW-11
Northing:
Easting:

Site Name: Act Pie
Site Location: Fayetteville, NY
Project #: 1940100888

Sampling Method: Bailer
Equipment Used:
Pump/Controller ID#:

Field Personnel: VCF
Date: 2/12/24
Weather: 34 / Sunny

Well information:

Installed Depth of Well*: ______ ft. bmp.
Measured Depth of Well*: 50.6 ft. bmp.
Depth to Water*: 32.6 ft. bmp.
Length of Water Column (LWC): 13.0 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

☐ 1 in. = 0.041 gal/ft
☒ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TIC
MP Notes:
Well Volume: 2.119 gal.
Pump Intake Depth*: ______ ft. bmp.

Start Purge Time: 8:45

Initial Observations: Color Clear Odor – *Sheen/Free Product* –

vol ~~Elapsed Time~~ *Minutes*	Depth to Water *ft bmp*	Temperature *Celsius*	pH *SU*	Specific Conductivity *µS/cm*	ORP *mV*	Dissolved Oxygen *mg/L*	Turbidity *NTU*	Flow Rate *ml/min*	Other
				Select Units from Dropdown Menus					
1	38.56	16.9	7.83	1905	7.8	9.01	23.6	–	
2	38.56	11.3	7.54	1836	5.3	10.34	38.4	–	
3	38.56	10.8	7.61	2048	3.6	9.87	21.8	–	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 9:40

Total volume of groundwater purged: 6.4 gal.

DO Titrataion: X mg/L

Final Observations: Color clear Odor – *Sheen/Free Product* –

Analytical Sample ID: ______ **Date:** ______ **Time:** ______

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes: MS/MSD

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-12
Northing:
Easting:

Site Name: Act Dir
Site Location: Fayetteville, NY
Project #: 1940100888

Sampling Method: Bailer
Equipment Used:
Pump/Controller ID#:

Field Personnel: VCF
Date: 2/21/24
Weather: 34/Sunny

Well information:

Installed Depth of Well*: ______ ft. bmp.
Measured Depth of Well*: 42.24 ft. bmp.
Depth to Water*: 33.48 ft. bmp.
Length of Water Column (LWC): 8.76 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

- ___ 1 in. = 0.041 gal/ft
- ✓ 2 in. = 0.163 gal/ft
- ___ 4 in. = 0.653 gal/ft
- ___ 6 in. = 1.469 gal/ft
- ___ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 1.42 gal.
Pump Intake Depth*: ______ ft. bmp.

Start Purge Time: 1130

Initial Observations: Color Brown Odor none Sheen/Free Product none

~~Elapsed Time~~ Vol ~~Minutes~~	Depth to Water ft bmp	Temperature Celsius	pH SU	Specific Conductivity µS/cm	ORP mV	Dissolved Oxygen mg/L	Turbidity NTU	Flow Rate ml/min	Other
Select Units from Dropdown Menus									
Initial	33.48	10.1	7.36	1381	42.1	8.26	Over-range	—	
1	35.11	10.8	7.12	1141	82.4	9.18	Over-range	—	
2	34.14	10.5	7.10	834	100.5	8.93	Over-range	—	
3	35.41	11.3	7.05	760	191.4	10.29	Over-range	\	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 12:30
Total volume of groundwater purged: 45 gal.

DO Titrataion: ______ mg/L

Final Observations: Color ______ Odor none Sheen/Free Product none

Analytical Sample ID: ______ **Date:** ______ **Time:** ______

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Conventional Groundwater Sampling Log

Well ID: MW-15
Northing:
Easting:

Site Name: Acc. DIC
Site Location: Fayetteville
Project #:

Sampling Method: Bailer
Equipment Used:
Pump/Controller ID#:

Field Personnel: CYV / VF
Date: 2-21-24
Weather: Sunny 40°F

Well information:

Installed Depth of Well*: ft. bmp.
Measured Depth of Well*: 66.0 ft. bmp.
Depth to Water*: 38.75 ft. bmp.
Water Column Length: 27.25 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

* Measurement Point:
☒ Well Casing
☐ Protective Casing
☐ Other:

Well Volume: 4.44 gal.
Pump Intake Depth*: ft. bmp.

Initial Observations

Start Purge Time: 11:55

Color: Gray ***Odor:*** ND ***Sheen/Free Product:*** ND

indicate units

Elapsed Time	Depth to Water *ft bmp*	Volume Purged	Temperature	pH	Specific Conductivity mS/cm	Other Turb.
Initial	38.75	initial	11.8	8.97	521	overrange
	46.33	1	12.7	7.26	1750	17
	47.80	2	13.2	7.21	1849	29.1
	45.30	3	13.8	7.22	1829	17.6

Final Observations

End Purge Time: 1315 **Final Water Level:** 45.30 ft bmp. **Total Volume Purged:** 13 gal.

Color: clear **Odor:** ND ***Sheen/Free Product:*** ND

Analytical Sample ID: MW-15-022124 **Date:** 2-21-24 **Time:** 1340

Container Size	Container Type	Quantity	Field Filtered?	Preservative	Analysis	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-17 ~~MW-17~~
Northing:
Easting:

Site Name: Accurate Die
Site Location: Fayetteville, NY
Project #: 1940100488

Sampling Method: Low-flow
Equipment Used: Geotech Peristaltic Pump
Pump/Controller ID#: 34797

Field Personnel: SLH
Date: 02/22/24
Weather: 42°F, rain

Well information:

Installed Depth of Well*: — ft. bmp.
Measured Depth of Well*: 15.58 ft. bmp.
Depth to Water*: 10.06 ft. bmp.
Length of Water Column (LWC): 5.52 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

☐ 1 in. = 0.041 gal/ft
☒ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 0.90 gal.
Pump Intake Depth*: 13.08 ft. bmp.

Start Purge Time: 13:25

Initial Observations: Color clear w/ iron floc. Odor ~~very slight sweet~~ none Sheen/Free Product none

Elapsed Time Minutes	Depth to Water ft bmp	Temperature Celsius	pH SU	Specific Conductivity µS/cm	ORP mV	Dissolved Oxygen mg/L	Turbidity NTU	Flow Rate ml/min	Other
				Select Units from Dropdown Menus					
0	10.17	8.4	7.53	561	123	9.97	50.11	300	
5	10.18	8.3	7.42	562	131.9	10.00	12.9	300	
10	10.19	8.3	7.41	562	135.7	9.91	4.35	300	
15	10.18	8.2	7.42	561	137.6	10.13	2.57	300	
20	10.17	8.2	7.42	561	138.5	10.36	2.41	300	
25	10.17	8.3	7.42	561	139.3	10.33	1.56	300	
30	10.17	8.2	7.42	561	139.7	10.48	2.37	300	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 13:55

Total volume of groundwater purged: 3.5 gal.

DO Titrataion: NA mg/L

Final Observations: Color clear Odor none Sheen/Free Product none

Analytical Sample ID: MW-17-022224 **Date:** 2/22/24 **Time:** 14:10

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
40mL	VOA vial	3	NO	HCl	Eurofins TestAmerica
250mL	Amber Glass	6	NO	none	"
250mL	Poly	1	NO	Nitric Acid	"
250mL	Poly	1	NO	NaOH	"
1L	Amber Glass	2	NO	none	"

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-18
Northing:
Easting:

Site Name: Accurate Die
Site Location: Fayetteville, NY
Project #:

Sampling Method: low-flow
Equipment Used: Geopump Peristaltic Pump
Pump/Controller ID#: 34797

Field Personnel: SLH
Date: 2/22/24
Weather: 42°F, Rain

Well information:

Installed Depth of Well*: — ft. bmp.
Measured Depth of Well*: 15.89 ft. bmp.
Depth to Water*: 5.60 ft. bmp.
Length of Water Column (LWC): 10.29 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

☐ 1 in. = 0.041 gal/ft
☒ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 1.68 gal.
Pump Intake Depth*: 13.39 ft. bmp.

Start Purge Time: 11:10

Initial Observations: *Color* clear *Odor* none *Sheen/Free Product* none

Elapsed Time *Minutes*	Depth to Water *ft bmp*	Temperature *Celsius*	pH *SU*	Specific Conductivity *µS/cm*	ORP *mV*	Dissolved Oxygen *mg/L*	Turbidity *NTU*	Flow Rate *ml/min*	Other
Select Units from Dropdown Menus									
0	~~5.87~~ 5.81	6.4	7.43	510	169.7	9.24	31.0	300	
5	5.83	7.1	7.29	510	169.3	8.20	17.4	300	
10	5.85	7.1	7.30	496.4	165.5	8.42	6.44	300	
15	5.87	7.2	7.31	492.7	164.2	8.52	5.06	300	
20	5.88	7.2	7.32	491.2	162.5	8.62	3.62	300	
25	5.89	7.1	7.32	490.7	160.9	8.69	2.94	300	
30	5.89	7.2	7.32	490.8	159.7	8.72	1.83	300	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 11:40

Total volume of groundwater purged: 3.5 gal.

DO Titrataion: NA mg/L

Final Observations: *Color* Clear *Odor* none *Sheen/Free Product* none

Analytical Sample ID: MW-18-022224 **Date:** 2/22/24 **Time:** 11:55

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
250mL	Amber Glass	6	NO	none	Test America Eurofins
250 mL	Poly.	1	NO	Nitric Acid	"
250 mL	Poly.	1	NO	NaOH	"
1 L	Amber Glass	2	NO	none	"

Notes:

14

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-18
Northing:
Easting:

Site Name: Accurate Die
Site Location: Fayetteville, NY
Project #:
Sampling Method: low-flow
Equipment Used: Geopump Peristaltic Pump
Pump/Controller ID#: 34797
Field Personnel: SLH
Date: 2/22/24
Weather: 42°F, Rain

Well information:

Installed Depth of Well*: — ft. bmp.
Measured Depth of Well*: 15.89 ft. bmp.
Depth to Water*: 5.60 ft. bmp.
Length of Water Column (LWC): 10.29 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

- ☐ 1 in. = 0.041 gal/ft
- ☒ 2 in. = 0.163 gal/ft
- ☐ 4 in. = 0.653 gal/ft
- ☐ 6 in. = 1.469 gal/ft
- ☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 1.68 gal.
Pump Intake Depth*: 13.39 ft. bmp.

Start Purge Time: 11:10

Initial Observations: *Color* clear *Odor* none *Sheen/Free Product* none

4

Elapsed Time *Minutes*	Depth to Water *ft bmp*	Temperature *Celsius*	pH *SU*	Specific Conductivity *µS/cm*	ORP *mV*	Dissolved Oxygen *mg/L*	Turbidity *NTU*	Flow Rate *ml/min*	Other
				Select Units from Dropdown Menus					
0	~~5.87~~ 5.81	6.4	7.43	510	169.7	9.24	31.0	300	
5	5.83	7.1	7.29	510	169.3	8.20	17.4	300	
10	5.85	7.1	7.30	496.4	165.5	8.42	6.44	300	
15	5.87	7.2	7.31	492.7	164.2	8.52	5.66	300	
20	5.88	7.2	7.32	471.2	162.5	8.62	3.62	300	
25	5.89	7.1	7.32	490.7	160.9	8.69	2.94	300	
30	5.89	7.2	7.32	490.8	159.7	8.72	1.83	300	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 11:40
Total volume of groundwater purged: 3.5 gal.
DO Titrataion: NA mg/L

Final Observations: *Color* Clear *Odor* none *Sheen/Free Product* none

Analytical Sample ID: MW-18-022224 **Date:** 2/22/24 **Time:** 11:55

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
250mL	Amber Glass	6	NO	none	Test America Eurofins
250 mL	Poly.	1	NO	Nitric Acid	"
250 mL	Poly.	1	NO	NaOH	"
1 L	Amber glass	2	NO	none	"

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-22
Northing:
Easting:

Site Name: Accurate Die
Site Location: Fayetteville, NY
Project #: 194010

Sampling Method: low-flow
Equipment Used: Geopump peristaltic pump
Pump/Controller ID#: 34797

Field Personnel: SLH
Date: 2/22/24
Weather: 40°F, Rain/overcast

Well information:

Installed Depth of Well*: — ft. bmp.
Measured Depth of Well*: 14.29 ft. bmp.
Depth to Water*: 3~~4~~.79 ft. bmp.
Length of Water Column (LWC): 10.5 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

☐ 1 in. = 0.041 gal/ft
☒ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 1.71 gal.
Pump Intake Depth*: 11.79 ft. bmp.

Start Purge Time: ~~9:50~~ 9:50

Initial Observations: Color clear Odor none Sheen/Free Product none

Elapsed Time Minutes	Depth to Water ft bmp	Temperature Celsius	pH SU	Specific Conductivity µS/cm	ORP mV	Dissolved Oxygen mg/L	Turbidity NTU	Flow Rate ml/min	Other
				Select Units from Dropdown Menus					
0	4.52	6.0	7.30	507	217.3	7.36	7.43	300	
5	4.71	6.1	7.30	491.4	208.0	5.05	6.14	200	
10	4.82	5.9	7.27	492.0	203.7	4.41	4.87	100	
15	4.87	5.8	7.24	~~491~~ 491.7	200.2	4.01	5.08	100	
20	4.97	5.8	7.26	491.2	194.0	3.91	4.62	100	
25	4.96	5.8	7.30	491.0	190.2	3.81	4.86	100	
30	4.98	5.8	7.32	490.8	186.0	3.69	~~4.95~~ 4.40	100	
35	5.0	5.9	7.34	490.3	183.4	3.66	3.61	100	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 10:25

Total volume of groundwater purged: 1.5 gal.

DO Titrataion: NA mg/L

Final Observations: Color Clear Odor none Sheen/Free Product none

Analytical Sample ID: MW-22-022224 **Date:** ~~8~~ 2/22/24 **Time:** ~~10:~~ 11:00

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory
40mL	VOA vial	3	No	HCL	Eurofins TestAmerica
250mL	Amber glass	6	No	None	"
250mL	Poly.	1	NO	Nitric Acid	"
250mL	Poly.	1	NO	NaOH	"
1L	Amber glass	2	NO	none	"

Notes: PDB line in well, removed prior to sampling

RAMBOLL

Conventional Groundwater Sampling Log

Well ID: MW-23
Northing:
Easting:

Site Name: Dec. DU
Site Location: Fayetteville
Project #:

Sampling Method: Bailer
Equipment Used:
Pump/Controller ID#:

Field Personnel: CYV / VF
Date: 2-21-24
Weather: Sunny 50°F

Well information:

Installed Depth of Well*: ft. bmp.
Measured Depth of Well*: 75.0 ft. bmp.
Depth to Water*: 54.65 ft. bmp.
Water Column Length: 20.35 ft.
Well Diameter: 2 in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

* Measurement Point:
☐ Well Casing
☐ Protective Casing
☐ Other:
Well Volume: 3.32 gal.
Pump Intake Depth*: ft. bmp.

Initial Observations

Start Purge Time: 1420

Color: Gray ***Odor:*** ND ***Sheen/Free Product:*** ND

indicate units

Elapsed Time	Depth to Water *ft bmp*	Volume Purged	Temperature	pH	Specific Conductivity μS/cm	Other turb.
Initial	54.65	–	14.4	7.23	956	over
1	65.80	1	12.6	7.16	823	19.40
2	66.30	2	12.1	7.14	806	18.4
3	63.15	3	13.3	7.08	802	12.6

Final Observations

End Purge Time: 1524 **Final Water Level:** 63.15 ft bmp. **Total Volume Purged:** 10 gal.

Color: Grayish ***Odor:*** ND ***Sheen/Free Product:*** ND

Analytical Sample ID: MW-23-022124 **Date:** 2-21-24 **Time:** 1540

Container Size	Container Type	Quantity	Field Filtered?	Preservative	Analysis	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-25
Northing:
Easting:

Site Name: Act Die
Site Location: Fayetteville, NY
Project #: 194010888
Sampling Method: Low Flow/Purging
Equipment Used: Geopump
Pump/Controller ID#: 3821
Field Personnel: VCF
Date: 2/22/24
Weather: rainy / 34°F

Well information:

Installed Depth of Well*: 16.24 ft. bmp.
Measured Depth of Well*: 16.24 ft. bmp.
Depth to Water*: 7.0 ft. bmp.
Length of Water Column (LWC): ~~7~~ ft. 9.24
Well Diameter: 1 in.

Well Volume Multipliers:

☒ 1 in. = 0.041 gal/ft
☐ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: ~~0.031~~ gal. 0.37
Pump Intake Depth*: ft. bmp.

Start Purge Time: 1025

Initial Observations: *Color* Translucent Brown *Odor* None *Sheen/Free Product* None

Elapsed Time *Minutes*	Depth to Water *ft bmp*	Temperature *Celsius*	pH *SU*	Specific Conductivity *μS/cm*	ORP *mV*	Dissolved Oxygen *mg/L*	Turbidity *NTU*	Flow Rate *ml/min*	Other
				Select Units from Dropdown Menus					
5	10.4	5.9	6.71	595	132.7	6.63	over	200	
10	11.45	6.4	6.81	686	101.6	5.9	over	200	
15	12.81	6.6	6.84	706	97.0	5.94	over	200	
20	15.6	7.2	6.99	718	106	8.31	over	500	
									Purged Dry
Purge 1	8.8	7.3	7.3	727	144	10.8	over	—	
Purge 2	8.4	6.1	7.03	737	153	9.65	over	—	
Purge 3	12.6	6.2	7.01	736	148	9.1	over	—	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 11:50

Total volume of groundwater purged: 2.5 gal.

DO Titrataion: mg/L

Final Observations: *Color* Brown *Odor* — *Sheen/Free Product* —

Analytical Sample ID: **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-26
Northing:
Easting:

Site Name: Act Dir
Site Location: Fayetteville, NY
Project #: 14010888
Sampling Method: Low Flow/Purging
Equipment Used: Geopump
Pump/Controller ID#: 3821
Field Personnel: VCF
Date: 2/22/24
Weather: Rainy 34°F

Well information:

Installed Depth of Well*: 11.5 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: 7.51 ft. bmp.
Length of Water Column (LWC): 3.99 ft.
Well Diameter: 1 in.

Well Volume Multipliers:

☒ 1 in. = 0.041 gal/ft
☐ 2 in. = 0.163 gal/ft
☐ 4 in. = 0.653 gal/ft
☐ 6 in. = 1.469 gal/ft
☐ 8 in. = 2.611 gal/ft

Measurement Point*: TOC
MP Notes:
Well Volume: 0.16 gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time: 1315

Initial Observations: *Color* Brown *Odor* none *Sheen/Free Product* none

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *μS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
				Select Units from Dropdown Menus					
IA	7.51	6.4	7.32	559	76.2	11.79	over	—	
Purge 1	8.21	5.6	7.10	548	43.6	9.12	over	—	
Purge 2	8.36	5.2	6.82	536	10.3	8.28	over	—	
Purge 3	9.02	4.9	6.65	523	-29.3	7.15	over	—	
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time: 1450

Total volume of groundwater purged: 2 gal.

DO Titrataion: / mg/L

Final Observations: *Color* Brown *Odor* none *Sheen/Free Product* none

Analytical Sample ID: **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-1
Northing:
Easting:

Site Name: Former Accurate Die
Site Location: Fayeteville, NY
Project #: 194010888
Sampling Method: Bladder Pump
Equipment Used: Bladder Pump
Pump/Controller ID#:
Field Personnel: LR/VF
Date: 2/22/2024
Weather:

Well information:

Installed Depth of Well*: 25.0 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: ft. bmp.
Length of Water Column (LWC): ft.
Well Diameter: in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

Measurement Point*:
MP Notes:
Well Volume: gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time:

Initial Observations: *Color* *Odor* *Sheen/Free Product*

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *µS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
Select Units from Dropdown Menus									
				DRY WELL					
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time:

Total volume of groundwater purged: gal.

DO Titrataion: mg/L
Iron mg/L
Ferrous iron: mg/L
Mg mg/L

Final Observations: *Color* *Odor* *Sheen/Free Product*

Analytical Sample ID: GW-MW-1-010000 **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

Low Flow Groundwater Sampling Log

Well ID: MW-7
Northing:
Easting:

Site Name: Former Accurate Die
Site Location: Fayeteville, NY
Project #: 194010888
Sampling Method: Bladder Pump
Equipment Used: Bladder Pump
Pump/Controller ID#:
Field Personnel: LR/VF
Date: 2/22/2024
Weather:

Well information:

Installed Depth of Well*: 44.0 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: ft. bmp.
Length of Water Column (LWC): ft.
Well Diameter: in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

Measurement Point*:
MP Notes:
Well Volume: gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time:

Initial Observations: *Color* *Odor* *Sheen/Free Product*

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *µS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
Select Units from Dropdown Menus									
				DRY WELL					
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time:
Total volume of groundwater purged: gal.

DO Titrataion: mg/L Iron mg/L
Ferrous iron: mg/L Mg mg/L

Final Observations: *Color* *Odor* *Sheen/Free Product*

Analytical Sample ID: GW-MW-7-010000 **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-13
Northing:
Easting:

Site Name: Former Accurate Die
Site Location: Fayeteville, NY
Project #: 194010888

Sampling Method: Bladder Pump
Equipment Used: Bladder Pump
Pump/Controller ID#:

Field Personnel: LR/VF
Date: 2/22/2024
Weather:

Well information:

Installed Depth of Well*: 20.0 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: ft. bmp.
Length of Water Column (LWC): ft.
Well Diameter: in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

Measurement Point*:
MP Notes:
Well Volume: gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time:

Initial Observations: *Color* *Odor* *Sheen/Free Product*

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *µS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
Select Units from Dropdown Menus									
			LIMITED AMOUNT OF WATER, SAMPLED FOR VOC ONLY USING PDB						
Stabilization	∆ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time:

Total volume of groundwater purged: gal.

DO Titrataion: mg/L
Ferrous iron: mg/L
Iron mg/L
Mg mg/L

Final Observations: *Color* *Odor* *Sheen/Free Product*

Analytical Sample ID: **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-24
Northing:
Easting:

Site Name: Former Accurate Die
Site Location: Fayeteville, NY
Project #: 194010888
Sampling Method: Bladder Pump
Equipment Used: Bladder Pump
Pump/Controller ID#:
Field Personnel: LR/VF
Date: 2/22/2024
Weather:

Well information:

Installed Depth of Well*: 10.0 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: ft. bmp.
Length of Water Column (LWC): ft.
Well Diameter: in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

Measurement Point*:
MP Notes:
Well Volume: gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time:

Initial Observations: *Color* *Odor* *Sheen/Free Product*

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *µS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
Select Units from Dropdown Menus									
			LIMITED AMOUNT OF WATER, SAMPLED FOR VOC ONLY USING PDB						
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time:
Total volume of groundwater purged: gal.

DO Titrataion: mg/L
Ferrous iron: mg/L
Iron mg/L
Mg mg/L

Final Observations: *Color* *Odor* *Sheen/Free Product*

Analytical Sample ID: **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Low Flow Groundwater Sampling Log

Well ID: MW-27
Northing:
Easting:

Site Name: Former Accurate Die
Site Location: Fayeteville, NY
Project #: 194010888
Sampling Method: Bladder Pump
Equipment Used: Bladder Pump
Pump/Controller ID#:
Field Personnel: VF
Date: 2/24/2024
Weather:

Well information:

Installed Depth of Well*: 10.0 ft. bmp.
Measured Depth of Well*: ft. bmp.
Depth to Water*: ft. bmp.
Length of Water Column (LWC): ft.
Well Diameter: in.

Well Volume Multipliers:

1 in. = 0.041 gal/ft
2 in. = 0.163 gal/ft
4 in. = 0.653 gal/ft
6 in. = 1.469 gal/ft
8 in. = 2.611 gal/ft

Measurement Point*:
MP Notes:
Well Volume: gal.
Pump Intake Depth*: ft. bmp.

Start Purge Time:

Initial Observations: *Color* *Odor* *Sheen/Free Product*

Elapsed Time *Minutes*	**Depth to Water** *ft bmp*	**Temperature** *Celsius*	**pH** *SU*	**Specific Conductivity** *μS/cm*	**ORP** *mV*	**Dissolved Oxygen** *mg/L*	**Turbidity** *NTU*	**Flow Rate** *ml/min*	**Other**
			Select Units from Dropdown Menus						
			LIMITED AMOUNT OF WATER, SAMPLED FOR VOC ONLY						
Stabilization	Δ ≤ 0.3'	± 3%	± 0.1	± 3%	± 10 mV	± 10%	± 10%	200 ≤ X ≤ 500	

End Purge Time:

Total volume of groundwater purged: gal.

DO Titrataion: mg/L
Ferrous iron: mg/L
Iron mg/L
Mg mg/L

Final Observations: *Color* *Odor* *Sheen/Free Product*

Analytical Sample ID: **Date:** **Time:**

Container Size	Container Type	Qty Collected	Field Filtered?	Preservative	Laboratory

Notes:

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888

Consultant Ramboll

Project Name Accurate Diecasting

Collector VCF and SLH

Sample ID SV-01-072424

Vacuum gauge "zero" ("Hg) No

Start Date/Time 7/24/2024 10:39

Start Pressure ("Hg) -26

End Date/Time 7/24/2024 12:39

End Pressure ("Hg) -3

Canister ID 4815

End pressure > "zero"? Yes

Flow controller ID 4048

Sampling duration (intended) 2 Hours

Associated ambient air sample ID AA-072424

Depth of sample point below grade 4 ft

Tubing type used Teflon

Length of tubing 183 cm

Tubing volume 57900 cc

Volume purged 200 cc @ per min

1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 48%

Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (^{o}F) 73

Rainfall 0 Inches

Wind direction SSW

Barometric pressure 30.07

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (^{o}F) 83

Rainfall 0 Inches

Wind direction SSW

Barometric pressure 30.13

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 1078 ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888

Consultant Ramboll

Project Name Accurate Diecasting

Collector VCF and SLH

Sample ID SV-02-082924

Vacuum gauge "zero" ("Hg) No

Start Date/Time 8/29/2024 8:58

Start Pressure ("Hg) -29

End Date/Time 8/29/2024 22:58

End Pressure ("Hg) -7

Canister ID 5661

End pressure > "zero"? Yes

Flow controller ID 8788

Sampling duration (intended) 2 Hours

Associated ambient air sample ID AA-072424

Depth of sample point below grade 4 ft

Tubing type used Teflon

Length of tubing 122 cm

Tubing volume 38636 cc

Volume purged 200 cc @ per min

1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 47%

Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (°F) 73

Rainfall 0 Inches

Wind direction SSW

Barometric pressure 30.07

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (°F) 70

Rainfall 0 Inches

Wind direction SSE

Barometric pressure 29.77

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 933 ppb

Soil Vapor (Canister) Sample Collection Field Form

Project #	1940100888	Consultant	Ramboll
Project Name	Accurate Diecasting	Collector	VCF and SLH

Sample ID	SV-03-072424	Vacuum gauge "zero" ("Hg)	No
Start Date/Time	7/24/2024 10:50	Start Pressure ("Hg)	-30
End Date/Time	7/24/2024 12:50	End Pressure ("Hg)	-7
Canister ID	3423	End pressure > "zero"?	Yes
Flow controller ID	6024	Sampling duration (intended)	2 Hours
Associated ambient air sample ID	AA-072424	Depth of sample point below grade	4 ft

Tubing type used Teflon Length of tubing 122 cm Tubing volume 38636 cc

Volume purged 200 cc @ per min 1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 49.50% Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (^{o}F)	73	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.07			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (^{o}F)	83	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.13			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 691 ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project #	1940100888	Consultant	Ramboll
Project Name	Accurate Diecasting	Collector	VCF and SLH

Sample ID	SV-04-072424	Vacuum gauge "zero" ("Hg)	No
Start Date/Time	7/24/2024 9:56	Start Pressure ("Hg)	-29
End Date/Time	7/24/2024 11:56	End Pressure ("Hg)	-6
Canister ID	2819	End pressure > "zero"?	Yes
Flow controller ID	2929	Sampling duration (intended)	2 Hours
Associated ambient air sample ID	AA-072424	Depth of sample point below grade	4 ft

Tubing type used Teflon Length of tubing 122 cm Tubing volume 38636 cc

Volume purged 200 cc @ per min 1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 48% Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (^{o}F)	73	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.07			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (^{o}F)	83	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.13			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 2000 ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888
Consultant Ramboll
Project Name Accurate Diecasting
Collector VCF and SLH

Sample ID SV-05-072424
Vacuum gauge "zero" ("Hg) No
Start Date/Time 7/24/2024 10:04
Start Pressure ("Hg) -30
End Date/Time 7/24/2024 12:04
End Pressure ("Hg) -7
Canister ID 34000107
End pressure > "zero"? Yes
Flow controller ID 9164
Sampling duration (intended) 2 Hours
Associated ambient air sample ID AA-072424
Depth of sample point below grade 4 ft

Tubing type used Teflon
Length of tubing 122 cm
Tubing volume 38636 cc
Volume purged 200 cc @ per min
1 to 3 volumes purged @ < 200cc/min? Yes
Chamber tracer gas conc. 52%
Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:
Air temperature (°F) 73
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.07
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:
Air temperature (°F) 83
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.13
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 1481 ppb

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888
Consultant Ramboll
Project Name Accurate Diecasting
Collector VCF and SLH

Sample ID SV-06-072424
Vacuum gauge "zero" ("Hg) No
Start Date/Time 7/24/2024 9:40
Start Pressure ("Hg) -14
End Date/Time 7/24/2024 11:40
End Pressure ("Hg) -7
Canister ID 34000252
End pressure > "zero"? Yes
Flow controller ID 4505
Sampling duration (intended) 2 Hours
Associated ambient air sample ID AA-072424
Depth of sample point below grade 4 ft

Tubing type used Teflon
Length of tubing 122 cm
Tubing volume 38636 cc
Volume purged 200 cc @ per min
1 to 3 volumes purged @ < 200cc/min? Yes
Chamber tracer gas conc. 50%
Tracer gas conc. during purging 2%

Weather Conditions during Probe Installation:
Air temperature (^{o}F) 73
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.07
Wind speed (mph) 5 to 10
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:
Air temperature (^{o}F) 83
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.13
Wind speed (mph) 5 to 10
Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 385 ppb

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888
Consultant Ramboll
Project Name Accurate Diecasting
Collector VCF and SLH

Sample ID SV-07-072424
Vacuum gauge "zero" ("Hg) No
Start Date/Time 7/24/2024 9:21
Start Pressure ("Hg) -30
End Date/Time 7/24/2024 11:21
End Pressure ("Hg) -9
Canister ID 2680
End pressure > "zero"? Yes
Flow controller ID 6228
Sampling duration (intended) 2 Hours
Associated ambient air sample ID AA-072424
Depth of sample point below grade 4 ft

Tubing type used Teflon
Length of tubing 122 cm
Tubing volume 38636 cc
Volume purged 200 cc @ per min
1 to 3 volumes purged @ < 200cc/min? Yes
Chamber tracer gas conc. 47%
Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:
Air temperature (°F) 73
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.07
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:
Air temperature (°F) 83
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.13
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:
Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 2700 ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project #	1940100888	Consultant	Ramboll
Project Name	Accurate Diecasting	Collector	VCF and SLH

Sample ID	SV-08-072424	Vacuum gauge "zero" ("Hg)	No
Start Date/Time	7/24/2024 9:27	Start Pressure ("Hg)	-29
End Date/Time	7/24/2024 11:27	End Pressure ("Hg)	-7
Canister ID	4819	End pressure > "zero"?	Yes
Flow controller ID	2668	Sampling duration (intended)	2 Hours
Associated ambient air sample ID	AA-072424	Depth of sample point below grade	4 ft

Tubing type used Teflon Length of tubing 122 cm Tubing volume 38636 cc

Volume purged 200 cc @ per min 1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 45% Tracer gas conc. during purging 2%

Weather Conditions during Probe Installation:

Air temperature (°F)	73	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.07			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (°F)	83	Rainfall	0 Inches	Wind direction	SSW
Barometric pressure	30.13			Wind speed (mph)	5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID: 1090ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888

Consultant Ramboll

Project Name Accurate Diecasting

Collector VCF and SLH

Sample ID SV-09-072424

Vacuum gauge "zero" ("Hg) No

Start Date/Time 7/24/2024 10:15

Start Pressure ("Hg) -29

End Date/Time 7/24/2024 12:15

End Pressure ("Hg) -15

Canister ID 5709

End pressure > "zero"? Yes

Flow controller ID 8818

Sampling duration (intended) 2 Hours

Associated ambient air sample ID AA-072424

Depth of sample point below grade 4 ft

Tubing type used Teflon

Length of tubing 122 cm

Tubing volume 38636 cc

Volume purged 200 cc @ per min

1 to 3 volumes purged @ < 200cc/min? Yes

Chamber tracer gas conc. 52%

Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (°F) 73

Rainfall 0 Inches

Wind direction SSW

Barometric pressure 30.07

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (°F) 83

Rainfall 0 Inches

Wind direction SSW

Barometric pressure 30.13

Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Field Duplicate Collected here: DUP-072424

Pre-test PID: 834 ppb

RAMBOLL

Soil Vapor (Canister) Sample Collection Field Form

Project # 1940100888
Consultant Ramboll
Project Name Accurate Diecasting
Collector VCF and SLH

Sample ID SV-10-072424
Vacuum gauge "zero" ("Hg) No
Start Date/Time 7/24/2024 10:20
Start Pressure ("Hg) -27
End Date/Time 7/24/2024 12:20
End Pressure ("Hg) -5
Canister ID 5615
End pressure > "zero"? Yes
Flow controller ID 3959
Sampling duration (intended) 2 Hours
Associated ambient air sample ID AA-072424
Depth of sample point below grade 4 ft

Tubing type used Teflon
Length of tubing 122 cm
Tubing volume 38636 cc
Volume purged 200 cc @ per min
1 to 3 volumes purged @ < 200cc/min? Yes
Chamber tracer gas conc. 47%
Tracer gas conc. during purging 0%

Weather Conditions during Probe Installation:

Air temperature (°F) 73
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.07
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

0.10 Inches of rain overnight after installation.

Weather Conditions at Start of Sampling:

Air temperature (°F) 83
Rainfall 0 Inches
Wind direction SSW
Barometric pressure 30.13
Wind speed (mph) 5 to 10

Substantial changes in weather conditions during sampling or over the past 24 to 48 hrs:

Heavy rain from 10:20 to 10:32 on day of sampling

Site Plan showing sample location, buildings, landmarks, potential soil vapor and outdoor air sources, preferential pathways

Comments: Pre-test PID:1409 ppb

Attachment A

2024 SUPPLEMENTAL REMEDIAL INVESTIGATION WORK PLAN

Work Plan

Supplemental Remedial Investigation

Former Accurate Die Casting Site (No. C734052)

Fayetteville, NY

A remedial investigation (RI) was conducted at the Former Accurate die Casting site (Site No. C734052) as part of the Brownfield Cleanup Program (BCP) administered by the New York State Department of Environmental Conservation (NYSDEC). The RI was conducted between November 11, 2019 and February 3, 2020 in accordance with the Remedial Investigation Work Plan (RIWP) dated October 2019 which was approved by NYSDEC and NYSDOH. An RI Report dated September 3, 2021 documenting the findings of the RI was submitted to NYSDEC for review and approval.

As outlined in a comment later dated, July 14, 2023, NYSDEC has requested that additional investigation activities be completed at the site. In response to this request, this work plan provides details pertaining to the installation of three additional groundwater monitoring wells, collection and analysis of groundwater samples from the new and select existing wells and sampling of soil vapor along the property boundary.

Monitoring Well Installation

Two monitoring wells will be installed to evaluate the groundwater quality on the west/northwest portion of the site as shown on Figure 1. A third well will be installed near the former UST located on the west side of the building. The wells will be set to screen the silt and sand unit that overlies the glacial till. Based on the drilling logs completed in this area it is expected that the top of glacial till will be encountered between 10 and 15 ft below grade.

The borings will be advanced using direct push methos to up to 2 ft into the glacial till to confirm its presence. Soil samples will be collected continuously for descriptive purposes and to confirm the depth of the glacial till unit.

Upon retrieval, each soil sample will be described for: 1) percent recovery; 2) soil type; 3) color; 4) moisture content; 5) texture; 6) grain size and shape; 7) consistency; 8) evidence of staining or other chemically related impacts; and 9) any other relevant observations. In addition, headspace screening of soil will be performed with a PID to allow evaluation of the bulk volatile organic concentration of each soil sample. Screening will be performed in approximate 2-ft intervals unless observations warrant deviation. This descriptive information will be recorded on a soil boring log form.

The monitoring wells will be set on top of the till to monitor the overburden groundwater. A bentonite pellet plug will be placed within the glacial till at the base of the boring. This plug will be covered with 6 inches of sand to prevent plugging of the well screen. The monitoring wells will be constructed with up to 10 ft of screen with the top of the screen set to no less than 3 ft below grade to allow for placement of an annular seal to minimize inflow of surface runoff. The wells will be constructed of ¾ to 1-inch inside diameter PVC. The well screen will be a 0.010-inch slot pre-packed well screen flush-threaded to PVC riser of sufficient length to bring the top of the well to between 2 and 3 ft above grade. The annular space above the well screen will be filled with cement/bentonite grout. Well heads will be completed with locking steel protective casings set within a concrete pad.

Drilling equipment used for the well installation will be decontaminated between locations.

April 22, 2024

Each newly installed monitoring well will be developed no earlier than 24 hours following installation. Development will be performed by surging and purging the well using a bailer or pump, as appropriate, to remove the fine-grained material which may have settled within the well and to provide hydraulic communication with the surrounding formation. Three to five well volumes will be removed as part of this process. Groundwater parameters will be measured and recorded prior to development, after removal of each well volume during development, and at the conclusion of development. Parameters will include turbidity, pH, temperature, specific conductance and dissolved oxygen (DO). Water levels will be measured prior to and at the conclusion of development. During well development, stability will be established as 3 consecutive readings as outlined below.

- Temperature (±10%)
- pH (±10%)
- Specific conductivity (±10%)
- DO (±10%)
- Turbidity (±10%)
-

If stability is not achieved, purging will cease after 5 well volumes have been removed.

Survey

A location and elevation survey will be completed following completion of the well installation to record the horizontal location and vertical elevation of newly installed monitoring wells (grade, top of PVC and protective casing). The survey will be completed by a New York State-licensed surveyor. Horizontal datum will be referenced to North American Datum (NAD) 83 (2007) New York State Plane Eastern Zone and vertical datum to North American Vertical Datum (NAVD) 88. Elevation will be surveyed to 0.01-foot accuracy.

Groundwater Sampling and Analysis

One set of groundwater samples will be collected from the three new overburden monitoring wells and the following existing monitoring wells as follows:

Overburden	**Bedrock**
MW-01 (upgradient)	MW-15 (upgradient)
MW-02	MW-7
MW-05	MW-11
MW-12	MW-23
MW-13	
MW-17	
MW-18	
MW-22	
MW-24	

Prior to the collection of groundwater samples, groundwater levels will be measured to the nearest 0.01 foot from the well to be sampled using an electronic water level probe. The water level measurements will be recorded from a reference point to be marked on each well casing.

Groundwater samples will be collected using low-flow sampling techniques. The wells will be purged at a flow rate not to exceed 500 milliliters per minute (ml/min) and water quality parameters will be monitored. The samples will be collected once the water quality measurements have stabilized as outlined below.

- Temperature ± 3% of measurement
- pH ± 0.1 pH units
- Specific conductance ± 3% of measurement
- Redox ±10 mV
- DO ±10% of measurement
- Turbidity ± 10% of measurement

If a stable groundwater level cannot be maintained at a yield of at least 100 ml/min, the well will be dewatered to the intake of the pump and water will be allowed to recover and the groundwater sample will be collected.

Groundwater samples being collected for VOC analysis as part of the semi-annual groundwater monitoring program are being collected using passive diffusion bags (PDBs). New PDBs are placed in the wells following collection of the samples during each event and therefore, are present in the wells. For consistency, the samples to be collected for VOC analysis from the wells that are part of the long-term monitoring program will be collected from the PDBs. Once the PDB has been removed low flow sampling methods will be employed for collection of the samples for the remainder of the analyses.

The collected samples will be submitted to an ELAP-certified laboratory for analysis. The samples will be analyzed for the TCL/TAL analytical suite including TCL VOCs + TICs, TCL SVOCs + TICs, TCL PCBs, TCL pesticides, TCL herbicides, TAL metals, cyanide, and mercury. QC samples will include a field duplicate, Matrix spike (MS) and matrix spike duplicated (MSD). The QC samples will be collected at a frequency of 1 QA/QC set per 20 environmental samples.

The laboratory will provide a data package that meets the requirements of NYS ASP Category B. The package will subsequently be reviewed by a data validator and a Data Usability Summary Report (DUSR) will be prepared.

Table 1 provides a summary of analytical parameters and associated methods, number of samples and associated (QA/QC) samples. Groundwater samples from select overburden and bedrock monitoring wells were previously analyzed for emerging contaminants at the request of NYSDEC. Therefore, these analyses will not be completed on samples collected during this sampling event.

Soil Vapor Sampling

Soil vapor (SV) samples will be collected from 9 locations as shown on **Figure 1**. These locations were selected to be in the same general locations as the SV samples collected in 2009. The sample numbers will also be the same as previously used with the date being the differentiator in the database. Consistent with the 2009 sampling event, SV samples will be collected from 4 to 5 ft below grade using temporary sample probes. Nearby monitoring wells will be gauged prior to advancing each boring to identify the approximate depth to water to confirm that the target sample probe depth will be at least 1 ft above the water table. The SV points will be advanced by hand (slide hammer, drill, or similar) and constructed with a slotted or permeable point attached to tubing. The annular space around the probe will be filled with 60-100 mesh glass beads or clean sand to between 0.5 and 1 foot above the sample point. A hydrated granular bentonite seal will be placed above the glass beads to surface grade to minimize ambient air infiltration.

The soil vapor sampling will be scheduled for at least 12 hours following placement of the probe. Prior to collection of the samples, 1 to 3 volumes of air will be removed from the tubing. Helium tracer gas will then be used to verify that there is no leakage through the surface seal.

The SV samples will be collected from each location using batch-certified SUMMA canisters at a rate of 0.2 L/min maximum for a period of up to 2 hours. For QA/QC purposes 1 ambient air sample and 1 duplicate sample will be collected for analysis. The samples will be analyzed for standard list VOCs by USEPA Method TO-15.

Following sample collection, the tubing will be pulled out or cut off to approximately 8 inches below grade and the surface will be sealed with bentonite.

Air Monitoring

Consistent with the CAMP provided in Appendix 1A of NYSDEC's Division of Environmental Remediation (DER) Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC 2010), air monitoring will be conducted during advancement of soil borings associated with the monitoring wells. Accordingly, one upwind and one downwind station equipped with PID and particulate monitoring equipment will be housed in enclosures and mounted on tripods. The specific locations of the equipment will be based on wind direction and the location of the potential exposure populations at the time the field activities are completed.

Investigation Derived Waste (IDW) Management

IDW will consist of personal protective equipment (PPE0, tubing, sampler liners, excess soil and water generated during decontamination and well purging. Soil will be placed in DOT-approved 55-gallon drums and staged on the Site pending characterization and off-site disposal. The PPE and other supplies will be disposed as solid waste. Decontamination and well purge water will be transferred to the onsite groundwater treatment plant for treatment.

Table 1
Sample Analysis and QA/QC Summary
Former Accurate Die Casting Site
Fayetteville, NY

Task	Matrix	Analyses	Method	Number of Samples	Trip Blank	Equipment Blank	Field Duplicate	MS	MSD	Estimated Total Number of Samples	Deliverable	Validated (Y/N)
Groundwater	**Water**	TCL Volatiles + TICs	USEPA Method 8260	15	4	1	1	1	1	23	Category B	Y
		TCL Semivolatiles + TICs	USEPA Method 8270	15	0	1	1	1	1	19		
		TCL PCBs	USEPA Method 8082	15	0	1	1	1	1	19		
		TCL Pesticides	USEPA Method 8081B	15	0	1	1	1	1	19		
		TCL Herbicides	USEPA Method 8151	15	0	1	1	1	1	19		
		TAL Inorganics	USEPA Method 6010	15	0	1	1	1	1	19		
		Cyanide	USEPA Method 9010	15	0	1	1	1	1	19		
		Mercury	USEPA Method 7471	15	0	1	1	1	1	19		

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PROJECT: 1940100888 | DATED: 3/15/2024 | DESIGNER: SSOULE

- PROPOSED MONITORING WELL
- BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL
- ABANDONED OVERBURDEN MONITORING WELL
- GROUNDWATER COLLECTION MANHOLE
- GROUNDWATER COLLECTION TRENCH
- ONONDAGA COUNTY PARCEL BOUNDARY 2022

Notes

- Stream from USGS National Hydrography Dataset.

0 100 200 Feet

PROPOSED MONITORING WELLS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL ACTION WORK PLAN
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 01

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

◆ PROPOSED SOIL VAPOR SAMPLE
◆ BEDROCK MONITORING WELL
◆ OVERBURDEN MONITORING WELL
◆ ABANDONED OVERBURDEN MONITORING WELL
☒ GROUNDWATER COLLECTION MANHOLE
🟩 GROUNDWATER COLLECTION TRENCH
🟨 ONONDAGA COUNTY PARCEL BOUNDARY 2022

Notes
- Stream from USGS National Hydrography Dataset.

PROPOSED SOIL VAPOR SAMPLE LOCATIONS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL ACTION WORK PLAN
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

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PROJECT: 1940100888 | DATED: 3/15/2024 | DESIGNER: SSOULE

Attachment B

TECHNICAL MEMORANDUM - VAPOR INTRUSION RESULTS, SEPTEMBER 18, 2006

O'BRIEN & GERE

TECHNICAL MEMORANDUM

To: John Grathwol – NYSDEC
Henrietta Hamel – NSDOH
From: Mark Distler
Re: Vapor Intrusion Evaluation Results, Former Accurate Die Casting Site, Fayetteville, NY (Site # 7-34-052)
File: 2488/39019.002.001
Date: September 18, 2006

cc: M.J. Peachey – NYSDEC
J. Burke – NYSDEC
T. Olmsted – ITT Corp
F. Daves – ITT Corp
S.J. Roland – O'Brien & Gere
J.F. Sutphen – O'Brien & Gere
A.R. Farrell – O'Brien & Gere

On behalf of ITT Corporation (ITT), O'Brien & Gere conducted a vapor intrusion evaluation at the former Accurate Die Casting Site (Site) in Fayetteville, New York. The evaluation was conducted at the request of the New York State Department of Environmental Conservation (NYSDEC) in a letter dated August 19, 2005. The evaluation was performed in accordance with Work Plans prepared by O'Brien & Gere, dated December 2, 2005; February 13, 2006 (revision 1); and February 16, 2006 (revision 2). The Work Plan revisions incorporated changes based on comments provided by the NYSDEC and New York State Department of Health (NYSDOH), including your letter of January 5, 2006, and were approved by both agencies in a letter from NYSDEC dated March 3, 2006 prior to initiating the evaluation. As also requested by NYSDEC, results tables in PDF format were forwarded to NYSDEC via electronic mail on June 13, 2006. NYSDEC's March 3, 2006 letter also requested submittal of a Technical Memorandum (TM) containing the results in both electronic (PDF) and hard copy formats, therefore a PDF file of this TM is also being provided with this submittal.

This TM presents the results of the evaluation and recommends next steps. This memorandum is being submitted to NYSDEC and NYSDOH in order to obtain their concurrence with the data evaluation and with the recommended next phase of the evaluation. All work was conducted in accordance with the NYSDEC approved Work Plan, dated February 16, 2006.

1. Site Background

The former Accurate Die Casting site (Site) is located at 555 E. Genesee Street, Fayetteville, New York. As shown in Figure 1, the Site is approximately 33 acres in size, and is bordered to the south by East Genesee Street. The Site is currently zoned for commercial/industrial use. The Site is bordered to the west by a former railroad bed that is no longer in use. Residential housing is located west of the former railroad bed. Residential housing also borders the Site to the east while Bishop Brook completes the approximate northern border. Overburden ground water flows from south to north toward Bishop Brook.

The Site has one occupied building with attached additions. The entire building's floor space is approximately 120,000 square feet. The foundations are slabs on grade except for some sub-slab compartments in the manufacturing area. The building has four commercial tenants with operations including offices, manufacturing, and general storage. Figure 2 indicates the currently configured spaces. O'Brien & Gere occupies the majority of the building consisting of offices, manufacturing and storage areas. Other tenants include Stuart Irby, LVR, Inc., and United Systems Integration (formerly Lane Fire & Safety). The space occupied by Stuart Irby is used for the manufacture of commercial electrical products, such as industrial transformers. LVR, Inc. uses its space for furnace fabrication and storage of associated refractory materials, such as silica dust and ceramic fiber. United Systems Integration is a retailer for personal protective equipment and safety supplies, and uses its space for storage of these items.

Accurate Die Casting conducted manufacturing operations at the site from 1950 until 1988 when it abandoned the facility. Accurate Die Casting used the facility for die and casting operations to fabricate metal products for the automobile industry.

ITT Commercial Finance Corporation, now ITT Corporation, acquired the site in 1988 as a result of foreclosure proceedings. ITT conducted a Remedial Investigation and Feasibility Study in accordance with a NYSDEC consent order (Index # A7-0258-91-03), dated August 19, 1991. Following the investigation, ITT conducted NYSDEC-approved site remediation corrective actions that included soil excavation and construction of a ground water collection and treatment (GWC&T) system. A Record of Decision (ROD) was finalized in December 1994.

Remedial activities have focused on the remediation of polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), trichloroethene (TCE), and other volatile organic compounds (VOCs) in soils and ground water. In accordance with NYSDEC requirements, in 1995 approximately 600 cubic yards of soil were excavated in Area 1, and a ground water interceptor trench was later constructed during 1999 to collect VOCs present in the sand lenses observed in Area 1. The locations of Area 1 and the ground water interceptor trench are shown on Figure 3.

The area outside the northeast corner of the building was addressed as part of an Interim Remedial Measure (IRM) between May 24 and June 22, 1994. During that period, soils exhibiting TCE concentrations above the NYSDEC-established Remedial Action Objective (RAO) of 0.7 mg/kg were removed to the extent practicable. Impacted soils under the Site's building immediately adjacent to the IRM area could not be excavated because of building stability concerns and were therefore left in place. Excavated soils were mechanically processed by aeration (mechanical volatilization via hammer mill and pug mill processing) until residual VOC levels were documented to be below the RAOs, and then were used to backfill the excavation. As part of the IRM, a ground water collection sump and an overburden recovery well (RW-1) were also constructed. The IRM area is shown on Figure 1 and Figure 3.

In 1995, a septic tank was uncovered in the area on the east side of the Site (Area 5). The contents were removed and properly disposed of at an off-site NYSDEC-approved landfill. The walls of the septic tank were cleaned and the concrete vault was filled and buried, completing remediation of this area.

A portion of the remedial activities noted above were contained in an IRM Work Plan that was submitted to NYSDEC in May, 1994. NYSDEC issued an approval letter for the IRM WP on May 23, 1994. Additional work plans were also submitted along with the issuance of corresponding NYSDEC approvals.

In addition to remedial activities, there is some reported use and storage of petroleum on the Site that pre-dated ITT's acquisition of the property. There were three underground No. 2 fuel oil storage tanks on-Site. The reported locations of these former tanks are shown on Figure 1. Two 10,000 gallon and one 500 gallon underground storage tanks were located and have since been decommissioned on the north side of the building. The two larger tanks were cleaned and filled with sand. The smaller tank was removed. Reportedly, these tanks were decommissioned in 1999. There is currently no fuel oil storage on the Site.

In addition, there have been three reported accidental spills at the Site, as follows:

- Waste oil on August 21, 1985 (Pre-dated ITT)
- PCB containing hydraulic oil on April 16, 1990
- PCB containing hydraulic oil on June 6, 1990

The site was sold to O'Brien & Gere Technical Services, Inc. in 1999 and subsequently sold to 547 East Genesee Street, LLC in a sale-lease back arrangement in 2000.

2. Vapor Intrusion Evaluation

The following describes the first phase of sampling that was conducted in March and May 2006.

2.1. Sampling Objectives

The vapor intrusion evaluation was conducted using a phased approach. The objective of the first phase of sampling was to assess the potential for (1) on-Site vapor intrusion, and (2) off-Site migration in soil vapor in response to the NYSDEC request letter dated August 19, 2005. Results of the first phase of sampling are summarized in this report along with a discussion regarding off-site migration and a proposed scope for additional (Phase 2) sampling. The following describes the sampling used to evaluate both objectives.

2.2. Sampling Locations and Methods

Both objectives of Phase 1 were achieved by collecting air samples using 6-liter pre-evacuated Summa® canisters. Sample collection rates were maintained by laboratory-calibrated constant-differential low volume flow controllers. Vacuum readings of the canisters were obtained and documented prior to sample collection and upon completion of sampling. Sample identifications, vacuum readings, flow controller identification numbers, and other relevant information were recorded on field forms located in Attachment 1 of this document. Samples were collected in accordance with the approved Work Plan and the NYSDOH draft vapor intrusion guidance (NYSDOH Guidance Document)..1 Sampling was conducted with the oversight of John Grathwol, project manager with the NYSDEC.

On-Site Sub-Slab and Indoor Air Sampling

On-Site sub-slab and indoor air sampling to evaluate the potential for vapor intrusion was initiated on March 14, 2006. Paired sub-slab and indoor air sample sets were collected throughout the building at eight locations shown in Figure 2. These locations were adjusted only slightly from Work Plan locations to accommodate conditions encountered in the field. Sample locations were selected to evaluate the potential for vapor intrusion in the different occupied spaces since air exchange rates were expected to vary due to differences in HVAC, wall insulation, and open doors. Samples collected in spaces furthest from the IRM area were used to evaluate if soil vapor from the IRM area may diffuse across the slab or from ground water impacts at the west side of the Site. During sampling, a building survey was completed for each building space sampled that had different characteristics that may have impacted sample results. These characteristics included separate HVAC units and general use of the space, such as manufacturing versus office space. The surveys also documented the type and amounts of chemicals stored in each sampled area with the potential to impact indoor air concentrations. Copies of the surveys are provided as Attachment 2.

In addition to and concurrent with indoor air sampling, an ambient air sample was collected immediate to and upwind of the on-Site building to assess the potential of impacts from upwind air sources on indoor air concentrations. The ambient air sample was located west of the building, at the top of stairs leading down to a small field, as shown on Figure 2.

Sub-slab soil vapor samples were collected by drilling small holes in the building's slab, inserting sampling tubing, sealing the tubing to the floor with beeswax to prevent sampling of indoor air, purging the tubing of ambient air, and slowly pulling (<10 cc/min) sub-slab air into a canister. The ambient and indoor air samples were collected by slowly pulling air into the canisters, which were situated at a height of approximately 3 to 5 feet above the ground or slab. Samples were collected over a 24-hour period, utilizing batch certified-clean canisters

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[1] "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," NYSDOH, February 2005.

for sub-slab samples and canisters that were individually certified-clean for low level analysis for indoor and ambient air samples. After sample collection, the canisters were shipped under routine Chain-of-Custody to a subcontracted laboratory, STL Inc. of Colchester, VT, where they were analyzed by USEPA Method TO-15. STL is certified by NYSDOH for TO-15 analyses. Canister certifications and Chain-of-Custody forms can be found with the analytical results in Attachment 3.

Soil Vapor Sampling

Sampling to evaluate the potential for off-Site migration of soil vapor was initiated on May 3, 2006. Shallow soil vapor was sampled at nine locations along the property line, identified in Figure 3. As described in the Work Plan, we intended to sample ten locations but for the reasons described below, a sample could not be collected at one of the locations (SV-03). Three locations were sampled along the eastern edge of the property and three were sampled along the western edge. As described in the Work Plan, these samples represent soil vapor in the vicinity of ground water monitoring wells that contain detectable concentrations of TCE, and are cross-gradient and down-gradient of ground water flow. Soil vapor at the south property line was measured by three sample locations between the on-Site building and off-Site buildings along Genesee Street. Please note that no soil gas sampling was proposed or performed at the North property boundary because O'Brien & Gere believes that some or all of the overburden ground water flow and shallow soil gas transport is intercepted by Bishop Brook.

Sample points with sample tubing were installed at depths of 4 to 5 feet below the ground surface. Coarse glass beads were installed above each sample point, creating a permeable sample zone approximately 1 foot high. The space above the glass beads to the ground surface was sealed with bentonite slurry. Ambient air was purged from the sample tubing and the installations were allowed to cure for approximately 24 hours before samples were collected. Helium tracer gas was applied to the first soil vapor point sampled (SV-1) to test the integrity of the installation and verify no ambient air would be collected in the sample. Tracer gas results indicated the installation was sealed properly, therefore no further tracer gas screening of the soil vapor point installations was performed, as directed by the Work Plan. Results of the tracer gas screening can be found on the SV-01 field form in Attachment 1.

Soil vapor samples were collected over four-hour periods, with batch certified-clean canisters. After sample collection, the canisters were shipped under routine Chain-of-Custody to a subcontracted laboratory, STL Inc. of Colchester, VT, where they were analyzed by USEPA Method TO-15. Chain-of-Custody forms can be found in Attachment 3.

After four hours of sample collection of SV-03, the canister vacuum was observed to be 26" Hg, indicating the canister was near empty and did not collect a sufficient sample for analysis. Since the initial purge of the soil vapor point was accomplished without creating a vacuum in the sample line, it was assumed that the flow controller may have been set for a longer sampling duration. Therefore, the canister was left overnight in an attempt to collect a sufficient soil vapor sample volume, however, by the next morning; the canister was still near empty. The flow controller was rechecked by the laboratory, which confirmed that the controller was properly set for a four-hour period. Therefore, we assume that the soil vapor point may have been installed in an impermeable layer of soil. Since extra canisters were not available for use during the same field mobilization, it was decided along with Mr. Grathwol that if necessary, a re-sample of this location may be conducted during a future field mobilization depending upon the results of the other soil vapor samples.

Quality Control

In accordance with the Work Plan, one duplicate soil vapor sample and one duplicate sub-slab sample (from locations SS-5 & SV-5) were collected as part of this sampling program. Additionally, Data Usability Summary Reports (DUSRs) were prepared for this sampling program to compare sample data with validation criteria prescribed by the United States Environmental Protection Agency's (USEPA) data validation guidance[2]. DUSRs were generated for both the on-Site sampling and off-Site migration of soil vapor sampling.

3. Summary and Data Evaluation

Results of the sample analyses are presented in Tables 1 and 2. Results are presented in units of micrograms per cubic meter (µg/m^3). Only compounds that were detected in samples above their respective reporting limits are included on the tables. Compounds that were included in the analysis but not detected are presented in the laboratory data reports, which are provided as Attachment 3. The data have been validated as discussed above; the DUSRs are included in this memorandum as Attachment 4.

3.1. On-Site Sub-Slab and Indoor Air Sampling Results

Table 1 presents results of the sub-slab and indoor air sampling of the on-Site building. The sample locations are shown on Figure 2, along with sub-slab and indoor air sample results for TCE, which was the primary compound detected. Note that the sub-slab sample SS-2 in the "SW OBG Storage" location is flagged as potentially being biased low because the sample probe was found out of the slab at the time of sample pickup.

The results indicate concentrations of TCE in sub-slab vapor, ranging from 190 µg/m3 to 32,000 µg/m3. Of the eight sub-slab samples, TCE was found at higher concentrations when compared to other compounds. In five of the eight samples, sample dilutions, required by the laboratory to bring TCE concentrations within their instrument's calibration range, increased the reporting limits for other compounds such that all or most of the other compounds were not detected. As discussed below, evaluations using NYSDOH decision matrices for both 1,1,1-Trichloroethane (TCA) and Tetrachloroethene (PCE) concentrations were unable to be performed for three of the eight sample locations because of elevated detection limits for these two compounds. In addition to TCE, compounds that were detected include n-heptane, n-hexane, cyclohexane, and BTEX, all of which are associated with gasoline.

Indoor air concentrations for TCE, ranging from 2.6 µg/m^3 to 23 µg/m^3, were also above typical indoor air concentrations.[3] With the exception of toluene and xylene, TCE indoor air concentrations were higher than the other compounds. Most of the other detected compounds are those often associated with gasoline vapors.

Table 1 also presents attenuation factors calculated for each sample set. The attenuation factor is the ratio of the sub-slab vapor concentration to the indoor air concentration. We found the attenuation factors useful in estimating which indoor air concentrations may be attributable solely to vapor intrusion and which are likely attributable to indoor air sources. Since there are no observed indoor sources of TCE and since sub-slab TCE concentrations were detectable in the samples, we propose that the TCE attenuation factor represents the attenuation factor for each location that was sampled. For each location, except for the "OBG Office Area", the attenuation factors range from 10^{-3} to 10^{-4}. The higher attenuation factor in the "OBG Office Area" (0.06) may be attributable to a higher negative indoor air pressure created by the HVAC system.

There were nine compounds detected in indoor air in the "OBG Office Area" that have attenuation factors equivalent to the TCE-derived attenuation factor, meaning that those indoor air concentrations may be attributable to vapor intrusion. In all other sampling locations, attenuation factors for compounds other than TCE that were

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[2] United States Environmental Protection Agency (USEPA). 1994. *Region II Validating Canisters of Volatile Organics in Ambient Air*, HW-18, Revision 0. New York, New York.

[3] NYSDOH Guidance Document estimates typical indoor air concentrations of TCE in office areas at approximately 1.2 µg/m^3.

detected in indoor air are greater than the TCE-derived attenuation factor, meaning that the indoor air concentrations are at least partially attributable to indoor air sources. The chemical inventories conducted at each sampling location confirm the presence of air sources. Several sources of gasoline and kerosene were found, and although some areas did not have sources within their space, the building's air is in communication with all sampled spaces.

The NYSDOH Guidance Document has decision matrices for TCE, TCA, and PCE. Using the sub-slab and indoor concentrations, the decision matrices suggest the next step in managing potential vapor intrusion. Table 1 includes a column for each set of samples (sub-slab and indoor air) that presents the recommended next step suggested by the decision matrices. For TCE, the decision matrix suggests that mitigation be performed.

The decision matrix for TCA or PCE suggests no further action for five of the eight sample sets. However, in the other three sample sets, we are unable to determine the recommended action because the reporting limits for these two compounds (due to sample dilution for TCE quantitation) are greater than some of the decision matrix' concentration categories. Nevertheless, TCE is the primary constituent of concern that will dictate the next step for the on-Site building, as discussed below in Item 4.1.

3.2. Soil Vapor Sampling Results

Table 2 shows the results of the soil vapor sampling. In addition, sample results for TCE are shown on Figure 3 for each soil vapor sample location. Based on the history of the Site and the vapor concentrations of TCE beneath the on-Site building's slab, TCE is the primary Site-related constituent of concern. TCE was detected in the soil vapor at three of the nine sampling locations above a reporting limit of 5.4 µg/m^3. Since the soil vapor results are significantly lower than the concentrations in the sub-slab vapor, they confirm the Conceptual Site Model (CSM) that the primary source of TCE vapors is beneath the building (specifically in the IRM area where it was infeasible to excavate the impacted soils remaining under the building).

Two of the three soil vapor samples where TCE was detected are located along the eastern property line, with 86 µg/m^3 found at SV-07. Samples collected at SV-01 and SV-04, located at the west and east property lines, respectively, had concentrations of TCE at 37 µg/m^3. These results indicate that Site-related constituents have the potential to migrate off-Site. Our recommendation for a next step to further evaluate potential off-Site migration is discussed below under Item 4.2.

In addition to a detectable level of TCE at SV-01, cis-1,2-dichloroethene, a degradation product of TCE, was also found (44 µg/m^3). Carbon tetrachloride was found in only one sample (SV-09) at a low concentration (15 µg/m^3). The only other chlorinated compound found in soil vapor (SV-10) at a low concentration was chloroform (6.8 µg/m^3).

Other detected compounds include non-chlorinated compounds, such as alkanes and BTEX, which are often associated with gasoline. In particular, gasoline vapor constituents include C4 to C8 aliphatic (such as, n-hexane, n-heptane, and cyclohexane) as well as trimethylbenzenes. These compounds were found in nearly every soil vapor sample. The concentrations of these compounds generally decrease with increased distance from Genesee Street.

BTEX could also be associated with other petroleum products such as mid-distillate oils (diesel and fuel oil). As noted above, No. 2 fuel oil was previously used and stored on the Site. However, middle distillate oils have vapor constituents consisting of C10 to C19 aliphatic and aromatic compounds (such as, nonane, decane, and naphthalene). The absence of these higher molecular weight compounds and the presence of the C4 to C8 gasoline-related compounds suggest that the primary BTEX vapor source is gasoline rather than mid-distillate oils.

There are four known sources of petroleum releases immediately upgradient of the Site. According to NYSDEC spill records, the following non-Site related releases have been documented:

- 537 Genesee (Sakran Inc.) - Gasoline on 3/28/94
- 535 Genesee (Sunoco) - Motor oil on 10/15/96
- 540 Genesee (Automobile Dealership) - Waste oil on 9/23/96
- 540 Genesee (Automobile Dealership) - Unknown Petroleum on 12/17/04

The locations of these properties are noted in Figure 1. The property at 535 and 537 Genesee Street is currently a Sunoco gas station. The property at 540 Genesee Street is Jay's Village Chevrolet.

The alkane and BTEX concentrations found in sub-slab vapor are consistently lower than the soil vapor concentrations measured at locations nearest to the building, thereby indicating that the source of these gasoline-related compounds is not under the on-Site building.

We propose that these non-chlorinated compounds are part of a low level gasoline background throughout the surrounding area sourced by off-Site releases, and are not Site-related because of the following reasons:

- The type of compounds are indicative of gasoline
- Known gasoline releases have occurred at three off-Site locations immediately upgradient of the Site.
- No known gasoline stored on Site.
- No higher levels (hot spots) of BTEX found on Site or under the on-Site building.
- BTEX soil vapor decreases as increasing distance from known off-Site gasoline spills.

3.3. Quality Assurance and Quality Control

Laboratory analytical results were subjected to data validation requirements in accordance with the USEPA procedures[4]. Quality assurance/quality control (QA/QC) samples included laboratory blanks, field duplicates, and matrix spike / matrix spike duplicates (MS/MSD). DUSRs for both on-Site vapor intrusion sampling and off-Site migration of soil vapor sampling are included in Attachment 4. The reports state that the entire data set is considered useable for project objectives. The data presented in Tables 1 and 2 include data qualifiers resulting from the reports.

The data show that one hundred percent of the data collected were determined to be usable for qualitative and quantitative evaluation purposes. The data show that quality control mechanisms were effective in ensuring measurement data reliability within expected limits of sampling and analytical error. No data were rejected during the data evaluation process.

The duplicate sub-slab and soil vapor samples show good overall precision of sampling and analysis techniques. The relative percent difference between individual detected compounds is less than 17 percent (<30 percent is considered acceptable). The QA/QC data generated from the sampling event indicate that the chemical data are

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[4] *Region II Validating Canisters of Volatile Organics in Ambient Air*, United States Environmental Protection Agency, HW-18, Revision 0, New York, New York.

acceptable and defensible and can be used for their intended purposes. A complete copy of the laboratory reports including laboratory QC documentation is maintained with the project files.

3.4 Investigation Derived Waste Management

Decontamination of sampling equipment was performed at the work location in accordance with the approved Work Plan. There was no removal of groundwater or soil.

4. Recommendations for Phase 2

4.1. On-Site Building

As discussed above, mitigation of the on-Site building is recommended. O'Brien & Gere has begun testing of the building to evaluate the feasibility of sub-slab depressurization (SSD), a highly effective mitigation technique. SSD should be feasible for most of the building except for the "OBG Manufacturing" area where there are extensive sub-slab compartments and ducts formerly used by Accurate Die for oil/water separation, forced air supply and return, and die coolant supply and return. These compartments/ducts have been sealed at the slab but have the potential to act as vapor reservoirs. We are conducting tests to determine their locations and to evaluate feasible mitigation options.

In addition, we are preparing Fact Sheets and cover letters that will communicate the sub-slab and indoor air sampling results to the property owner and tenants. Once we receive NYSDEC concurrence with this report, its findings, and recommended actions, we will forward these documents to NYSDEC for review prior to distribution. We also intend to meet with each entity to discuss the results and the upcoming mitigation plan. We request to conduct those meetings in concert with the NYSDEC and/or NYSDOH.

4.2. Off-Site Migration

As discussed above, the soil vapor data indicates that there is a potential of off-Site migration of Site-related vapor constituents at three locations along the Site's property line (SV-01; SV-04 and SV-07). The TCE soil vapor concentrations are at low levels such that if these levels were found in sub-slab vapor of an off-Site building, the resulting indoor air levels may be so low that they would not be detectable above ambient air levels. Nevertheless, we propose to conduct off-Site sub-slab and indoor air sampling to evaluate the potential for off-Site vapor intrusion in these areas.

O'Brien & Gere recommends sampling in one off-Site building adjacent to each soil vapor location where TCE was detected. Based on soil vapor data, these three buildings would represent the highest potential sub-slab vapor concentration. Additional sampling of adjacent buildings may be recommended depending upon sample results. Since there is a gasoline background in soil vapor, we propose to sample for chlorinated compounds only.

We recommend that the following three buildings be sampled as part of the evaluation's Phase 2 [redacted]

[redacted]

Re-sampling of SV-03 is not recommended at this time since TCE results of SV-02, the soil vapor sample closest in proximity to the SV-03 location, indicate very low soil vapor concentration northwest of the Site.

Pending your concurrence with this report, its findings, and our recommendation, ITT will prepare a community outreach plan that we will submit to you for review and approval prior to implementation.

If you have any questions regarding this report, please feel free to contact me at (315) 437-6100, or Teresa Olmsted of ITT at (714) 630-3175.

Attachments:
Table 1 – Summary of On-Site Sub-Slab and Indoor Air Sampling Detections, March 2006
Table 2 – Summary of Soil Vapor Sampling Detections, May 2006
Figure 1 – Site Plan
Figure 2 – On-Site Building Vapor Intrusion Sample Results
Figure 3 – Soil Vapor Sample Results
Attachment 1 – Field Data Forms
Attachment 2 – Building Survey Forms
Attachment 3 – Sample Analysis Data
Attachment 4 – Data Usability Summary Reports

TABLES

Table 1
Summary of On-Site Sub-Slab and Indoor Air Sampling Detections, March 2006
Former Accurate Die Casting Site, Site #7-34-052
Fayetteville, NY

	Sample Location:		*Irby*				*NE Corner of OBG*				*LVR*			
	Sample Type:	Ambient Upwind	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)
	Sample I.D.:	031406-AMB	SS-1	IA-1			SS-2	IA-2			SS-3	IA-3		
Compound	**Sample Date:**	3/14/06	3/14/06	3/14/06			3/14/06	3/14/06			3/14/06	3/14/06		
Trichloroethene		<0.21 U	910	3.4	Mitigate	0.004	25,000	11	Mitigate	0.0004	18,000	12	Mitigate	0.001
1,1,1-Trichloroethane		<0.22 U	<5.5 U	0.46	NFA	>0.08	<160 U	0.47	UTD	>0.003	<110 U	1.6	UTD	>0.01
Tetrachloroethene		<0.27 U	10	<0.27 U	NFA	<0.03	<200 U	<0.27 U	UTD		<140 U	0.52	UTD	>0.004
Chloroform		0.22	21	<0.20 U	NA	<0.01	<150 U	<0.20 U	NA		<98 U	<0.20 U	NA	
Carbon Tetrachloride		0.69	<6.3 U	0.63	NA	>0.1	<190 U	0.82	NA	>0.004	<130 U	0.75	NA	>0.01
Dichlorodifluoromethane		2.8	<12 U	3.4	NA	>0.3	<370 U	3.7	NA	>0.01	<250 U	3.5	NA	>0.01
Trichlorofluoromethane		1.7	<5.6 U	2.6	NA	>0.5	<170 U	2.2	NA	>0.01	<110 U	2.0	NA	>0.02
Methyl tert-Butyl Ether		<0.14 U	<9.0 U	0.18	NA	>0.02	<270 U	<0.14 U	NA		<180 U	4.3	NA	>0.02
1,3-Butadiene		<0.18 U	<5.5 U	0.75	NA	>0.1	<170 U	1.2	NA	>0.01	<110 U	1.4	NA	>0.01
n-Heptane		<0.16 U	9.4	1.8	NA	0.2	<120 U	22 J	NA	>0.2	250	7.0	NA	0.03
n-Hexane		<0.28 U	11	5.3	NA	0.5	<260 U	5.6	NA	>0.02	420	20 J	NA	0.05
Cyclohexane		<0.14 U	4.1	1.1	NA	0.3	<100 U	1.8	NA	>0.02	<69 U	3.8	NA	>0.06
1,3,5-Trimethylbenzene		<0.20 U	4.9	1.6	NA	0.3	<150 U	2.2	NA	>0.01	<98 U	2.8	NA	>0.03
2,2,4-Trimethylpentane		<0.19 U	<4.7 U	1.4	NA	>0.3	<140 U	1.9	NA	>0.01	<93 U	9.3	NA	>0.1
Benzene		0.54	5.4	3.5	NA	0.6	<96 U	3.5	NA	>0.04	<64 U	12	NA	>0.2
Ethylbenzene		<0.17 U	10	4.0 J	NA	0.4	<130 U	4.3 J	NA	>0.03	<87 U	7.4 J	NA	>0.09
Toluene		0.53	38	16 J	NA	0.4	260	120 J	NA	0.5	110	41 J	NA	0.4
4-Ethlytoluene		<0.20 U	16	4.1 J	NA	0.3	<150 U	4.9 J	NA	>0.03	<98 U	7.9 J	NA	>0.08
o-Xylene		<0.17 U	13	4.3	NA	0.3	<130 U	4.8	NA	>0.04	<87 U	10	NA	>0.1
m&p-Xylenes		0.25	39	17 J	NA	0.4	<330 U	17 J	NA	>0.05	<220 U	30 J	NA	>0.1
Xylene (total)		0.26	52	22 J	NA	0.4	<130 U	24 J	NA	>0.18	<87 U	43 J	NA	>0.5

	OBG Garage				*Lane Fire & Safety*				
	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)	Sub-Slab	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)
	SS-4	IA-4			SS-5	031406-DUP	IA-5		
Compound	3/14/06	3/14/06			3/14/06	3/14/06	3/14/06		
Trichloroethene	12,000	2.6	Mitigate	0.0002	10,000	11,000	23	Mitigate	0.002
1,1,1-Trichloroethane	<65 U	0.31	NFA	>0.005	<55 U	<65 U	1.1	NFA	>0.02
Tetrachloroethene	<81 U	<0.27 U	NFA		<68 U	<81 U	0.60	NFA	>0.01
Chloroform	<59 U	<0.20 U	NA		<49 U	<59 U	<0.39 U	NA	
Carbon Tetrachloride	<75 U	0.69	NA	>0.01	<63 U	<75 U	0.75	NA	>0.01
Dichlorodifluoromethane	<150 U	3.2	NA	>0.02	<120 U	<150 U	3.7	NA	>0.03
Trichlorofluoromethane	<67 U	2.3	NA	>0.03	<56 U	<67 U	2.1	NA	>0.04
Methyl tert-Butyl Ether	<110 U	<0.14 U	NA		<90 U	<110 U	0.87	NA	>0.01
1,3-Butadiene	<66 U	<0.18 U	NA		<55 U	<66 U	<0.35 U	NA	
n-Heptane	<49 U	0.61	NA	>0.01	<41 U	<49 U	11 J	NA	>0.3
n-Hexane	<110 U	1.6	NA	>0.01	<88 U	<110 U	13 J	NA	>0.1
Cyclohexane	<41 U	0.41	NA	>0.01	<34 U	<41 U	15	NA	>0.4
1,3,5-Trimethylbenzene	<59 U	0.26	NA	>0.004	<49 U	<59 U	3.4	NA	>0.07
2,2,4-Trimethylpentane	<56 U	0.75	NA	>0.01	<47 U	<56 U	5.6	NA	>0.1
Benzene	<38 U	3.8	NA	>0.1	<32 U	<38 U	7.3	NA	>0.2
Ethylbenzene	<52 U	2.0 J	NA	>0.04	<43 U	<52 U	6.9 J	NA	>0.2
Toluene	<45 U	5.7	NA	>0.1	<38 U	<45 U	45 J	NA	>1
4-Ethlytoluene	<59 U	0.69 J	NA	>0.01	<49 U	<59 U	7.9	NA	>0.2
o-Xylene	<52 U	2.2	NA	>0.04	<43 U	<52 U	8.3	NA	>0.2
m&p-Xylenes	<130 U	7.4 J	NA	>0.06	<110 U	<130 U	25 J	NA	>0.2
Xylene (total)	<52 U	10	NA	>0.2	<43 U	<52 U	35 J	NA	>0.8

	OBG OfficeArea				*OBG Electrical Shop*				*SW OBG - Storage*			
	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)	Sub-Slab	Indoor Air	NYSDOH Decision Matrix^{A}	AF (α)
	SS-6	IA-6			SS-7	IA-7			SS-8	IA-8		
Compound	3/14/06	3/14/06			3/14/06	3/14/06			3/14/06	3/14/06		
Trichloroethene	190	12	Mitigate	0.06	32,000	16	Mitigate	0.001	>1,100 L	8.1	Mitigate	<0.01
1,1,1-Trichloroethane	<1.1 U	0.87	NFA	>0.8	<220 U	0.55	UTD	>0.003	<8.7 U	0.51	NFA	>0.06
Tetrachloroethene	6.2	<0.27 U	NFA	<0.04	<270 U	0.39	UTD	>0.001	<11 U	<0.27 U	NFA	
Chloroform	<0.98 U	<0.20 U	NA	<0.2	<200 U	<0.20 U	NA		<7.8 U	0.24	NA	>0.03
Carbon Tetrachloride	<1.3 U	<0.69	NA	>0.5	<250 U	0.82	NA	>0.003	<10 U	0.75	NA	>0.08
Dichlorodifluoromethane	4.2	2.7	NA	0.6	<490 U	3.4	NA	>0.01	<20 U	3.1	NA	>0.2
Trichlorofluoromethane	2.2	1.7	NA	0.8	<220 U	3.5	NA	>0.02	<9.0 U	2.3	NA	>0.3
Methyl tert-Butyl Ether	<1.8 U	<0.14 U	NA		<360 U	<0.14 U	NA		<14 U	0.28	NA	>0.02
1,3-Butadiene	<1.1 U	0.46	NA	>0.4	<220 U	0.51	NA	>0.002	<8.8 U	0.58	NA	>0.07
n-Heptane	23	0.74	NA	0.03	<160 U	14	NA	>0.09	180 L	2.3	NA	0.01
n-Hexane	23	0.74	NA	0.03	<350 U	8.1	NA	>0.02	230 L	4.9	NA	0.02
Cyclohexane	4.1	0.34	NA	0.08	<140 U	2.2	NA	>0.02	32 L	1.2	NA	0.04
1,3,5-Trimethylbenzene	<0.98 U	0.29	NA	>0.3	<200 U	2.4	NA	>0.01	<7.9 U	2.7	NA	>0.3
2,2,4-Trimethylpentane	<0.93 U	0.36	NA	>0.4	<190 U	2.2	NA	>0.01	<7.5 U	1.8	NA	>0.2
Benzene	8.3	5.8	NA	0.7	<130 U	3.5	NA	>0.03	48 L	3.5	NA	0.07
Ethylbenzene	13	0.83 J	NA	0.06	<170 U	4.8 J	NA	>0.03	7.4 L	4.8 J	NA	0.6
Toluene	57	4.5	NA	0.08	<150 U	57 J	NA	>0.4	83 L	33 J	NA	0.4
4-Ethlytoluene	<0.98 U	0.64 J	NA	>0.7	<200 U	6.9 J	NA	>0.03	<7.9 U	5.9 J	NA	0.7
o-Xylene	17	0.69	NA	0.04	<170 U	5.2	NA	>0.03	6.9 L	5.2	NA	0.8
m&p-Xylenes	52	2.6 J	NA	0.05	<430 U	20 J	NA	>0.05	24 L	19 J	NA	0.8
Xylene (total)	69	3.5	NA	0.05	<170 U	27 J	NA	>0.2	32 L	25 J	NA	0.8

Note: Results are reported in units of micrograms per cubic meter (ug/m^3).

<##; U - Compound not detected above the reporting limit (##).

[a] NYSDOH draft vapor intrusion guidance (Feb 2005) recommends actions based on the combination of sub-slab and indoor air concentrations (available for TCE, 111-TCA and PCE only).

NFA - not further action as recommended by NYSDOH draft guidance.

UTD - unable to determine NYSDOH recommended action because some of the reported results are not detected above a reporting limit that is greater than some of the decision matrix' concentration categories.

NA - Not available

AF - attenuation factor (indoor conc. / sub-slab conc.). Not calculated when both sample results are below the reporting limit.

J - results reported as approximate values from the laboratory or data validator because (1) the reported result exceeded the upper analytical calibration limit or (2) there was an excursion from lab QA/QC criteria.

L - Results for this sample are suspected to be biased low because sub-slab sample probe was found out of the slab at time of sample pickup.

Table 2
Summary of Soil Vapor Sampling Detections, May 2006
Former Accurate Die Casting Site, Site #7-34-052
Fayetteville, NY

	Sample I.D.:	SV-1	SV-2	SV-4	SV-5	SV-DUP[a]	SV-6	SV-7	SV-8	SV-9	SV-10
Compound	Sample Date:	5/3/06	5/3/06	5/3/06	5/3/06	5/3/06	5/4/06	5/4/06	5/4/06	5/4/06	5/4/06
Trichloroethene		37	<5.4 U	37	<5.4 U	<5.4 U	<5.4 U	86	<5.4 U	<5.4 U	<5.4 U
Chloroform		<4.9 U	<4.9 U	<4.9 U	<4.9 U	<4.9 U	<4.9 U	<4.9 U	<4.9 U	<4.9 U	6.8
Carbon Tetrachloride		<6.3 U	<6.3 U	<6.3 U	<6.3 U	<6.3 U	<6.3 U	<6.3 U	<6.3 U	15	<6.3 U
cis-1,2-Dichloroethene		44	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U
n-Heptane		18	7.0	<4.1 U	6.1	5.3	15	8.2	7.0	<4.1 U	9.4
n-Hexane		9.2	9.2	<8.8 U	<8.8 U	<8.8 U	9.2	<8.8 U	<8.8 U	<8.8 U	<8.8 U
Cyclohexane		5.9	11	<3.4 U	<3.4 U	<3.4 U	3.8	<3.4 U	3.8	<3.4 U	8.3
1,3,5-Trimethylbenzene		5.9	<4.9 U	<4.9 U	11	9.3	11	7.9	9.8	9.3	9.3
Benzene		8.6	12	<3.2 U	5.1	5.8	9.3	6.7	5.8	6.7	11
Ethylbenzene		17	6.5	6.5	14	14	18	16	16	19	19
Toluene		68	64	22	72	64	72	64	60	75	79
4-Ethlytoluene		14	<4.9 U	4.9	21	19	20	19	17	20	20
o-Xylene		23	8.3	6.9	20	21	27	24	24	29	27
m&p-Xylenes		69	23	23	61	61	87	69	74	87	83
Xylene (total)		91	31	29	78	78	110	96	96	110	110

Note: Results are reported in units of micrograms per cubic meter (ug/m^3).

[a] Duplicate sample collected at SV-5.

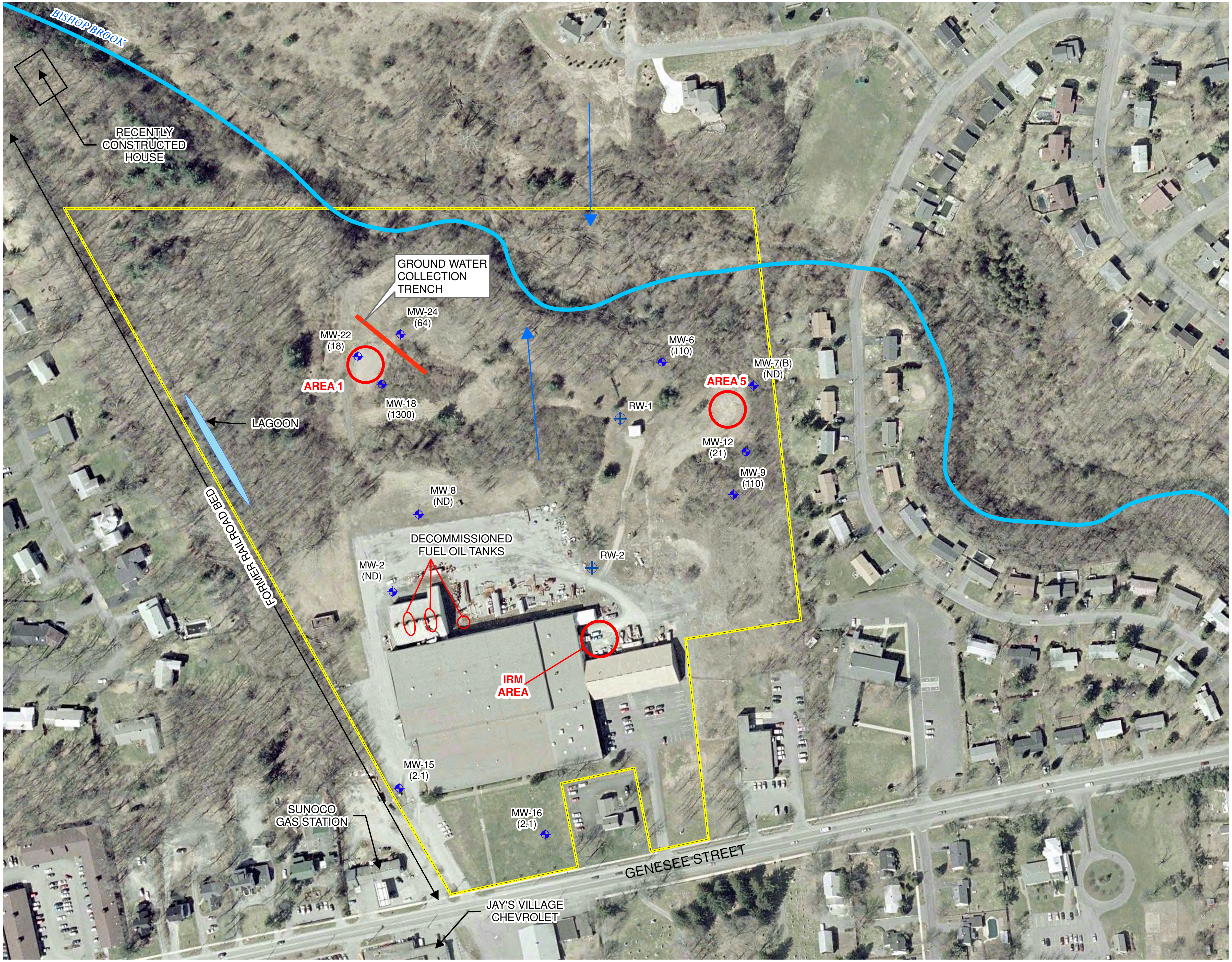
<##; U - Compound not detected above the reporting limit (##).

.

FIGURES

T:\2488_ACCUDIE\FAYETTEVILLE\MXD\25463\SITEPLAN.MXD

FIGURE 1



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AERIAL PHOTOGRAPHY SOURCE: http://www.nysgis.state.ny.us/ (1993)

LEGEND

▭ PROPERTY LINE (approximate)
→ OVERBURDEN GROUND WATER FLOW
⊕ RECOVERY WELL
◆ MONITORING WELL
(110) TCE CONCENTRATION (ug/L) (Latest sample result from samples collected from November 2001 - April 2005.)

FORMER ACCURATE DIE CASTING SITE FAYETTEVILLE, NEW YORK

SITE CODE 7-34-052

SITE PLAN

0 100 200 400
Feet

JUNE 2006
2488/25463

O'BRIEN & GERE

PLOT DATE: 06/13/06 DIV. 732 JPS

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FIGURE 2

LEGEND

▭ PROPERTY LINE (approximate)

▲ AMBIENT AIR SAMPLE LOCATION

■ SUB-SLAB AND INDOOR AIR SAMPLE LOCATION

LOCATION ID
(SUB-SLAB, INDOOR)
TCE CONCENTRATIONS (ug/m^3)

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AERIAL PHOTOGRAPHY SOURCE: http://www.nysgis.state.ny.us/ (1993)

FORMER ACCURATE
DIE CASTING SITE
FAYETTEVILLE, NEW YORK

SITE CODE 7-34-052

ON-SITE BUILDING VAPOR INTRUSION SAMPLE RESULTS (MARCH 2006)

0 37.5 75 150
Feet

JUNE 2006
2488/25463

O'BRIEN & GERE

PLOT DATE: 06/20/06 DIV. 732 JPS

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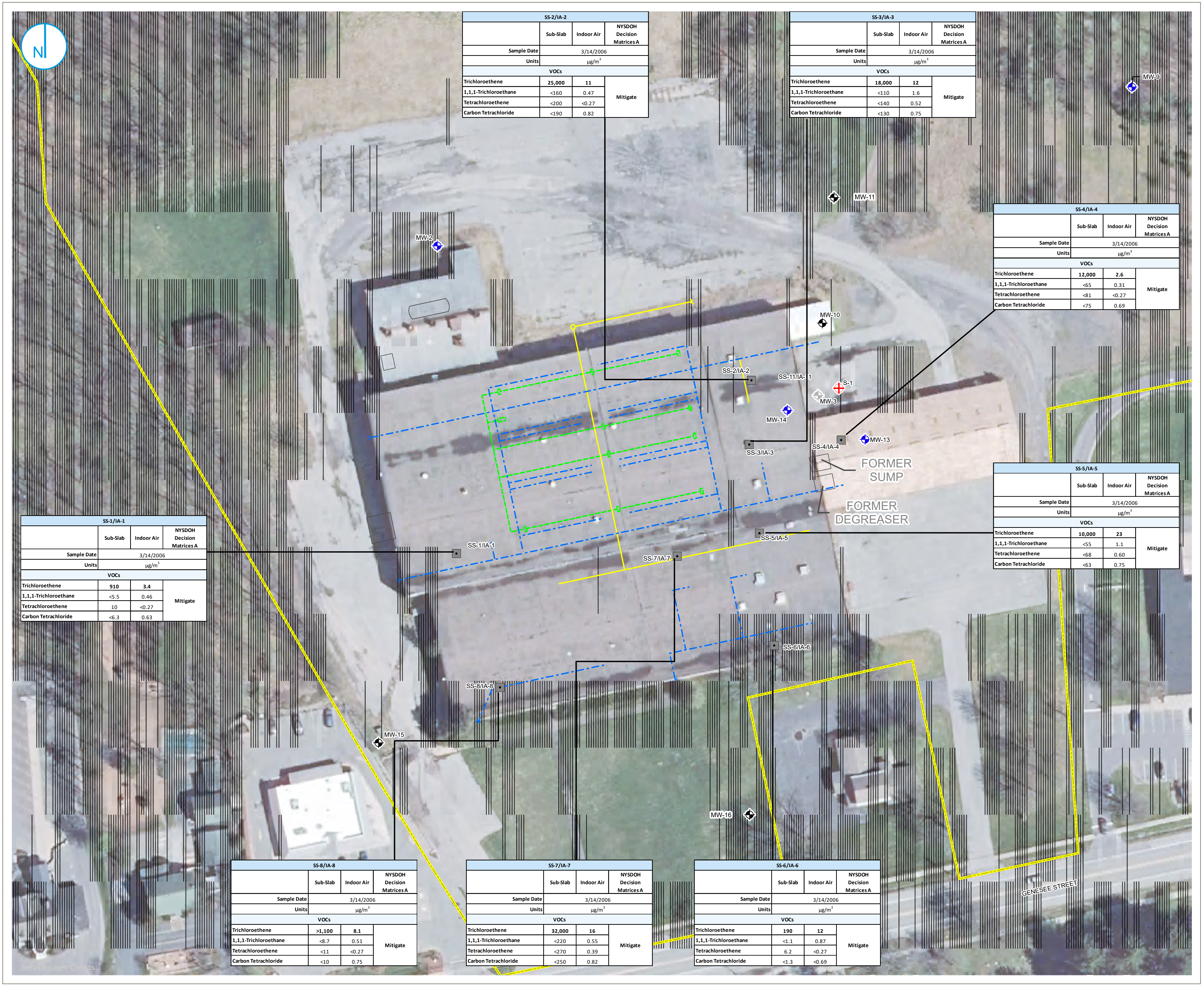

SS-2/IA-2

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**25,000**	**11**	Mitigate
1,1,1-Trichloroethane	<160	0.47	
Tetrachloroethene	<200	<0.27	
Carbon Tetrachloride	<190	0.82	

SS-3/IA-3

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**18,000**	**12**	Mitigate
1,1,1-Trichloroethane	<110	1.6	
Tetrachloroethene	<140	0.52	
Carbon Tetrachloride	<130	0.75	

SS-4/IA-4

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**12,000**	**2.6**	Mitigate
1,1,1-Trichloroethane	<65	0.31	
Tetrachloroethene	<81	<0.27	
Carbon Tetrachloride	<75	0.69	

SS-1/IA-1

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**910**	**3.4**	Mitigate
1,1,1-Trichloroethane	<5.5	0.46	
Tetrachloroethene	10	<0.27	
Carbon Tetrachloride	<6.3	0.63	

SS-5/IA-5

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**10,000**	**23**	Mitigate
1,1,1-Trichloroethane	<55	1.1	
Tetrachloroethene	<68	0.60	
Carbon Tetrachloride	<63	0.75	

SS-8/IA-8

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**>1,100**	**8.1**	Mitigate
1,1,1-Trichloroethane	<8.7	0.51	
Tetrachloroethene	<11	<0.27	
Carbon Tetrachloride	<10	0.75	

SS-7/IA-7

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**32,000**	**16**	Mitigate
1,1,1-Trichloroethane	<220	0.55	
Tetrachloroethene	<270	0.39	
Carbon Tetrachloride	<250	0.82	

SS-6/IA-6

	Sub-Slab	Indoor Air	NYSDOH Decision Matrices A
Sample Date	3/14/2006		
Units	μg/m^3		
VOCs			
Trichloroethene	**190**	**12**	Mitigate
1,1,1-Trichloroethane	<1.1	0.87	
Tetrachloroethene	6.2	<0.27	
Carbon Tetrachloride	<1.3	<0.69	

PROJECT: 25179.60243 | DATED: 8/25/2021 | DESIGNER: VELIZCY

- ◈ ABANDONED OVERBURDEN MONITORING WELL
- ◈ BEDROCK MONITORING WELL
- ◈ OVERBURDEN MONITORING WELL
- ◈ PIEZOMETER
- ✛ RECOVERY WELL
- Ⓜ SEWER LINE MANHOLE (APPROXIMATE)
- ‐‐ SEWER LINE (APPROXIMATE)
- ‐‐‐‐ DIE COOLING & RETURN
- —— SANITARY SEWER
- ‐·‐ STORM SEWER
- ▭ ONONDAGA COUNTY PARCEL BOUNDARY 2014

2006 SOIL VAPOR EVALUTATION (Locations Are Approximate)

- ▪ SUB-SLAB AND INDOOR AIR SAMPLE

Notes

MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994.

0 50
Feet

2006 VAPOR INTRUSION SAMPLE RESULTS

FOUBU ENVIRONMENTAL SERVICES, LLC
REMEDIAL INVESTIGATION REPORT
547 EAST GENESEE STREET
FAYETTEVILLE, NEW YORK
SITE NO. C734052

FIGURE 2A

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY

RAMBOLL

FIGURE 3

LEGEND

▭	PROPERTY LINE (approximate)
◆	SOIL VAPOR SAMPLE LOCATION
(86)	TCE CONCENTRATION (ug/m^3)
Ⓐ	PROPOSED OFF-SITE SAMPLE LOCATION

FORMER ACCURATE
DIE CASTING SITE
FAYETTEVILLE, NEW YORK

SITE CODE 7-34-052

SOIL VAPOR SAMPLE RESULTS (MAY 2006)

0 100 200 400
Feet

JUNE 2006
2488/25463

O'BRIEN & GERE

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AERIAL PHOTOGRAPHY SOURCE: http://www.nysgis.state.ny.us/ (1993)

T:\2488_ACCUDIE\FAYETTEVILLE\MXD\25463\SoilVaporResults.MXD

PLOT DATE: 06/14/06 DIV. 732 JPS

ATTACHMENTS

ATTACHMENT 1

Field Data Forms

On-Site Vapor Intrusion Sampling

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location

SW corner loading dock

IRBY

Canister Record

Canister ID 04738

Flow controller ID 7225869

Sample duration 24Hr

Sampling rate –

Sample ID SS-1

Date/Time start 3/14/06 / 11:12 a.m

Date/Time end 3/15/06 ~~11:12~~ am 12:12 am

Gauge prior to start 0

Start pressure –29 inches

End pressure –7.5"

Complete all that apply:

Air temperature (°F) ~68°

Barometric pressure 29.54

PID reading (~~ppmv~~ ppb) 1,690

FID reading (ppmv) –

PID meter ID Pine 05192

FID meter ID –

Gas analyzer ID –

Ft. tubing used 36"

% O_2 –

% CO_2 –

% CH_4 –

Purge Volume 15cc

For indoor location:

Noticeable odor No

Floor slab depth 4"

Intake height above floor (ft) –

Intake depth below floor (ft) ¼"

Floor surface type Concrete

Room –

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: – 3/15/06 – 1110 – found IA canister below –10". will let sample collect longer.

SS ~~I~~A-1 ran for an extra hour

Analytical method required TO15

Laboratory used ~~Central~~, STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. McKenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

SW corner loading dock

IEBY

Canister Record

Canister ID 6327

Flow controller ID 7228536

Sample duration 24hr

Sampling rate –

Sample ID IA-1

Date/Time start 3/14/06 11:12 a.m

Date/Time end 3/15/06 ~~11:12~~ a.m CMW 12:12 am

Gauge prior to start 0

Start pressure -30 inches

End pressure -10"

Complete all that apply:

Air temperature (°F) ~70°

Barometric pressure 29.54

PID reading (p~~pm~~v) ppb ~0-10 ppb

FID reading (ppmv) –

PID meter ID Pine 05182

FID meter ID –

Gas analyzer ID –

Ft. tubing used –

% O_2 –

% CO_2 –

% CH_4 –

Purge Volume ~~15cc~~ –

For indoor location:

Noticeable odor No

Floor slab depth –

Intake height above floor (ft) ~3'

Intake depth below floor (ft) NA

Floor surface type Concrete

Room –

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: 3/15/06 - 1110 - Found canister below -10". Let sample collect for 1 extra Hour. ~~IA-1 ran for an extra hour~~ Loading dock door may have been opened occassionally. There is a car parked in the loading dock on 3/15/06 that wasn't there on 3/14/06.

Analytical method required TO 15

Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location

OBG storage

South wall

Canister Record

Canister ID 7072

Flow controller ID 7277003

Sample duration 24Hr

Sampling rate —

Sample ID SS-2

Date/Time start 3/14/06 1544

Date/Time end 3/15/06 1544

Gauge prior to start 0

Start pressure -30

End pressure -6"

Complete all that apply:

Air temperature (°F) ~65°

Barometric pressure 29.54

PID reading (ppmv) 4700

FID reading (ppmv) —

PID meter ID PINE 05182

FID meter ID —

Gas analyzer ID —

Ft. tubing used 36"

% O_2 —

% CO_2 —

% CH_4 —

Purge Volume 16"

For indoor location:

Noticeable odor No

Floor slab depth 6.5"

Intake height above floor (ft) —

Intake depth below floor (ft) 1/4"

Floor surface type Concrete

Room OBG storage

Story/level 1st On Grade

For outdoor location:

Noticeable odor —

Distance to road (ft) —

Direction to closest building (degrees) —

Distance to closest building (ft) —

Intake height above ground level (ft) —

Intake depth below ground level (ft) —

Soil type —

Comments: Overhead door in storage area is opened and closed occasionally. Had to re-drill sample port. - Slab was too thick approx 10 ft to the NW.

Analytical method required TO 15

Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463
Project Name Accurate Die Casting Site
Date 3/14/06
Collector C. Finke / C. McKenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location
OBG Storage
South wall

Canister Record
Canister ID 6326
Flow controller ID 7297514
Sample duration 24hr
Sampling rate -

Sample ID IA-2
Date/Time start 3/14/06 1544
Date/Time end 3/15/06 15:14
Gauge prior to start 0
Start pressure -30
End pressure -6"

Complete all that apply:

Air temperature (°F) ~~68~~ ~65°
Barometric pressure 29.54
PID reading (ppmv) 0
FID reading (ppmv) -
PID meter ID Pine 05182
FID meter ID -
Gas analyzer ID -
Ft. tubing used -
% O_2 -
% CO_2 -
% CH_4 -
Purge Volume -

For indoor location:

Noticeable odor No
Floor slab depth -
Intake height above floor (ft) 54"
Intake depth below floor (ft) -
Floor surface type Concrete
Room OBG Storage
Story/level 1st On Grade

For outdoor location:

Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments:

Analytical method required TO 15
Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463
Project Name Accurate Die Casting Site
Date 3/14/06
Collector C. Finke / C. McKenzie

Type of sample: (Circle one)
Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location
cmw ~~SS-3~~ LVR
south middle - approx. 11
ft from South wall

Canister Record
Canister ID 12308
Flow controller ID 7304357
Sample duration 24hrs
Sampling rate –

Sample ID ·SS-3
Date/Time start 3/14/06 · 1207
Date/Time end 3/15/06 12:07

Gauge prior to start 0 inches
Start pressure -30"
End pressure -.8"

Complete all that apply:

Air temperature (°F)	cmw ~~44°F~~ 68°F	PID meter ID	PiWE 05182	% O_2	–
Barometric pressure	29.54	FID meter ID	–	% CO_2	–
PID reading ~~(ppmv)~~	830 ppb	Gas analyzer ID	–	% CH_4	–
FID reading (ppmv)	–	Ft. tubing used	36"	Purge Volume	15cc

For indoor location:
Noticeable odor Dusty
Floor slab depth 5.5"
Intake height above floor (ft) –
Intake depth below floor (ft) 1/4"
Floor surface type Concrete
Room –
Story/level 1st

For outdoor location:
Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments: - 5½" slab appears to rest on compact gravel
Sub-slab beeswax appeared a little loose, ~~to~~ on the Slab, but appeared tight in the sample port.

Analytical method required TO 15
Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Project Name Accurate Die Casting Site

Date 3/14/06

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

LVR
south-middle - approximatly
11' from south wall

Canister Record

Canister ID 6328

Flow controller ID 7303974

Sample duration 24 hrs

Sampling rate –

Sample ID ⓐ ~~SS-3~~ IA-3

Date/Time start 3/14/06 1208

Date/Time end 3/15/06 12:08

Gauge prior to start 0 inches

Start pressure -29"

End pressure -7.5"

Complete all that apply:

Air temperature (°F) 68° F

Barometric pressure 29.54

PID reading ~~(ppmv)~~ 3 ppb

FID reading (ppmv) –

PID meter ID PINE 05182

FID meter ID -

Gas analyzer ID -

Ft. tubing used -

% O_2 –

% CO_2 –

% CH_4 –

Purge Volume –

For indoor location:

Noticeable odor No

Floor slab depth –

Intake height above floor (ft) ~3 ft

Intake depth below floor (ft) –

Floor surface type Concrete

Room –

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: Welding machine west of sample location was approx. 97 ppb

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location

O'Brien & Gere Garage

NW area - SW of monitoring well

Canister Record

Canister ID 1122

Flow controller ID 7242811

Sample duration 24 hrs

Sampling rate -

Sample ID SS-4

Date/Time start 3/14/06 1251

Date/Time end 3/15/06 1251

Gauge prior to start 0"

Start pressure -30"

End pressure -10"

Complete all that apply:

Air temperature (°F) ~ 37°F

Barometric pressure 29.54

PID reading (~~ppmv~~ ppb) 0

FID reading (ppmv) -

PID meter ID P'VE 05182

FID meter ID -

Gas analyzer ID -

Ft. tubing used 3 ft

% O_2 -

% CO_2 -

% CH_4 -

Purge Volume 15cc

For indoor location:

Noticeable odor No

Floor slab depth 5.5"

Intake height above floor (ft) -

Intake depth below floor (ft) 1/4"

Floor surface type Concrete

Room -

Story/level 1st - on grade

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments:

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

~~SS-4~~ OBG Garage
NW area - SW of monitoring well

Canister Record

Canister ID 6338
Flow controller ID 7273198
Sample duration 24 Hrs
Sampling rate -

Sample ID ~~SS-4~~ IA-4
Date/Time start 3/14/06 ~~1201~~ 1251
Date/Time end 3/15/06 1251

Gauge prior to start 0"
Start pressure -29.5
End pressure -6

Complete all that apply:

Air temperature (°F)	~37°F	PID meter ID	PIWE 05182	% O_2	-
Barometric pressure	29.54	FID meter ID	-	% CO_2	-
PID reading (ppbv)	0	Gas analyzer ID	-	% CH_4	-
FID reading (ppmv)	-	Ft. tubing used	-	Purge Volume	-

For indoor location:

Noticeable odor No
Floor slab depth -
Intake height above floor (ft) 3 ft
Intake depth below floor (ft) -
Floor surface type Concrete
Room Garage
Story/level 1st - On grade

For outdoor location:

Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments: ~~C~~ OBG moves vehicles through the garage. Smoking occurs in the garage as well. When collecting the canisters, the garage door was found open.

Analytical method required TO-15
Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location

Lane Fire & Safety
Storage room entryway
- pulled carpet back.

Canister Record	SS-5	Dup.
Canister ID	6860	12574
Flow controller ID	7301140	7249930
Sample duration	24hr	24hr
Sampling rate	—	—

Sample ID	SS-5	031406-DUP	Gauge prior to start	0	2
Date/Time start	3/14/06 1631	3/14/06 1631	Start pressure	-30"	> -30"
Date/Time end	3/15/06 1631	3/15/06 1631	End pressure	~~-7.85"~~ -10"	~~-10"~~ ~~-7.85"~~ 8" cmm

Complete all that apply:

Air temperature (°F)	66°F	PID meter ID	Pine 05182	% O_2	—
Barometric pressure	29.54	FID meter ID	—	% CO_2	—
PID reading (~~ppmv~~)	101 ppm	Gas analyzer ID	—	% CH_4	—
FID reading (ppmv)	—	Ft. tubing used	36"	Purge Volume	15 cc

For indoor location:

Noticeable odor No

Floor slab depth 6½

Intake height above floor (ft) —

Intake depth below floor (ft) ¼"

Floor surface type Concrete

Room storage room entr.

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: Patched concrete and put adhesive down for carpet repair.

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463
Date 3/14/06
Project Name Accurate Die Casting Site
Collector C. Fiske / C. Mckenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location
Lane Fire & Safety

Canister Record
Canister ID 6331
Flow controller ID 7249395
Sample duration 24Hr
Sampling rate —

Sample ID IA-5
Date/Time start 3/14/06 1631
Date/Time end 3/15/06 1631

Gauge prior to start 0 inches
Start pressure -29"
End pressure -6"

Complete all that apply:

Air temperature (°F) 66°F
Barometric pressure 29.54
PID reading ~~(ppmv)~~ 70 ppm
FID reading (ppmv) —

PID meter ID Pine 05182
FID meter ID —
Gas analyzer ID —
Ft. tubing used —

% O_2 —
% CO_2 —
% CH_4 —
Purge Volume —

For indoor location:

Noticeable odor No
Floor slab depth —
Intake height above floor (ft) 4 feet
Intake depth below floor (ft) —
Floor surface type Concrete
Room storage room entr.
Story/level 1st

For outdoor location:

Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments: STL guage was reading -28". Checked can pressure with OBG guage and it read -6".

Analytical method required TO15
Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Project Name Accurate Die Casting Site

Date 3/14/06

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location
OBG offices
2 cubes in from south wall
- center

Canister Record
Canister ID 5297
Flow controller ID 7226623
Sample duration 24 Hr
Sampling rate —

Sample ID SS-6
Date/Time start 3/14/06 1323
Date/Time end 3/15/06 1326

Gauge prior to start -1 inches
Start pressure -30"
End pressure -4"

Complete all that apply:

Air temperature (°F) ~70°
Barometric pressure 29.54
PID reading ~~(ppmv)~~ 3100 ppb
FID reading (ppmv) -

PID meter ID PIWE 05182
FID meter ID —
Gas analyzer ID —
Ft. tubing used 36"

% O_2 —
% CO_2 —
% CH_4 —
Purge Volume 15cc

For indoor location:

Noticeable odor NO
Floor slab depth 6"
Intake height above floor (ft) —
Intake depth below floor (ft) 1/4"
Floor surface type Concrete
Room Offices
Story/level 1st - on Grade

For outdoor location:

Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments: Hole drilled through portion of slab w/ no carpet - Old wall was removed.

Analytical method required to 15
Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

OBG offices

2 cubes in from South wall -center

Canister Record

Canister ID 6316

Flow controller ID 7286507

Sample duration 24 hr

Sampling rate -

Sample ID IA-6

Date/Time start 3/14/06 1323

Date/Time end 3/15/06 1326

Gauge prior to start - 4

Start pressure @ ~~-20"~~ -30"

End pressure - 9.5"

Complete all that apply:

Air temperature (°F) ~70°

Barometric pressure 29.54

PID reading ~~(ppmv)~~ 0 ppb

FID reading (ppmv) -

PID meter ID PIVE 05182

FID meter ID -

Gas analyzer ID -

Ft. tubing used -

% O_2 -

% CO_2 -

% CH_4 -

Purge Volume -

For indoor location:

Noticeable odor No

Floor slab depth -

Intake height above floor (ft) 4'

Intake depth below floor (ft) -

Floor surface type concrete w/carpet on top

Room offices

Story/level 1st - On Grade

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: Gauge is cracked - Initial (start) pressure is reading -20" Hg. Did not have OBG gauge on-site for initial pressure. Checked with other STL gauge and was -30".

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463
Project Name Accurate Die Casting Site
Date 3/14/06
Collector C. Finke / C. Mckenzie

Type of sample: (Circle one)
Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location
OBG Electrical shop
Center of room approx.
15' from East wall

Canister Record
Canister ID 1837
Flow controller ID 7248452
Sample duration 24 hr
Sampling rate —

Sample ID SS-7
Date/Time start 3/14/06 14:06
Date/Time end 3/15/06 1406

Gauge prior to start 0 inches
Start pressure -29 inches
End pressure -8.5"

Complete all that apply:

Air temperature (°F) ~70°
Barometric pressure 29.54
PID reading ~~(ppmv)~~ 281 ppb
FID reading (ppmv) —

PID meter ID Pine 05182
FID meter ID —
Gas analyzer ID —
Ft. tubing used 36"

% O_2 —
% CO_2 —
% CH_4 —
Purge Volume 15 cc

For indoor location:

Noticeable odor NO
Floor slab depth 11½"
Intake height above floor (ft) —
Intake depth below floor (ft) 1/4"
Floor surface type concrete
Room —
Story/level 1st

For outdoor location:

Noticeable odor
Distance to road (ft)
Direction to closest building (degrees)
Distance to closest building (ft)
Intake height above ground level (ft)
Intake depth below ground level (ft)
Soil type

Comments:

Analytical method required TO 15
Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Project Name Accurate Die Casting Site

Date 3/14/06

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

OBG Electrical shop
center of room approx. 15'
from East wall.

Canister Record

Canister ID 6330

Flow controller ID 7301418

Sample duration 24 hr

Sampling rate —

Sample ID IA-7

Date/Time start 3/14/06 14:06

Date/Time end 3/15/06 1406

Gauge prior to start 0 inches

Start pressure ~30 inches

End pressure ~6 "

Complete all that apply:

Air temperature (°F) ~70°

Barometric pressure 29.54

PID reading ~~(ppmv)~~ 0 ppb

FID reading (ppmv) —

PID meter ID Pine 05182

FID meter ID —

Gas analyzer ID —

Ft. tubing used —

% O_2 —

% CO_2 —

% CH_4 —

Purge Volume —

For indoor location:

Noticeable odor No

Floor slab depth —

Intake height above floor (ft) 36 "

Intake depth below floor (ft) —

Floor surface type concrete

Room elec. shop

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: Some chemicals (cutting oil) are present. Did not see any chlorinated VOCs.

Analytical method required TO 15

Laboratory used GTL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air [✓ Substructure soil gas] Ambient air Soil gas

Sample Location

Storage
~ 35' from S and W
walls

Canister Record

Canister ID 1635

Flow controller ID 7225876

Sample duration 24 hr

Sampling rate —

Sample ID SS-8

Date/Time start 3/14/06 14:44

Date/Time end 3/15/00 14:35

Gauge prior to start 0 inches

Start pressure -30 inches

End pressure -5.5"

Complete all that apply:

Air temperature (°F) 60°F

Barometric pressure 29.54

PID reading (~~ppmv~~) 220 ppb

FID reading (ppmv) —

PID meter ID Pine 05182

FID meter ID —

Gas analyzer ID —

Ft. tubing used 36"

% O_2 —

% CO_2 —

% CH_4 —

Purge Volume 15cc

For indoor location:

Noticeable odor No

Floor slab depth 9½"

Intake height above floor (ft) —

Intake depth below floor (ft) ¼"

Floor surface type concrete

Room storage (SW corner)

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments: S-S 8 Sample line found outside of sub-slab hole. Beeswax seal broken. Sample will be biased low due to indoor air contamination.

Analytical method required TO 15

Laboratory used STL

VI sample form.xls

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463

Date 3/14/06

Project Name Accurate Die Casting Site

Collector C. Finke / C. McKenzie

Type of sample: (Circle one) [✓ Indoor air] Substructure soil gas Ambient air Soil gas

Sample Location

Storage

~ 35' from S and W walls

Canister Record

Canister ID 6317

Flow controller ID 7301380

Sample duration 24 hr

Sampling rate —

Sample ID IA-8

Date/Time start 3/14/06 14:44

Date/Time end 3/15/06 14:35

Gauge prior to start 0 inches

Start pressure -28.5 inches

End pressure -5"

Complete all that apply:

Air temperature (°F) 60°F

Barometric pressure 29.54

PID reading ~~(ppmv)~~ 0 ppb

FID reading (ppmv) —

PID meter ID Pine 05182

FID meter ID —

Gas analyzer ID —

Ft. tubing used —

% O_2 —

% CO_2 —

% CH_4 —

Purge Volume —

For indoor location:

Noticeable odor No

Floor slab depth —

Intake height above floor (ft) 36.5"

Intake depth below floor (ft) —

Floor surface type concrete

Room storage (SW corner)

Story/level 1st

For outdoor location:

Noticeable odor

Distance to road (ft)

Direction to closest building (degrees)

Distance to closest building (ft)

Intake height above ground level (ft)

Intake depth below ground level (ft)

Soil type

Comments:

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 25463
Date 3/14/06
Project Name Accurate Die Casting Site
Collector C. Finke / C. Mckenzie

Type of sample: (Circle one) Indoor air Substructure soil gas [✓ Ambient air] Soil gas

Sample Location
west of structure - attached to hand-rail for stairs leading down to Rec. Center

Canister Record
Canister ID 6696
Flow controller ID 2304360
Sample duration 24 hr
Sampling rate -

Sample ID 031406-Amb
Date/Time start 3/14/06 1509
Date/Time end 3/15/06 ~~1509~~ 1609
Gauge prior to start 0
Start pressure -30"
End pressure -4"

Complete all that apply:

Air temperature (°F) ~30°
Barometric pressure 29.54
PID reading (ppmv) 0 ppb
FID reading (ppmv) -
PID meter ID PINF 05182
FID meter ID -
Gas analyzer ID -
Ft. tubing used -
% O_2 -
% CO_2 -
% CH_4 -
Purge Volume -

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) -
Direction to closest building (degrees) west of structure
Distance to closest building (ft) Approx 40'
Intake height above ground level (ft) ~4 ft
Intake depth below ground level (ft) -
Soil type -

Comments:
winds moderate to strong from the NW. 3/14 - Snow

Analytical method required TO 15
Laboratory used STL

VI sample form.xls

Soil Vapor Sampling

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project #	39019	Date	5/3/06
Project Name	Accurate Die	Collector	C. Fike

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location		**Canister Record**	
Creative Env. Day		Canister ID	4013
School Sports Field		Flow controller ID	2771
		Sample duration	4 Hr
		Sampling rate	

Sample ID	SV-1	Gauge prior to start	0"
Date/Time start	5/3/06 0923	Start pressure	-29.5"
Date/Time end	5/3/06 1319	End pressure	-3"

Complete all that apply:

Air temperature (°F)	~61	PID meter ID	—	% O_2	—
Barometric pressure	29.40	FID meter ID	—	% CO_2	—
PID reading (ppmv)	—	Gas analyzer ID	—	% CH_4	—
FID reading (ppmv)	—	Ft. tubing used	7 ft	Purge Volume	50cc

For indoor location:		For outdoor location:	
Noticeable odor		Noticeable odor	NA
Floor slab depth		Distance to road (ft)	~100 ft
Intake height above floor (ft)		Direction to closest building (degrees)	NW of Building
Intake depth below floor (ft)		Distance to closest building (ft)	150'
Floor surface type		Intake height above ground level (ft)	NA
Room		Intake depth below ground level (ft)	@ ~~5~~ 4.5 4.5 ft
Story/level		Soil type	Sand, Clay

Comments: Performed Helium Tracer gas test with detector model 9821 (Mark). Introduced helium into flux chamber ~~bucket~~ above vapor point. ~~Checked~~ Verified helium presence at lower port in flux chamber. Used Geopump to extract sample @ ~.1LPM into 1 L tedlar bag before sample collection. Helium = ~~0%~~ 0%. ~~Ch~~ Repeated procedure after sampling and found 0% Helium.

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project #	39019	Date	5/3/06
Project Name	Accurate Die	Collector	C Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location		Canister Record	
SV-2		Canister ID	2567
Western Property edge		Flow controller ID	4203
near dam.		Sample duration	4 Hr
		Sampling rate	

Sample ID	SV-2	Gauge prior to start	0"
Date/Time start	5/3/06 0947	Start pressure	-30"
Date/Time end	5/3/06 1349	End pressure	0"

Complete all that apply:

Air temperature (°F)	~61	PID meter ID	—	% O_2	—
Barometric pressure	29.40	FID meter ID	—	% CO_2	—
PID reading (ppmv)	–	Gas analyzer ID		% CH_4	—
FID reading (ppmv)	–	Ft. tubing used	7ft.	Purge Volume	50 cc

For indoor location:		For outdoor location:	
Noticeable odor		Noticeable odor	No
Floor slab depth		Distance to road (ft)	–
Intake height above floor (ft)		Direction to closest building (degrees)	–
Intake depth below floor (ft)		Distance to closest building (ft)	–
Floor surface type		Intake height above ground level (ft)	–
Room		Intake depth below ground level (ft)	4 ft
Story/level		Soil type	Sand, Clay

Comments:

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019
Project Name Accurate Die
Date 5/3/06
Collector C Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location
North west corner

Canister Record
Canister ID 3266
Flow controller ID 2918
Sample duration 4 hrs.
Sampling rate -

Sample ID SV-3
Date/Time start 5/3/06 0951
Date/Time end 5/3/06 NA
Gauge prior to start 0"
Start pressure -30"
End pressure NA

Complete all that apply:

Air temperature (°F)	~61°	PID meter ID	—	% O_2	—
Barometric pressure	29.40	FID meter ID	—	% CO_2	—
PID reading (ppmv)	-	Gas analyzer ID	—	% CH_4	—
FID reading (ppmv)	—	Ft. tubing used	7'	Purge Volume	50 cc

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) -
Direction to closest building (degrees) -
Distance to closest building (ft) -
Intake height above ground level (ft) -
Intake depth below ground level (ft) 4 ft
Soil type Sand, Clay

Comments: Attempted to collect canister after 4 hrs. Found vacuum @ -26". Let canister sample overnight. At 0935, found canister still @ -26". Connected canister to the SV-4 sample line and let it run for an hour. Found canister @ <20".

Analytical method required TO 15
Laboratory used STL

VI sample form

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39.019

Project Name Accudie

Date 5/3/06

Collector C Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location
(# SV 4)
North East Corner

Canister Record
Canister ID 3625
Flow controller ID 2806
Sample duration 4 hr.
Sampling rate

Sample ID SV-4
Date/Time start 5/3/06 12:33 pm
Date/Time end 5/3/06 1559

Gauge prior to start 0
Start pressure > -30 inches
End pressure -1"

Complete all that apply:

Air temperature (°F) ~61°
Barometric pressure 29.40
PID reading (ppmv) -
FID reading (ppmv) -

PID meter ID -
FID meter ID -
Gas analyzer ID -
Ft. tubing used 7'

% O_2 -
% CO_2 -
% CH_4 -
Purge Volume 50 cc

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) -
Direction to closest building (degrees) -
Distance to closest building (ft) -
Intake height above ground level (ft) -
Intake depth below ground level (ft) 4 ft
Soil type Sand, Clay

Comments:

Analytical method required TO 15
Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019

Project Name Accudie

Date 5/3/06

Collector C.Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location

Residential - eastern location (both cans)

Canister Record

	sv-5 @ ~~sv #5~~	SV-Dup
Canister ID	2968	2662
Flow controller ID	3376	3131
Sample duration	4 hr.	4 hr.
Sampling rate		

Sample ID	sv-5 @ ~~SV#5~~	
Date/Time start	5/3/06	5/3/06 12:41 pm (both)
Date/Time end	5/3/06	1618 both

Gauge prior to start	0	0
Start pressure	-29.0	-29.5
End pressure	-6	-4

Complete all that apply:

Air temperature (°F)	61°	PID meter ID	—	% O_2	—
Barometric pressure	29.40	FID meter ID	—	% CO_2	—
PID reading (ppmv)	—	Gas analyzer ID	—	% CH_4	—
FID reading (ppmv)	—	Ft. tubing used	7'	Purge Volume	50cc

For indoor location:

Noticeable odor

Floor slab depth

Intake height above floor (ft)

Intake depth below floor (ft)

Floor surface type

Room

Story/level

For outdoor location:

Noticeable odor No

Distance to road (ft) -

Direction to closest building (degrees) -

Distance to closest building (ft) -

Intake height above ground level (ft) -

Intake depth below ground level (ft) 4 ft

Soil type Sand, Clay

Comments:

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019

Project Name Accurate Die

Date 5/4/06

Collector ~~5/4/06~~ C. Finley

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location

Northwest of church
Southern most sample point
along eastern boundary

Canister Record

Canister ID 3343

Flow controller ID 4048

Sample duration 4hr

Sampling rate –

Sample ID SV-6

Date/Time start 5/4/06 1107

Date/Time end 5/4/06 1456

Gauge prior to start 0

Start pressure -30"

End pressure -3"

Complete all that apply:

Air temperature (°F) ~62°F

Barometric pressure 29.40"Hg

PID reading (ppmv) –

FID reading (ppmv) –

PID meter ID –

FID meter ID –

Gas analyzer ID –

Ft. tubing used 7'

$\% O_2$ –

$\% CO_2$ –

$\% CH_4$ –

Purge Volume 50cc

For indoor location:

Noticeable odor ~~No~~

Floor slab depth

Intake height above floor (ft)

Intake depth below floor (ft)

Floor surface type

Room

Story/level

For outdoor location:

Noticeable odor No

Distance to road (ft) –

Direction to closest building (degrees) –

Distance to closest building (ft) ~70'

Intake height above ground level (ft) NA

Intake depth below ground level (ft) ~4.5'

Soil type Sand, Clay, Fill

Comments:

Analytical method required TO-15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019
Project Name Accurate Die
Date 5/4/06
Collector C Finlo

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location
Near Post Office

Canister Record
Canister ID 3661
Flow controller ID 3738
Sample duration 4 Hr
Sampling rate

Sample ID ~~SV-6~~ SV-7
Date/Time start 5/4/06 0944
Date/Time end 5/4/06 1326
Gauge prior to start 0
Start pressure -29"
End pressure -4"

Complete all that apply:

Air temperature (°F) ~62°@
Barometric pressure 29.40"Hg
PID reading (ppmv) -
FID reading (ppmv) -
PID meter ID —
FID meter ID —
Gas analyzer ID —
Ft. tubing used 7'
% O_2 —
% CO_2 —
% CH_4 —
Purge Volume 50cc

For indoor location:
Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:
Noticeable odor No
Distance to road (ft) -
Direction to closest building (degrees)
Distance to closest building (ft) —
Intake height above ground level (ft) —
Intake depth below ground level (ft) 5 ft
Soil type Sand, Clay

Comments: Point was installed on Post Office property. Found out after point was installed, Point was set deeper (5ft) because it is installed on the edge of a mulch pile that is approx. <1 ft above grade. Upon istallation, it was observed that the bentonite slurry may not have reached the desired depth, however, after 24 hrs, the slurry appeared to have drained. More slurry was added prior to sampling.

Analytical method required TO 15
Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019

Project Name Accudie

Date 5/4/06

Collector C. Finke

Type of sample:
(Circle one)
Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location
551 Genesee st
(Adjacent to OBG offices)

Canister Record
Canister ID 4171
Flow controller ID 2758
Sample duration 4 hrs
Sampling rate

Sample ID SV8
Date/Time start 5/4/06 1047
Date/Time end 5/4/06 1443

Gauge prior to start 0"
Start pressure –30"
End pressure –4"

Complete all that apply:

Air temperature (°F)	~62°	PID meter ID	–	% O_2	–
Barometric pressure	29.40	FID meter ID	–	% CO_2	–
PID reading (ppmv)	–	Gas analyzer ID	–	% CH_4	–
FID reading (ppmv)	–	Ft. tubing used	7'	Purge Volume	50 cc

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) –
Direction to closest building (degrees) –
Distance to closest building (ft) –
Intake height above ground level (ft) –
Intake depth below ground level (ft) 4 ft
Soil type sand, clay

Comments:

Analytical method required TO 15

Laboratory used STL

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019
Project Name Acadia
Date 5/4/06
Collector C. Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location
Near OBG Flagpole and
side Parking lot

Canister Record
Canister ID CMW ~~6970~~ 2644
Flow controller ID 3856
Sample duration 4 hr
Sampling rate

Sample ID SV9
Date/Time start 5/4/06 1054
Date/Time end 5/4/06 1429
Gauge prior to start 0"
Start pressure -30
End pressure -4"

Complete all that apply:

Air temperature (°F)	~62°	PID meter ID	—	% O_2	—
Barometric pressure	29.40	FID meter ID	—	% CO_2	—
PID reading (ppmv)	—	Gas analyzer ID	—	% CH_4	—
FID reading (ppmv)	—	Ft. tubing used	7'	Purge Volume	50cc

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) —
Direction to closest building (degrees) —
Distance to closest building (ft) —
Intake height above ground level (ft) —
Intake depth below ground level (ft) 4 ft
Soil type Sand, Clay

Comments:

Analytical method required TO 15
Laboratory used STL

VI sample form

O'BRIEN & GERE

Vapor Intrusion Sampling Form

Project # 39019
Project Name Accurate Die
Date 5/4/06
Collector @ ~~5/4/06~~ C. Finke

Type of sample: (Circle one) Indoor air Substructure soil gas Ambient air [✓ Soil gas]

Sample Location

Adjacent to fence and gas station and day care facility.

Canister Record

Canister ID 3159
Flow controller ID 2807
Sample duration 4 h
Sampling rate –

Sample ID SV-10
Date/Time start 5/4/06 1100
Date/Time end 5/4/06 1448
Gauge prior to start 0
Start pressure <-30"
End pressure -6.5"

Complete all that apply:

Air temperature (°F)	~62°F	PID meter ID	–	% O_2	–
Barometric pressure	29.4"Hg	FID meter ID	–	% CO_2	–
PID reading (ppmv)	–	Gas analyzer ID	–	% CH_4	–
FID reading (ppmv)	–	Ft. tubing used	7'	Purge Volume	50cc

For indoor location:

Noticeable odor
Floor slab depth
Intake height above floor (ft)
Intake depth below floor (ft)
Floor surface type
Room
Story/level

For outdoor location:

Noticeable odor No
Distance to road (ft) ~4'
Direction to closest building (degrees) West of K IRBY
Distance to closest building (ft) ~40'
Intake height above ground level (ft) –
Intake depth below ground level (ft) ~4.5'
Soil type sand, clay

Comments:

Analytical method required TO15
Laboratory used STL

ATTACHMENT 2

Building Survey Forms

O'BRIEN & GERE

Indoor Air Quality Building Survey

Date 3/14/06
Collector C. Finke
Affiliation OBG

Access Contact IRBY
Phone 315-329-0038
Best time to contact —

Address 547 ~~555~~ E. Genesee St
Fayetteville, NY 13066

Owner ☐ Renter ☑ Other ☐

Access Agreement Signed —

Date built /
Yrs. of residence /
No. of occupants /

Building type:
Residential ☐
Commercial ☐
School ☐
Church ☐
Industrial ☑
Other

Check all that apply:

Ranch ☐
Cape ☐
3-Family ☐
Raised Ranch ☐
Colonial ☐
Mobile Home ☐
2-Family ☐
Duplex ☐
Other (specify)
Apartments ☐
Condominium ☐

Above grade building construction

Wood frame ☐
Brick ☒
Poured concrete ☐
Concrete block ☑
Stone ☐
Other steel

Foundation construction

Fieldstone ☐
Poured concrete ☐
Solid top concrete block ☐
Open top concrete block ☐
Slab on grade ☑
Other

Is the owner aware of any additions made to the original design of the structure? (please specify)

Utilities

Sewer:
Public ☑
Private ☐
Other

Water:
Public ☑
Private ☐
Other
Spring ☐
Well ☐

Hot water heater type:
Gas ☐
Oil ☐
Electric ☐
Other

Heating, ventilation, and air conditioning systems

Primary heat type:
Hot air ☐
Hot water ☐
Steam radiator ☐
Electric ☐
Solar ☐
Other Gas Radiator

Fuel type (heat):
Natural gas ☑
Fuel oil ☐
Electric ☐
Wood ☐
Other

Secondary heat type:
Kerosene ☐
Wood stove ☐
Electric ☐
Propane ☐
Other

Ventilation types:
Attic fan ☐
Kitchen hood ☐
Bathroom fan ☐
Other Overhead Door
Ceiling fan ☐
Air filtration ☐
Induced fireplace ☐
Other

Air conditioning:
Window units ☐
Furnance unit ☐
Electric ☐
Other

Basement type

None ☑
Full ☐
Half ☐
Slab on grade ☐
Vented crawlspace ☐
Unvented crawlspace ☐
Other

If slab on grade, is there a garage with occupied space above?

Basement depth below grade (feet)

Front NA
Rear NA
Side 1 NA
Side 2 NA

Basement characteristics

General:
No. of rooms ~4
Bathroom 1
Basement use No Basement
Electrical comp. construction

Floor:
Earth ☐
Concrete ☑
Tile ☐
Carpet ☐
Other

Walls:
Finished ☑
Unfinished ☑
Painted ☐
Sheetrock ☐
Other

Paneling ☐
Tile ☐
Insulated ☐
Uninsulated ☐

Check if present:
Fireplace ☐
Sump pump ☐
Floor drains ☐
Interior walls ☑

Elevator ☐
Ash cleanout ☐
Water damage ☐
Jacuzzi/hot tub ☐

French drain ☐
Floor cracks ☐
Wall cracks ☐
Other

Does the basement have a moisture problem? No
Does the basement ever flood? (specify frequency) No
Does the basement have a radon system installed? No
Has there been recent purchases of furnishings (carpets, rugs, linoleum, tile, or funiture) or remodeling (new construction,roofing, or floor stripping? (please specify) No

---

Chemical usage, exposure and storage

Identify occupant hobbies:
Painting ☐
Stained glass ☐
Jewelry making ☐

Electronics ☑
Woodworking ☐
Furniture refinishing ☐

Model making ☐
Auto repair ☐
Other

Where in the structure are these hobbies conducted? Throughout
Does the occupants' job require chemical exposure? No
If so, where are the occupants clothes cleaned? NA

Has the structure been fumigated in the last year? No
If so, is fumigation regularly performed? (how often) NA
Are pesticides frequently applied to lawn or garden? No
If so, are they stored on the property? NA

Identify chemicals stored in the basement/1st floor living space, or garage if structure is slab on grade (include fuels, solvents, cleaners, etc.) Use separate inventory sheet for each area surveyed

Brand	Product		Amount stored	PPB Reading
Rainbow	Precison cleaner	- Dichloro Clooroethane	12 oz. bottle	0
Rustoleum	Primer Paint	None listed	12oz	0
NAPA	Aluminum Brightener	- No	2 Gal	0
Chance Moisture eater	Moisture Eater	- Chlorinate listed	1 Gal	~400
Walter	X Force	NL	3 Gal	0

Comments

Is there any other information about the structural features of this building, the habits of its occupants or potential sources for chemical contaminents to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

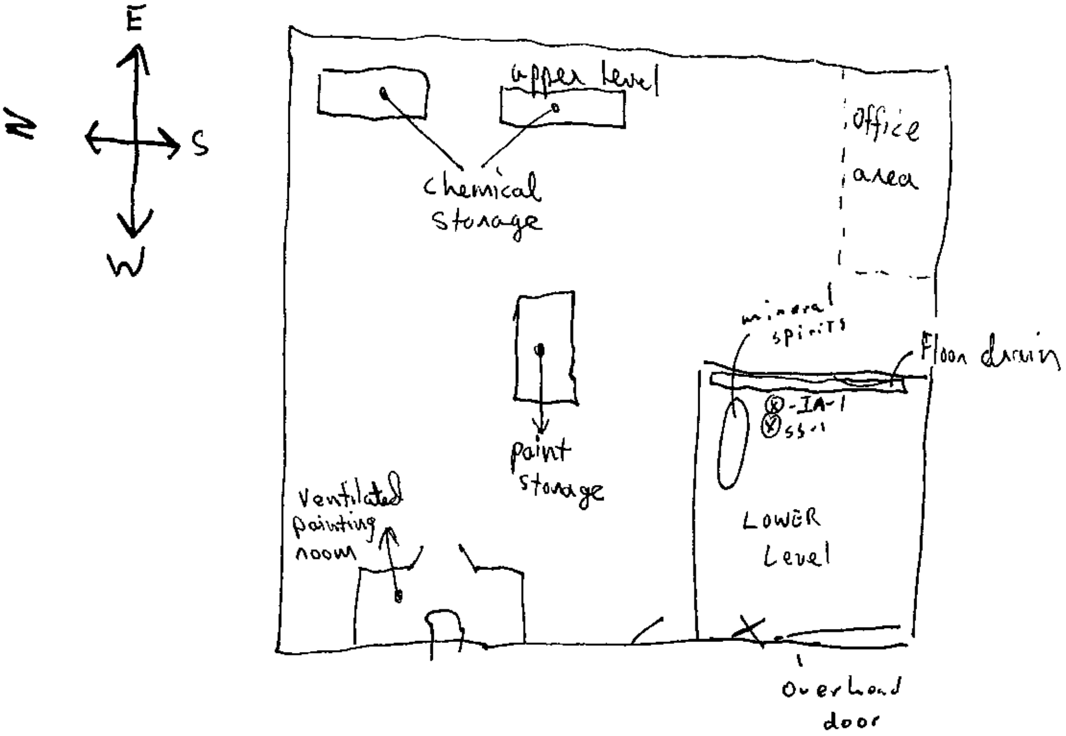
Shop uses Acetone, mineral oil, Alcohol, Xylene, paints, mineral spirits used frequently

- will use solder flux today-during sampling

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
-	SS-1 and IA-1 sampling location
-	floor drain adjacent to sampling location
-	cabinet containing paints, cleaners
-	shelf under work bench containing chemicals, cleaners
-	shelf above same workbench containing paints, cleaners
-	layout of upper level (E to W) ventilated painting room in background
-	layout of upper level (N to S) showing office area in background
	upper level looking down at sampling location
-	picture of sampling location taken from overhead door
-	primer paint and cleaning solvent
-	walter container (0 ppb)

Sketch lot and sample location layout (if applicable)



O'BRIEN & GERE

Indoor Air Quality Building Survey

Date 3/14/06
Collector C. Finke
Affiliation OBG

Access Contact LVR
Phone 315-329-0045
Best time to contact

Address 555 E. ~~[illegible]~~ Genesee St
E. Syracuse, NY 13066

Owner ☐ Renter ☑ Other ☐

Access Agreement Signed

Date built -
Yrs. of residence -
No. of occupants -

Building type:
Residential ☐
Commercial ☐
School ☐
Church ☐
Industrial ☒
Other

Check all that apply:

Ranch ☐
Cape ☐
3-Family ☐
Raised Ranch ☐
Colonial ☐
Mobile Home ☐
2-Family ☐
Duplex ☐
Other (specify)
Apartments ☐
Condominium ☐

Above grade building construction

Wood frame ☑
Brick ☐
Poured concrete ☐
Concrete block ☐
Stone ☐
Other steel

Foundation construction

Fieldstone ☐
Poured concrete ☐
Solid top concrete block ☐
Open top concrete block ☐
Slab on grade ☑
Other

Is the owner aware of any additions made to the original design of the structure? (please specify)

Utilities

Sewer:
Public ☑
Private ☐
Other

Water:
Public ☑
Private ☐
Other
Spring ☐
Well ☐

Hot water heater type:
Gas ☐
Oil ☐
Electric ☐
Other

Heating, ventilation, and air conditioning systems

Primary heat type:
Hot air ☐
Hot water ☐
Steam radiator ☐
Electric ☐
Solar ☐
Other Gas Radiator

Fuel type (heat):
Natural gas ☑
Fuel oil ☐
Electric ☐
Wood ☐
Other

Secondary heat type:
Kerosene ☐
Wood stove ☐
Electric ☐
Propane ☐
Other

Ventilation types:
Attic fan ☐
Kitchen hood ☐
Bathroom fan ☐
Other Overhead Door

Ceiling fan ☐
Air filtration ☐
Induced fireplace ☐
Other

Air conditioning:
Window units ☐
Furnance unit ☐
Electric ☐
Other

Basement type

None ☑ Half ☐ Vented crawlspace ☐ Other ______
Full ☐ Slab on grade ☑ Unvented crawlspace ☐ ______
If slab on grade, is there a garage with occupied space above? ______

Basement depth below grade (feet)
Front NA Rear NA Side 1 NA Side 2 NA

Basement characteristics

General:
No. of rooms 1
Bathroom 1
Basement use ______

Floor:
Earth ☐
Concrete ☑
Tile ☐
Carpet ☐
Other ______

Walls:
Finished ☑
Unfinished ☑
Painted ☐
Sheetrock ☐
Other steel frame

Paneling ☐
Tile ☐
Insulated ☑
Uninsulated ☐

Check if present:
Fireplace ☐
Sump pump ☐
Floor drains ☐
Interior walls ☑

Elevator ☐
Ash cleanout ☐
Water damage ☐
Jacuzzi/hot tub ☐

French drain ☐
Floor cracks ☐
Wall cracks ☐
Other Roof Drain

for office - sheetrock, wood construct.

Does the basement have a moisture problem? - No ~~NA~~
Does the basement ever flood? (specify frequency) - No ⓐ
Does the basement have a radon system installed? - No
Has there been recent purchases of furnishings (carpets, rugs, linoleum, tile, or funiture) or remodeling (new construction,roofing, or floor stripping? (please specify) - No ~~NA~~ ⓟ

Chemical usage, exposure and storage

Identify occupant hobbies:
Painting ☐
Stained glass ☐
Jewelry making ☐

Electronics ☐
Woodworking ☐
Furniture refinishing ☐

Model making ☐
Auto repair ☐
Other welding

Where in the structure are these hobbies conducted? ~~see~~ NA
Does the occupants' job require chemical exposure? NA
If so, where are the occupants clothes cleaned? NA

Has the structure been fumigated in the last year? Unknown - probably not
If so, is fumigation regularly performed? (how often)
Are pesticides frequently applied to lawn or garden?
If so, are they stored on the property?

Identify chemicals stored in the basement/1st floor living space, or garage if structure is slab on grade (include fuels, solvents, cleaners, etc.) Use separate inventory sheet for each area surveyed

Brand	Product	Amount stored	
kerosene container	– ~~C~~ maybe empty		0ppb
Gasoline container	– 10 Gal – " "		0ppb
welder – ~97ppb	– see indoor air form.		

Comments

Is there any other information about the structural features of this building, the habits of its occupants or potential sources for chemical contaminents to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

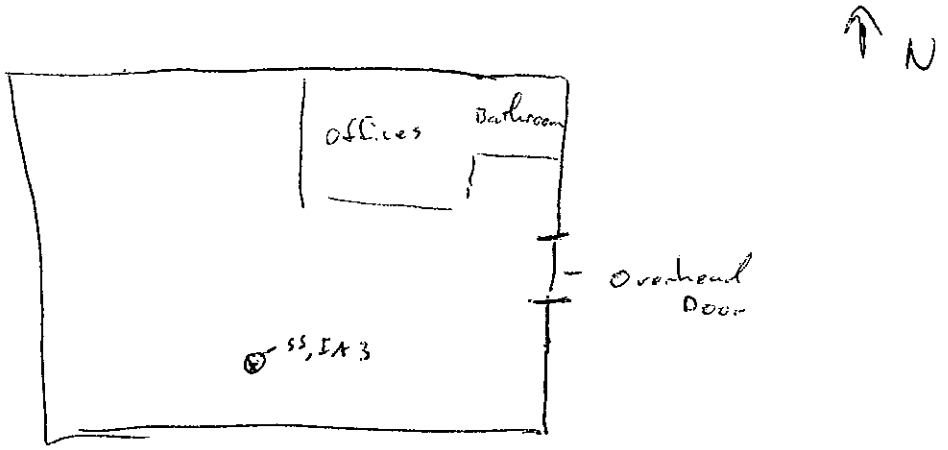
Indoor air may contain silica dust, ceramic fiber

Welding performed during visit to collect samples

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	Sample SS-3, IA-3
	Overhead door

Sketch lot and sample location layout (if applicable)



O'BRIEN & GERE

Indoor Air Quality Building Survey

Date 3/14/06
Collector C. Fiaho
Affiliation OBG

Access Contact Joe DeMatteo
Phone —
Best time to contact —

Address Lane Fire and Safety
555 E. Genesee St
Fayetteville, NY 13066

Owner ☐ Renter ☑ Other ☐

Access Agreement Signed —

Date built —
Yrs. of residence —
No. of occupants —

Building type:
Residential ☐ Commercial ☑
School ☐ Church ☐
Industrial ☐ Other ______

Check all that apply:

Ranch ☐
Cape ☐
3-Family ☐
Raised Ranch ☐
Colonial ☐
Mobile Home ☐
2-Family ☐
Duplex ☐
Other (specify) ______
Apartments ☐
Condominium ☐

Above grade building construction

Wood frame ☑
Brick ☐
Poured concrete ☐
Concrete block ☐
Stone ☐
Other Steel frame w/ sheetrock

Foundation construction

Fieldstone ☐
Poured concrete ☐
Solid top concrete block ☐
Open top concrete block ☐
Slab on grade ☑
Other ______

Is the owner aware of any additions made to the original design of the structure? (please specify)

Utilities

Sewer:
Public ☑
Private ☐
Other ______

Water:
Public ☑
Private ☐
Other ______
Spring ☐
Well ☐

Hot water heater type:
Gas ☐ Oil ☐
Electric ☐
Other None

Heating, ventilation, and air conditioning systems

Primary heat type:
Hot air ☐
Hot water ☐
Steam radiator ☐
Electric ☑
Solar ☐
Other unknown - did not find heat source

Fuel type (heat):
Natural gas ☐
Fuel oil ☐
Electric ☐
Wood ☐
Other ______

Secondary heat type:
Kerosene ☐
Wood stove ☐
Electric ☐
Propane ☐
Other ______

Ventilation types:
Attic fan ☐
Kitchen hood ☐
Bathroom fan ☐
Other ______
Ceiling fan ☐
Air filtration ☐
Induced fireplace ☐
Other ______

Air conditioning:
Window units ☐
Furnance unit ☐
Electric ☐
Other ______

- Electric space heaters/AC

Basement type

None ☐
Full ☐

Half ☐
Slab on grade ☑

Vented crawlspace ☐
Unvented crawlspace ☐

Other ______

If slab on garde, is there a garage with occupied space above? ______

Basement depth below grade (feet)

Front — Rear — Side 1 — Side 2 —

Basement characteristics

General:
No. of rooms 4
Bathroom ☐
Basement use ______

Floor:
Earth ☐
Concrete ☐
Tile ☐
Carpet ☑
Other ______

Walls:
Finished ☑
Unfinished ☐
Painted ☐
Sheetrock ☐
Other ______

Paneling ☐
Tile ☐
Insulated ☐
Uninsulated ☐

Check if present:
Fireplace ☐
Sump pump ☐
Floor drains ☐
Interior walls ☑

Elevator ☐
Ash cleanout ☐
Water damage ☐
Jacuzzi/hot tub ☐

French drain ☐
Floor cracks ☐
Wall cracks ☐
Other ______

Does the basement have a moisture problem? Unknown
Does the basement ever flood? (specify frequency) |
Does the basement have a radon system installed? ↓
Has there been recent purchases of fumishings (carpets, rugs, linoleum, tile, or funiture) or remodeling (new construction,roofing, or floor stripping? (please specify) Unknown

---

Chemical usage, exposure and storage

- Did not observe chemicals in rooms

Identify occupant hobbies:
Painting ☐
Stained glass ☐
Jewelry making ☐

Electronics ☐
Woodworking ☐
Furniture refinishing ☐

Model making ☐
Auto repair ☐
Other ______

Where in the structure are these hobbies conducted? —
Does the occupants' job require chemical exposure? —
If so, where are the occupants clothes cleaned? —

Has the structure been fumigated in the last year? —
If so, is fumigation regularly performed? (how often) —
Are pesticides frequently applied to lawn or garden? —
If so, are they stored on the property? —

Identify chemicals stored in the basement/1st floor living space, or garage if structure is slab on grade (include fuels, solvents, cleaners, etc.) Use separate inventory sheet for each area surveyed

Brand	Product	Amount stored
Did not observe	chemicals in rooms	

Comments

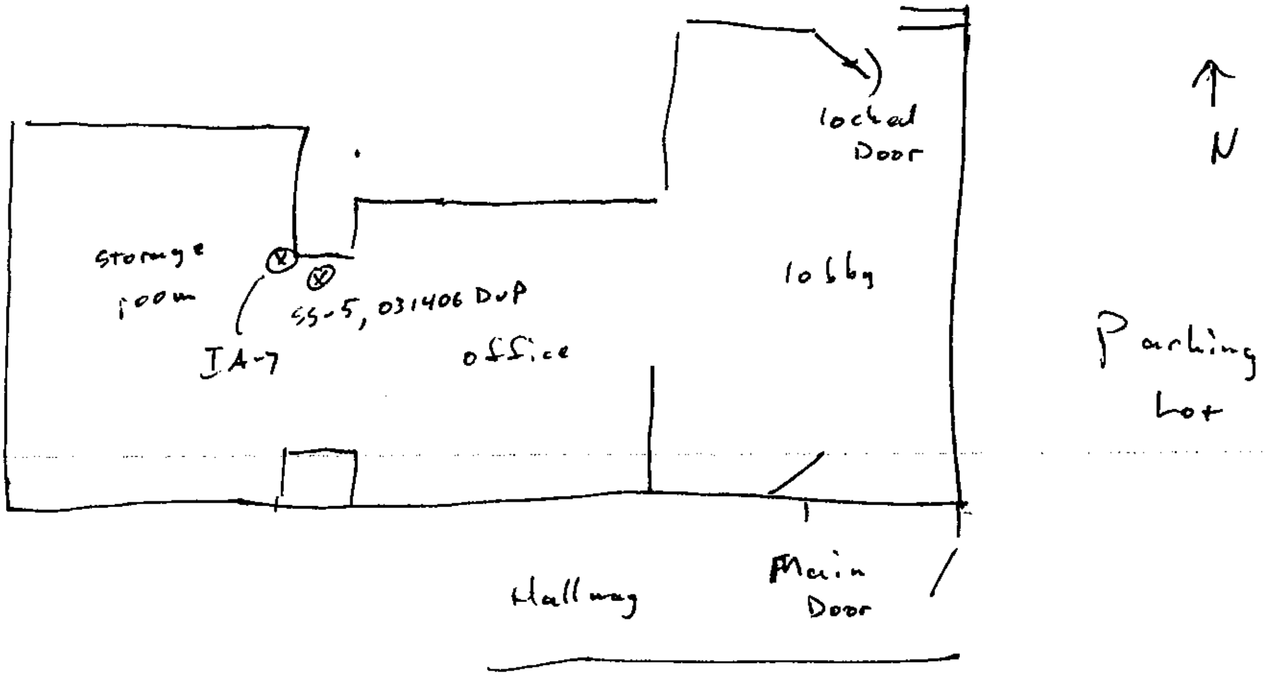
Is there any other information about the structural features of this building, the habits of its occupants or potential sources for chemical contaminents to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

Lane Fire and Safety stores and sells personal protective equipment.

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	Sample SS-~~2~~ 5, IA-5 location
	Heater (electric)
	Storage room
	Office - looking into storage room

Sketch lot and sample location layout (if applicable)



O'BRIEN & GERE

Indoor Air Quality Building Survey

Date 3/14/06
Collector C. Finke
Affiliation OBG

Access Contact O'Brien & Gere
Phone 315-637-2234
Best time to contact —

Address 555 East Genesee St
Fayetteville, NY 13066

Owner ☑ Renter ☐ Other ☐

Access Agreement Signed —

Date built —
Yrs. of residence —
No. of occupants —

Building type:
Residential ☐
Commercial ☑
School ☐
Church ☐
Industrial ☐
Other

Check all that apply:

Ranch ☐
Cape ☐
3-Family ☐
Raised Ranch ☐
Colonial ☐
Mobile Home ☐
2-Family ☐
Duplex ☐
Other (specify)
Apartments ☐
Condominium ☐

Above grade building construction

Wood frame ☑
Brick ☐
Poured concrete ☐
Concrete block ☑
Stone ☐
Other steel

Foundation construction

Fieldstone ☐
Poured concrete ☐
Solid top concrete block ☐
Open top concrete block ☑
Slab on grade ☑
Other

Is the owner aware of any additions made to the original design of the structure? (please specify)

—

Utilities

Sewer:
Public ☑
Private ☐
Other

Water:
Public ☑
Private ☐
Other
Spring ☐
Well ☐

Hot water heater type:
Gas ☑
Oil ☐
Electric ☐
Other

Heating, ventilation, and air conditioning systems

Primary heat type:
Hot air ☐
Hot water ☐
Steam radiator ☐
Electric ☐
Solar ☐
Other Radiators (overhead

Fuel type (heat):
Natural gas ☑
Fuel oil ☐
Electric ☐
Wood ☐
Other

Secondary heat type:
Kerosene ☐
Wood stove ☐
Electric ☐
Propane ☐
Other

Ventilation types:
Attic fan ☐
Kitchen hood ☐
Bathroom fan ☑
Other
Ceiling fan ☐
Air filtration ☐
Induced fireplace ☐
Other

Air conditioning:
Window units ☐
Furnance unit ☐
Electric ☐
Other

Basement type

None ☐ Half ☐ Vented crawlspace ☐ Other ______
Full ☐ Slab on grade ☑ Unvented crawlspace ☐ ______
If slab on grade, is there a garage with occupied space above? ______

Basement depth below grade (feet)

Front — Rear — Side 1 — Side 2 —

Basement characteristics

General: see site plan
No. of rooms ☐
Bathroom ☐
Basement use ______

Floor:
Earth ☐
Concrete ☑
Tile ☐
Carpet ☐
Other ______

Walls:
Finished ☑
Unfinished ☑
Painted ☐
Sheetrock ☑
Other ______

Paneling ☐
Tile ☐
Insulated ☐
Uninsulated ☐

Check if present:
Fireplace ☐
Sump pump ☐
Floor drains ☐
Interior walls ☐

Elevator ☐
Ash cleanout ☐
Water damage ☐
Jacuzzi/hot tub ☐

French drain ☐
Floor cracks ☑ – small
Wall cracks ☐
Other ______

Does the basement have a moisture problem? No
Does the basement ever flood? (specify frequency) No
Does the basement have a radon system installed? No
Has there been recent purchases of furnishings (carpets, rugs, linoleum, tile, or funiture) or remodeling (new construction,roofing, or floor stripping? (please specify) No

---

Chemical usage, exposure and storage

Identify occupant hobbies:
Painting ☐
Stained glass ☐
Jewelry making ☐

Electronics ☑
Woodworking ☐
Furniture refinishing ☐

Model making ☐
Auto repair ☐
Other General metal fabrication

Where in the structure are these hobbies conducted? Main warehouse area
Does the occupants' job require chemical exposure? No
If so, where are the occupants clothes cleaned? NA

Has the structure been fumigated in the last year? No
If so, is fumigation regularly performed? (how often) NA
Are pesticides frequently applied to lawn or garden? No
If so, are they stored on the property? NA

Identify chemicals stored in the basement/1st floor living space, or garage if structure is slab on grade (include fuels, solvents, cleaners, etc.) Use separate inventory sheet for each area surveyed

site #	Brand	Product	Amount stored
6	None	Present in office space	
2,8	"	" storage areas to the sw and	
"			NE
4	Garage storage area has:	Magic kote foam coating	55 gal drums
4	~~Gasoline tank~~	Gasoline tank	250 gal drums
		Top Coat Roof tar	2 5gal buckets
		kerosene	1 5gal tank

PID was 0 for all chems

Comments

Is there any other information about the structural features of this building, the habits of its occupants or potential sources for chemical contaminents to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

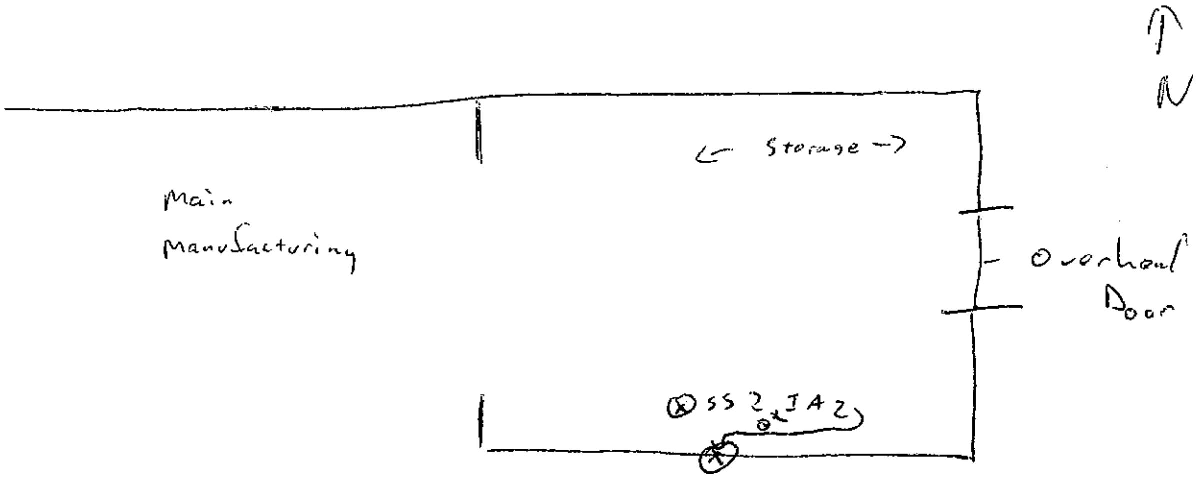
See ②

OBG Storage - Site 2

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	No chemicals observed. ~~Pictur~~ Pictures
	taken of sample canisters.

Sketch lot and sample location layout (if applicable)

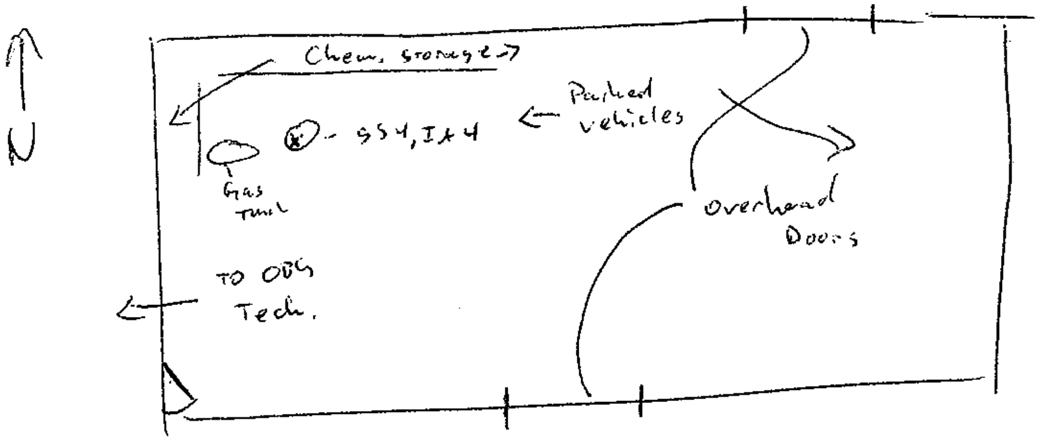


OBG Storage (Garage) - Site 4

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	took photos of chemicals
	and sample canisters.

Sketch lot and sample location layout (if applicable)



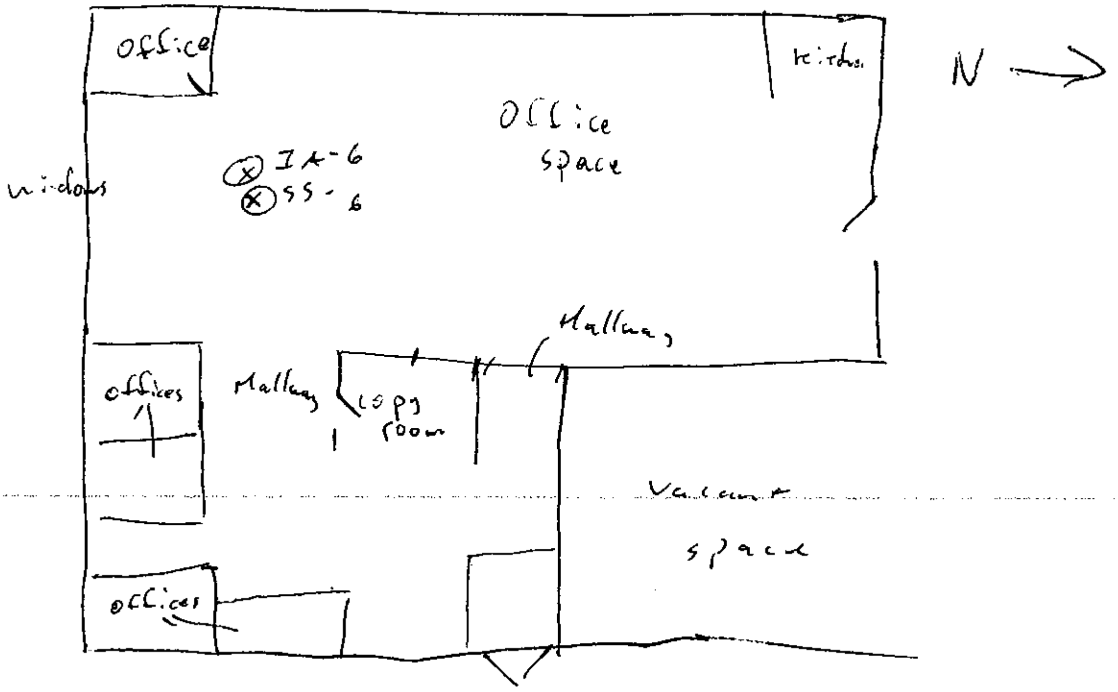
Numerous wall cracks
and openings.

OBG Offices - Site 6

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	Photos taken of sample location

Sketch lot and sample location layout (if applicable)

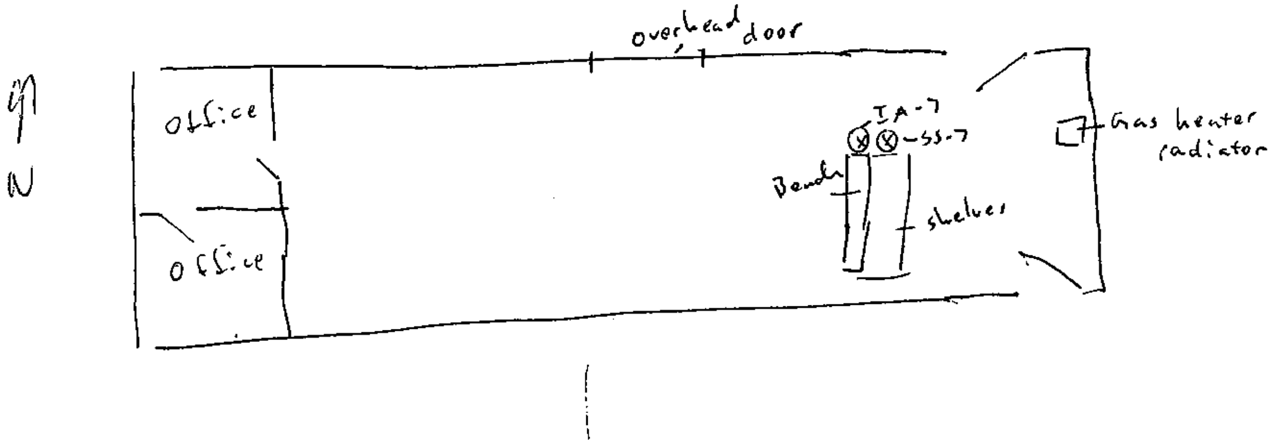


OBG Offices (Electrical) - Site 7

Identify photographs taken as additional documentation of existing conditions.

Photo ID	Description of photo
	Took photos of chemicals plus
	photos of sample locations

Sketch lot and sample location layout (if applicable)



Chem.
Inventory
of
Electrical
shop (SS, IA #7)

NC = No chlorinates listed
NL = No ingredients listed

Identify chemicals stored in the basement/1st floor living space, or garage if structure is slab on grade (include fuels, solvents, cleaners, etc.) Use separate inventory sheet for each area surveyed

Brand	Product	Amount stored	ppb reading
Rapid tap	cutting fluid	16 fl. oz can	8
Rapid tap	" "	(2) gallon cans	9
Lock-tight	anti-seize lube	1 pint can	0
purple primer	PVC primer ⇒ methyl/ethyl Ketone cyclohexanone tetrahydrafurane	1 pint	400
CRC	contact cleaner	NL	
WD-40	lubricant → petroleum distillates	2 cans	0
Rigid (Dark)	thread cutting oil	1/2 gallon	0

Comments

Is there any other information about the structural features of this building, the habits of its occupants or potential sources for chemical contaminents to the indoor air that may be of importance in facilitating the evaluation of the indoor air quality of the building?

Shop uses various cutting lubricants frequently

OBG Storage - Site 8

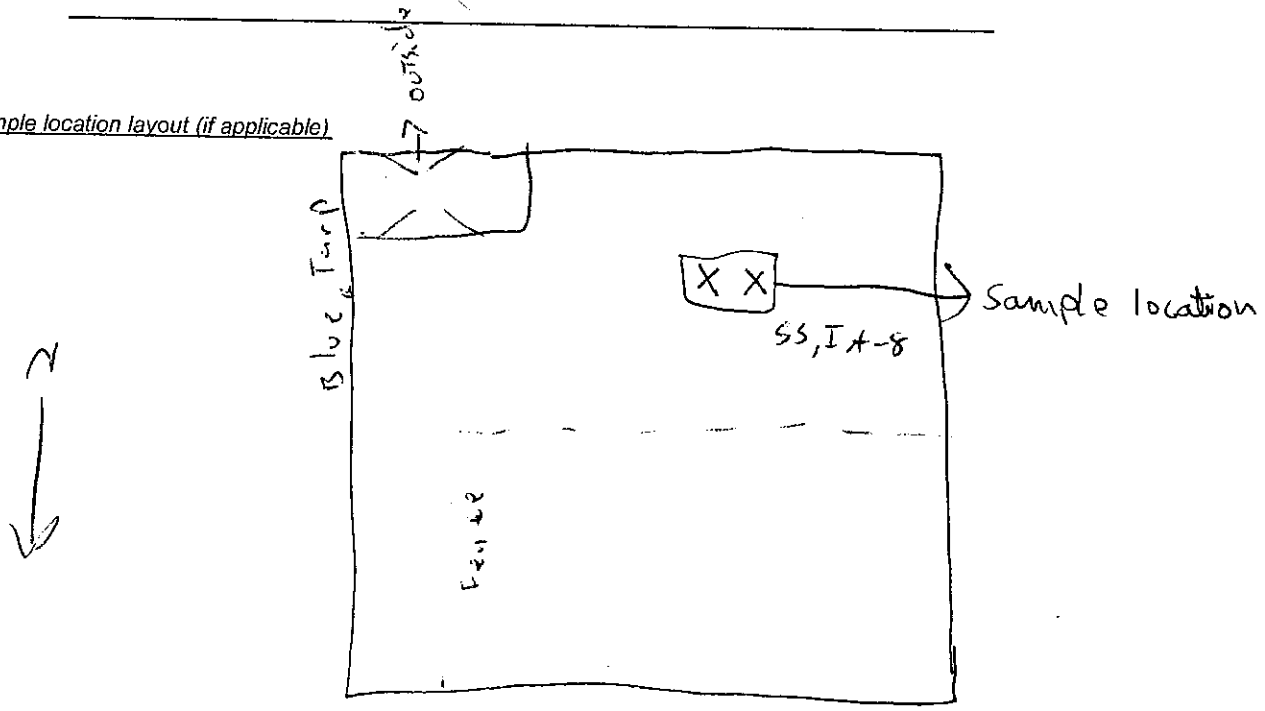
Identify photographs taken as additional documentation of existing conditions.

Photo ID

Description of photo

Took photos of sample canisters

Sketch lot and sample location layout (if applicable)



ATTACHMENT 3

Sample Analysis Data

On-Site Vapor Intrusion Sampling

SEVERN TRENT STL®

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

March 30, 2006

Mr. Mark Distler
O'Brien & Gere Laboratories
5000 Brittonfield Parkway
PO Box 4942
Syracuse, NY 13221

Re: Laboratory Project No. 26000
Case: 26000; SDG: NY113231

Dear Mr. Distler:

Enclosed are the analytical results for the samples that were received by STL Burlington on March 17th, 2006. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 03/17/06 ETR No:	113231	
661776	SS-1	03/14/06	Air
661777	IA-1	03/14/06	Air
661778	SS-2	03/14/06	Air
661779	IA-2	03/14/06	Air
661780	SS-3	03/14/06	Air
661781	IA-3	03/14/06	Air
661782	SS-4	03/14/06	Air
661783	IA-4	03/14/06	Air
661784	SS-5	03/14/06	Air
661785	IA-5	03/14/06	Air
661786	031406-DUP	03/14/06	Air
661787	SS-6	03/14/06	Air
661788	IA-6	03/14/06	Air
661789	SS-7	03/14/06	Air
661790	IA-7	03/14/06	Air
661791	SS-8	03/14/06	Air
661792	IA-8	03/14/06	Air
661793	031406-AMB	03/14/06	Air

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The low-level volatile organics analyses for the majority of the indoor air samples in this delivery group yielded concentrations of Toluene and Xylenes that exceeded the range of calibrated instrument response. At the client's request, these samples were not diluted, in order to achieve lower reporting limits. The results exceeding the calibration range are qualified using the "E" qualifier.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,

Don Dawicki
Project Manager

Enclosure

SEVERN TRENT **STL®**
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Page 1 of 2

CHAIN OF CUSTODY RECORD

Report to:
Company: O'Brien & Gere
Address: 5000 Brittonfield Pkwy
E Syracuse, NY 13057
Contact: Mark Distler
Phone: 315-437-6100
Fax: 315-463-7554
Contract/Quote: Proj # 26000 site # 25463

Invoice to:
Company: SAME
Address:
Contact:
Phone:
Fax:

Sampler's Name: Christopher Finke
Sampler's Signature:

Proj. No.: 25463
Project Name: Accurate Die

ANALYSIS REQUESTED: TO-15 per Project # 26000, site # 25463 Low-level - O'Brien & Gere Mark Distler

Lab Use Only
Due Date:
Temp. of coolers when received (C°): 1 2 3 4 5
Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TO-15	Lab/Sample ID (Lab Use Only)
A	3/14/06	1112	✓		SS-1	—	—	—	—		
A	3/14/06	1112			IA-1						
A	3/14/06	1544			SS-2						
A	3/14/06	1544			IA-2						
A	3/14/06	1207			SS-3						
A	3/14/06	1208			IA-3						
A	3/14/06	1251			SS-4						
A	3/14/06	1251			IA-4						
A	3/14/06	1631			SS-5					✓	
A	3/14/06	1631	↓		IA-5	↓	↓	↓	↓	↓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Christopher M. McKenzie	3/16/06	0815	Fed EX	3/16/06	~1500
				3/17/06	0930

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

SEVERN TRENT STL®
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

Page 2 of 2

CHAIN OF CUSTODY RECORD

Report to:
Company: O'Brien & Gere
Address: 5000 Brittonfield pkwy
E. Syracuse, NY 13057
Contact: Mark Distler
Phone: 315-437-6100
Fax: 315-463-7554
Contract/ proj # 26000
Quote: site # 25463

Invoice to:
Company: SAME
Address:
Contact:
Phone:
Fax:

ANALYSIS REQUESTED
TO 15 per
Project # 26000, site # 25463
Low-Level - O'Brien & Gere
Mark Distler

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Sampler's Name: Christopher Finke
Sampler's Signature: Chil J. Fink

Proj. No.: 25463
Project Name: Accurate Die
No/Type of Containers²: 6 L

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	TO 15	Lab/Sample ID (Lab Use Only)
A	3/14/0	1631	✓		031406-Dup	—	—	—	—	↓	
A	↓	1323	↓		SS-6	↓	↓	↓	↓	↓	
A	↓	1323	↓		IA-6	↓	↓	↓	↓	↓	
A	↓	1406	↓		SS-7	↓	↓	↓	↓	↓	
A	↓	1406	↓		IA-7	↓	↓	↓	↓	↓	
A	↓	1444	↓		SS-8	↓	↓	↓	↓	↓	
A	↓	1444	*		IA-8	↓	✓	↓	↓	↓	
A	↓	1509	↓		031406-AMB	↓	↓	↓	↓	✓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
Christopher M. McKenzie	3/16/06	8:15 am	FED EX	3/16/06	~1500
				3/17/06	0930

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STL8234-200 (12/02)

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-1

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661776

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	3.0		2.5	11		8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	4.2		1.0	21		4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.2		1.0	4.1		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	1.7		1.0	5.4		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	2.3		1.0	9.4		4.1
Trichloroethene	79-01-6	170		1.0	910		5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	10		1.0	38		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.5		1.0	10		6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-1

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661776

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	2.3		1.0	10		4.3
Xylene (m,p)	1330-20-7	9.0		2.5	39		11
Xylene (o)	95-47-6	3.0		1.0	13		4.3
Xylene (total)	1330-20-7	12		1.0	52		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	3.2		1.0	16		4.9
1,3,5-Trimethylbenzene	108-67-8	1.0		1.0	4.9		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-2

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661778

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	75	U	75	370	U	370
1,2-Dichlorotetrafluoroethane	76-14-2	30	U	30	210	U	210
Vinyl Chloride	75-01-4	30	U	30	77	U	77
1,3-Butadiene	106-99-0	75	U	75	170	U	170
Bromomethane	74-83-9	30	U	30	120	U	120
Chloroethane	75-00-3	30	U	30	79	U	79
Bromoethene	593-60-2	30	U	30	130	U	130
Trichlorofluoromethane	75-69-4	30	U	30	170	U	170
1,1-Dichloroethene	75-35-4	30	U	30	120	U	120
3-Chloropropene	107-05-1	75	U	75	230	U	230
Methyl tert-Butyl Ether	1634-04-4	75	U	75	270	U	270
trans-1,2-Dichloroethene	156-60-5	30	U	30	120	U	120
n-Hexane	110-54-3	75	U	75	260	U	260
1,1-Dichloroethane	75-34-3	30	U	30	120	U	120
1,2-Dichloroethene (total)	540-59-0	30	U	30	120	U	120
cis-1,2-Dichloroethene	156-59-2	30	U	30	120	U	120
Chloroform	67-66-3	30	U	30	150	U	150
1,1,1-Trichloroethane	71-55-6	30	U	30	160	U	160
Cyclohexane	110-82-7	30	U	30	100	U	100
Carbon Tetrachloride	56-23-5	30	U	30	190	U	190
2,2,4-Trimethylpentane	540-84-1	30	U	30	140	U	140
Benzene	71-43-2	30	U	30	96	U	96
1,2-Dichloroethane	107-06-2	30	U	30	120	U	120
n-Heptane	142-82-5	30	U	30	120	U	120
Trichloroethene	79-01-6	4700		30	25000		160
1,2-Dichloropropane	78-87-5	30	U	30	140	U	140
Bromodichloromethane	75-27-4	30	U	30	200	U	200
cis-1,3-Dichloropropene	10061-01-5	30	U	30	140	U	140
Toluene	108-88-3	68		30	260		110
trans-1,3-Dichloropropene	10061-02-6	30	U	30	140	U	140
1,1,2-Trichloroethane	79-00-5	30	U	30	160	U	160
Tetrachloroethene	127-18-4	30	U	30	200	U	200
Dibromochloromethane	124-48-1	30	U	30	260	U	260

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-2

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661778

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	30	U	30	230	U	230
Ethylbenzene	100-41-4	30	U	30	130	U	130
Xylene (m,p)	1330-20-7	75	U	75	330	U	330
Xylene (o)	95-47-6	30	U	30	130	U	130
Xylene (total)	1330-20-7	30	U	30	130	U	130
Bromoform	75-25-2	30	U	30	310	U	310
1,1,2,2-Tetrachloroethane	79-34-5	30	U	30	210	U	210
4-Ethyltoluene	622-96-8	30	U	30	150	U	150
1,3,5-Trimethylbenzene	108-67-8	30	U	30	150	U	150

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-3

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661780

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	50	U	50	250	U	250
1,2-Dichlorotetrafluoroethane	76-14-2	20	U	20	140	U	140
Vinyl Chloride	75-01-4	20	U	20	51	U	51
1,3-Butadiene	106-99-0	50	U	50	110	U	110
Bromomethane	74-83-9	20	U	20	78	U	78
Chloroethane	75-00-3	20	U	20	53	U	53
Bromoethene	593-60-2	20	U	20	87	U	87
Trichlorofluoromethane	75-69-4	20	U	20	110	U	110
1,1-Dichloroethene	75-35-4	20	U	20	79	U	79
3-Chloropropene	107-05-1	50	U	50	160	U	160
Methyl tert-Butyl Ether	1634-04-4	50	U	50	180	U	180
trans-1,2-Dichloroethene	156-60-5	20	U	20	79	U	79
n-Hexane	110-54-3	120		50	420		180
1,1-Dichloroethane	75-34-3	20	U	20	81	U	81
1,2-Dichloroethene (total)	540-59-0	20	U	20	79	U	79
cis-1,2-Dichloroethene	156-59-2	20	U	20	79	U	79
Chloroform	67-66-3	20	U	20	98	U	98
1,1,1-Trichloroethane	71-55-6	20	U	20	110	U	110
Cyclohexane	110-82-7	20	U	20	69	U	69
Carbon Tetrachloride	56-23-5	20	U	20	130	U	130
2,2,4-Trimethylpentane	540-84-1	20	U	20	93	U	93
Benzene	71-43-2	20	U	20	64	U	64
1,2-Dichloroethane	107-06-2	20	U	20	81	U	81
n-Heptane	142-82-5	60		20	250		82
Trichloroethene	79-01-6	3300		20	18000		110
1,2-Dichloropropane	78-87-5	20	U	20	92	U	92
Bromodichloromethane	75-27-4	20	U	20	130	U	130
cis-1,3-Dichloropropene	10061-01-5	20	U	20	91	U	91
Toluene	108-88-3	28		20	110		75
trans-1,3-Dichloropropene	10061-02-6	20	U	20	91	U	91
1,1,2-Trichloroethane	79-00-5	20	U	20	110	U	110
Tetrachloroethene	127-18-4	20	U	20	140	U	140
Dibromochloromethane	124-48-1	20	U	20	170	U	170

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-3

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661780

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	20	U	20	150	U	150
Ethylbenzene	100-41-4	20	U	20	87	U	87
Xylene (m,p)	1330-20-7	50	U	50	220	U	220
Xylene (o)	95-47-6	20	U	20	87	U	87
Xylene (total)	1330-20-7	20	U	20	87	U	87
Bromoform	75-25-2	20	U	20	210	U	210
1,1,2,2-Tetrachloroethane	79-34-5	20	U	20	140	U	140
4-Ethyltoluene	622-96-8	20	U	20	98	U	98
1,3,5-Trimethylbenzene	108-67-8	20	U	20	98	U	98

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-4

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661782

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	30	U	30	150	U	150
1,2-Dichlorotetrafluoroethane	76-14-2	12	U	12	84	U	84
Vinyl Chloride	75-01-4	12	U	12	31	U	31
1,3-Butadiene	106-99-0	30	U	30	66	U	66
Bromomethane	74-83-9	12	U	12	47	U	47
Chloroethane	75-00-3	12	U	12	32	U	32
Bromoethene	593-60-2	12	U	12	52	U	52
Trichlorofluoromethane	75-69-4	12	U	12	67	U	67
1,1-Dichloroethene	75-35-4	12	U	12	48	U	48
3-Chloropropene	107-05-1	30	U	30	94	U	94
Methyl tert-Butyl Ether	1634-04-4	30	U	30	110	U	110
trans-1,2-Dichloroethene	156-60-5	12	U	12	48	U	48
n-Hexane	110-54-3	30	U	30	110	U	110
1,1-Dichloroethane	75-34-3	12	U	12	49	U	49
1,2-Dichloroethene (total)	540-59-0	12	U	12	48	U	48
cis-1,2-Dichloroethene	156-59-2	12	U	12	48	U	48
Chloroform	67-66-3	12	U	12	59	U	59
1,1,1-Trichloroethane	71-55-6	12	U	12	65	U	65
Cyclohexane	110-82-7	12	U	12	41	U	41
Carbon Tetrachloride	56-23-5	12	U	12	75	U	75
2,2,4-Trimethylpentane	540-84-1	12	U	12	56	U	56
Benzene	71-43-2	12	U	12	38	U	38
1,2-Dichloroethane	107-06-2	12	U	12	49	U	49
n-Heptane	142-82-5	12	U	12	49	U	49
Trichloroethene	79-01-6	2300		12	12000		64
1,2-Dichloropropane	78-87-5	12	U	12	55	U	55
Bromodichloromethane	75-27-4	12	U	12	80	U	80
cis-1,3-Dichloropropene	10061-01-5	12	U	12	54	U	54
Toluene	108-88-3	12	U	12	45	U	45
trans-1,3-Dichloropropene	10061-02-6	12	U	12	54	U	54
1,1,2-Trichloroethane	79-00-5	12	U	12	65	U	65
Tetrachloroethene	127-18-4	12	U	12	81	U	81
Dibromochloromethane	124-48-1	12	U	12	100	U	100

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-4

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661782

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	12	U	12	92	U	92
Ethylbenzene	100-41-4	12	U	12	52	U	52
Xylene (m,p)	1330-20-7	30	U	30	130	U	130
Xylene (o)	95-47-6	12	U	12	52	U	52
Xylene (total)	1330-20-7	12	U	12	52	U	52
Bromoform	75-25-2	12	U	12	120	U	120
1,1,2,2-Tetrachloroethane	79-34-5	12	U	12	82	U	82
4-Ethyltoluene	622-96-8	12	U	12	59	U	59
1,3,5-Trimethylbenzene	108-67-8	12	U	12	59	U	59

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-5

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661784

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	25	U	25	120	U	120
1,2-Dichlorotetrafluoroethane	76-14-2	10	U	10	70	U	70
Vinyl Chloride	75-01-4	10	U	10	26	U	26
1,3-Butadiene	106-99-0	25	U	25	55	U	55
Bromomethane	74-83-9	10	U	10	39	U	39
Chloroethane	75-00-3	10	U	10	26	U	26
Bromoethene	593-60-2	10	U	10	44	U	44
Trichlorofluoromethane	75-69-4	10	U	10	56	U	56
1,1-Dichloroethene	75-35-4	10	U	10	40	U	40
3-Chloropropene	107-05-1	25	U	25	78	U	78
Methyl tert-Butyl Ether	1634-04-4	25	U	25	90	U	90
trans-1,2-Dichloroethene	156-60-5	10	U	10	40	U	40
n-Hexane	110-54-3	25	U	25	88	U	88
1,1-Dichloroethane	75-34-3	10	U	10	40	U	40
1,2-Dichloroethene (total)	540-59-0	10	U	10	40	U	40
cis-1,2-Dichloroethene	156-59-2	10	U	10	40	U	40
Chloroform	67-66-3	10	U	10	49	U	49
1,1,1-Trichloroethane	71-55-6	10	U	10	55	U	55
Cyclohexane	110-82-7	10	U	10	34	U	34
Carbon Tetrachloride	56-23-5	10	U	10	63	U	63
2,2,4-Trimethylpentane	540-84-1	10	U	10	47	U	47
Benzene	71-43-2	10	U	10	32	U	32
1,2-Dichloroethane	107-06-2	10	U	10	40	U	40
n-Heptane	142-82-5	10	U	10	41	U	41
Trichloroethene	79-01-6	1900		10	10000		54
1,2-Dichloropropane	78-87-5	10	U	10	46	U	46
Bromodichloromethane	75-27-4	10	U	10	67	U	67
cis-1,3-Dichloropropene	10061-01-5	10	U	10	45	U	45
Toluene	108-88-3	10	U	10	38	U	38
trans-1,3-Dichloropropene	10061-02-6	10	U	10	45	U	45
1,1,2-Trichloroethane	79-00-5	10	U	10	55	U	55
Tetrachloroethene	127-18-4	10	U	10	68	U	68
Dibromochloromethane	124-48-1	10	U	10	85	U	85

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-5

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661784

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	10	U	10	77	U	77
Ethylbenzene	100-41-4	10	U	10	43	U	43
Xylene (m,p)	1330-20-7	25	U	25	110	U	110
Xylene (o)	95-47-6	10	U	10	43	U	43
Xylene (total)	1330-20-7	10	U	10	43	U	43
Bromoform	75-25-2	10	U	10	100	U	100
1,1,2,2-Tetrachloroethane	79-34-5	10	U	10	69	U	69
4-Ethyltoluene	622-96-8	10	U	10	49	U	49
1,3,5-Trimethylbenzene	108-67-8	10	U	10	49	U	49

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

031406-DUP

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661786

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	30	U	30	150	U	150
1,2-Dichlorotetrafluoroethane	76-14-2	12	U	12	84	U	84
Vinyl Chloride	75-01-4	12	U	12	31	U	31
1,3-Butadiene	106-99-0	30	U	30	66	U	66
Bromomethane	74-83-9	12	U	12	47	U	47
Chloroethane	75-00-3	12	U	12	32	U	32
Bromoethene	593-60-2	12	U	12	52	U	52
Trichlorofluoromethane	75-69-4	12	U	12	67	U	67
1,1-Dichloroethene	75-35-4	12	U	12	48	U	48
3-Chloropropene	107-05-1	30	U	30	94	U	94
Methyl tert-Butyl Ether	1634-04-4	30	U	30	110	U	110
trans-1,2-Dichloroethene	156-60-5	12	U	12	48	U	48
n-Hexane	110-54-3	30	U	30	110	U	110
1,1-Dichloroethane	75-34-3	12	U	12	49	U	49
1,2-Dichloroethene (total)	540-59-0	12	U	12	48	U	48
cis-1,2-Dichloroethene	156-59-2	12	U	12	48	U	48
Chloroform	67-66-3	12	U	12	59	U	59
1,1,1-Trichloroethane	71-55-6	12	U	12	65	U	65
Cyclohexane	110-82-7	12	U	12	41	U	41
Carbon Tetrachloride	56-23-5	12	U	12	75	U	75
2,2,4-Trimethylpentane	540-84-1	12	U	12	56	U	56
Benzene	71-43-2	12	U	12	38	U	38
1,2-Dichloroethane	107-06-2	12	U	12	49	U	49
n-Heptane	142-82-5	12	U	12	49	U	49
Trichloroethene	79-01-6	2000		12	11000		64
1,2-Dichloropropane	78-87-5	12	U	12	55	U	55
Bromodichloromethane	75-27-4	12	U	12	80	U	80
cis-1,3-Dichloropropene	10061-01-5	12	U	12	54	U	54
Toluene	108-88-3	12	U	12	45	U	45
trans-1,3-Dichloropropene	10061-02-6	12	U	12	54	U	54
1,1,2-Trichloroethane	79-00-5	12	U	12	65	U	65
Tetrachloroethene	127-18-4	12	U	12	81	U	81
Dibromochloromethane	124-48-1	12	U	12	100	U	100

TO-14/15
Result Summary

CLIENT SAMPLE NO.

031406-DUP

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661786

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	12	U	12	92	U	92
Ethylbenzene	100-41-4	12	U	12	52	U	52
Xylene (m,p)	1330-20-7	30	U	30	130	U	130
Xylene (o)	95-47-6	12	U	12	52	U	52
Xylene (total)	1330-20-7	12	U	12	52	U	52
Bromoform	75-25-2	12	U	12	120	U	120
1,1,2,2-Tetrachloroethane	79-34-5	12	U	12	82	U	82
4-Ethyltoluene	822-96-8	12	U	12	59	U	59
1,3,5-Trimethylbenzene	108-67-8	12	U	12	59	U	59

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-6

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661787

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.85		0.50	4.2		2.5
1,2-Dichlorotetrafluoroethane	76-14-2	0.20	U	0.20	1.4	U	1.4
Vinyl Chloride	75-01-4	0.20	U	0.20	0.51	U	0.51
1,3-Butadiene	106-99-0	0.50	U	0.50	1.1	U	1.1
Bromomethane	74-83-9	0.20	U	0.20	0.78	U	0.78
Chloroethane	75-00-3	0.20	U	0.20	0.53	U	0.53
Bromoethene	593-60-2	0.20	U	0.20	0.87	U	0.87
Trichlorofluoromethane	75-69-4	0.40		0.20	2.2		1.1
1,1-Dichloroethene	75-35-4	0.20	U	0.20	0.79	U	0.79
3-Chloropropene	107-05-1	0.50	U	0.50	1.6	U	1.6
Methyl tert-Butyl Ether	1634-04-4	0.50	U	0.50	1.8	U	1.8
trans-1,2-Dichloroethene	156-60-5	0.20	U	0.20	0.79	U	0.79
n-Hexane	110-54-3	6.4		0.50	23		1.8
1,1-Dichloroethane	75-34-3	0.20	U	0.20	0.81	U	0.81
1,2-Dichloroethene (total)	540-59-0	0.20	U	0.20	0.79	U	0.79
cis-1,2-Dichloroethene	156-59-2	0.20	U	0.20	0.79	U	0.79
Chloroform	67-66-3	0.20	U	0.20	0.98	U	0.98
1,1,1-Trichloroethane	71-55-6	0.20	U	0.20	1.1	U	1.1
Cyclohexane	110-82-7	1.2		0.20	4.1		0.69
Carbon Tetrachloride	56-23-5	0.20	U	0.20	1.3	U	1.3
2,2,4-Trimethylpentane	540-84-1	0.20	U	0.20	0.93	U	0.93
Benzene	71-43-2	2.6		0.20	8.3		0.64
1,2-Dichloroethane	107-06-2	0.20	U	0.20	0.81	U	0.81
n-Heptane	142-82-5	5.5		0.20	23		0.82
Trichloroethene	79-01-6	35		0.20	190		1.1
1,2-Dichloropropane	78-87-5	0.20	U	0.20	0.92	U	0.92
Bromodichloromethane	75-27-4	0.20	U	0.20	1.3	U	1.3
cis-1,3-Dichloropropene	10061-01-5	0.20	U	0.20	0.91	U	0.91
Toluene	108-88-3	15		0.20	57		0.75
trans-1,3-Dichloropropene	10061-02-6	0.20	U	0.20	0.91	U	0.91
1,1,2-Trichloroethane	79-00-5	0.20	U	0.20	1.1	U	1.1
Tetrachloroethene	127-18-4	0.92		0.20	6.2		1.4
Dibromochloromethane	124-48-1	0.20	U	0.20	1.7	U	1.7

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-6

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661787

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.20	U	0.20	1.5	U	1.5
Ethylbenzene	100-41-4	2.9		0.20	13		0.87
Xylene (m,p)	1330-20-7	12		0.50	52		2.2
Xylene (o)	95-47-6	4.0		0.20	17		0.87
Xylene (total)	1330-20-7	16		0.20	69		0.87
Bromoform	75-25-2	0.20	U	0.20	2.1	U	2.1
1,1,2,2-Tetrachloroethane	79-34-5	0.20	U	0.20	1.4	U	1.4
4-Ethyltoluene	622-96-8	0.20	U	0.20	0.98	U	0.98
1,3,5-Trimethylbenzene	108-67-8	0.20	U	0.20	0.98	U	0.98

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-7

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661789

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	100	U	100	490	U	490
1,2-Dichlorotetrafluoroethane	76-14-2	40	U	40	280	U	280
Vinyl Chloride	75-01-4	40	U	40	100	U	100
1,3-Butadiene	106-99-0	100	U	100	220	U	220
Bromomethane	74-83-9	40	U	40	160	U	160
Chloroethane	75-00-3	40	U	40	110	U	110
Bromoethene	593-60-2	40	U	40	170	U	170
Trichlorofluoromethane	75-69-4	40	U	40	220	U	220
1,1-Dichloroethene	75-35-4	40	U	40	160	U	160
3-Chloropropene	107-05-1	100	U	100	310	U	310
Methyl tert-Butyl Ether	1634-04-4	100	U	100	360	U	360
trans-1,2-Dichloroethene	156-60-5	40	U	40	160	U	160
n-Hexane	110-54-3	100	U	100	350	U	350
1,1-Dichloroethane	75-34-3	40	U	40	160	U	160
1,2-Dichloroethene (total)	540-59-0	40	U	40	160	U	160
cis-1,2-Dichloroethene	156-59-2	40	U	40	160	U	160
Chloroform	67-66-3	40	U	40	200	U	200
1,1,1-Trichloroethane	71-55-6	40	U	40	220	U	220
Cyclohexane	110-82-7	40	U	40	140	U	140
Carbon Tetrachloride	56-23-5	40	U	40	250	U	250
2,2,4-Trimethylpentane	540-84-1	40	U	40	190	U	190
Benzene	71-43-2	40	U	40	130	U	130
1,2-Dichloroethane	107-06-2	40	U	40	160	U	160
n-Heptane	142-82-5	40	U	40	160	U	160
Trichloroethene	79-01-6	5900		40	32000		210
1,2-Dichloropropane	78-87-5	40	U	40	180	U	180
Bromodichloromethane	75-27-4	40	U	40	270	U	270
cis-1,3-Dichloropropene	10061-01-5	40	U	40	180	U	180
Toluene	108-88-3	40	U	40	150	U	150
trans-1,3-Dichloropropene	10061-02-6	40	U	40	180	U	180
1,1,2-Trichloroethane	79-00-5	40	U	40	220	U	220
Tetrachloroethene	127-18-4	40	U	40	270	U	270
Dibromochloromethane	124-48-1	40	U	40	340	U	340

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-7

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661789

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	40	U	40	310	U	310
Ethylbenzene	100-41-4	40	U	40	170	U	170
Xylene (m,p)	1330-20-7	100	U	100	430	U	430
Xylene (o)	95-47-6	40	U	40	170	U	170
Xylene (total)	1330-20-7	40	U	40	170	U	170
Bromoform	75-25-2	40	U	40	410	U	410
1,1,2,2-Tetrachloroethane	79-34-5	40	U	40	270	U	270
4-Ethyltoluene	622-96-8	40	U	40	200	U	200
1,3,5-Trimethylbenzene	108-67-8	40	U	40	200	U	200

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-8

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661791

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	4.0	U	4.0	20	U	20
1,2-Dichlorotetrafluoroethane	76-14-2	1.6	U	1.6	11	U	11
Vinyl Chloride	75-01-4	1.6	U	1.6	4.1	U	4.1
1,3-Butadiene	106-99-0	4.0	U	4.0	8.8	U	8.8
Bromomethane	74-83-9	1.6	U	1.6	6.2	U	6.2
Chloroethane	75-00-3	1.6	U	1.6	4.2	U	4.2
Bromoethene	593-60-2	1.6	U	1.6	7.0	U	7.0
Trichlorofluoromethane	75-69-4	1.6	U	1.6	9.0	U	9.0
1,1-Dichloroethene	75-35-4	1.6	U	1.6	6.3	U	6.3
3-Chloropropene	107-05-1	4.0	U	4.0	13	U	13
Methyl tert-Butyl Ether	1634-04-4	4.0	U	4.0	14	U	14
trans-1,2-Dichloroethene	156-60-5	1.6	U	1.6	6.3	U	6.3
n-Hexane	110-54-3	66		4.0	230		14
1,1-Dichloroethane	75-34-3	1.6	U	1.6	6.5	U	6.5
1,2-Dichloroethene (total)	540-59-0	1.6	U	1.6	6.3	U	6.3
cis-1,2-Dichloroethene	156-59-2	1.6	U	1.6	6.3	U	6.3
Chloroform	67-66-3	1.6	U	1.6	7.8	U	7.8
1,1,1-Trichloroethane	71-55-6	1.6	U	1.6	8.7	U	8.7
Cyclohexane	110-82-7	9.2		1.6	32		5.5
Carbon Tetrachloride	56-23-5	1.6	U	1.6	10	U	10
2,2,4-Trimethylpentane	540-84-1	1.6	U	1.6	7.5	U	7.5
Benzene	71-43-2	15		1.6	48		5.1
1,2-Dichloroethane	107-06-2	1.6	U	1.6	6.5	U	6.5
n-Heptane	142-82-5	44		1.6	180		6.6
Trichloroethene	79-01-6	200		1.6	1100		8.6
1,2-Dichloropropane	78-87-5	1.6	U	1.6	7.4	U	7.4
Bromodichloromethane	75-27-4	1.6	U	1.6	11	U	11
cis-1,3-Dichloropropene	10061-01-5	1.6	U	1.6	7.3	U	7.3
Toluene	108-88-3	22		1.6	83		6.0
trans-1,3-Dichloropropene	10061-02-6	1.6	U	1.6	7.3	U	7.3
1,1,2-Trichloroethane	79-00-5	1.6	U	1.6	8.7	U	8.7
Tetrachloroethene	127-18-4	1.6	U	1.6	11	U	11
Dibromochloromethane	124-48-1	1.6	U	1.6	14	U	14

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SS-8

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661791

Date Analyzed: 03/28/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.6	U	1.6	12	U	12
Ethylbenzene	100-41-4	1.7		1.6	7.4		6.9
Xylene (m,p)	1330-20-7	5.6		4.0	24		17
Xylene (o)	95-47-6	1.6		1.6	6.9		6.9
Xylene (total)	1330-20-7	7.4		1.6	32		6.9
Bromoform	75-25-2	1.6	U	1.6	17	U	17
1,1,2,2-Tetrachloroethane	79-34-5	1.6	U	1.6	11	U	11
4-Ethyltoluene	622-96-8	1.6	U	1.6	7.9	U	7.9
1,3,5-Trimethylbenzene	108-67-8	1.6	U	1.6	7.9	U	7.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.
IA-1

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661777

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.69		0.040	3.4		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.34		0.080	0.75		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.46		0.040	2.6		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.051		0.040	0.18		0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.18
n-Hexane	110-54-3	1.5		0.080	5.3		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.18	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.084		0.040	0.46		0.22
Cyclohexane	110-82-7	0.31		0.040	1.1		0.14
Carbon Tetrachloride	56-23-5	0.10		0.040	0.63		0.25
2,2,4-Trimethylpentane	540-84-1	0.29		0.040	1.4		0.19
Benzene	71-43-2	1.1		0.040	3.5		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.43		0.040	1.8		0.16
Trichloroethene	79-01-6	0.64		0.040	3.4		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	4.2	E	0.040	16	E	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-1

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661777

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.91		0.040	4.0		0.17
Xylene (m,p)	1330-20-7	3.8		0.040	17		0.17
Xylene (o)	95-47-6	1.0		0.040	4.3		0.17
Xylene (total)	1330-20-7	5.1	E	0.040	22	E	0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.83		0.040	4.1		0.20
1,3,5-Trimethylbenzene	108-67-8	0.32		0.040	1.6		0.20

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-2

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661779

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.75		0.040	3.7		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.52		0.080	1.2		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.39		0.040	2.2		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	1.6		0.080	5.6		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.086		0.040	0.47		0.22
Cyclohexane	110-82-7	0.51		0.040	1.8		0.14
Carbon Tetrachloride	56-23-5	0.13		0.040	0.82		0.25
2,2,4-Trimethylpentane	540-84-1	0.41		0.040	1.9		0.19
Benzene	71-43-2	1.1		0.040	3.5		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	5.4	E	0.040	22	E	0.16
Trichloroethene	79-01-6	2.1		0.040	11		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	33	E	0.040	120	E	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-2

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661779

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	1.0		0.040	4.3		0.17
Xylene (m,p)	1330-20-7	4.0	E	0.040	17	E	0.17
Xylene (o)	95-47-6	1.1		0.040	4.8		0.17
Xylene (total)	1330-20-7	5.5	E	0.040	24	E	0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	1.0		0.040	4.9		0.20
1,3,5-Trimethylbenzene	108-67-8	0.45		0.040	2.2		0.20

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-3

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661781

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.70		0.040	3.5		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.62		0.080	1.4		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.35		0.040	2.0		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	1.2		0.040	4.3		0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	5.8	E	0.080	20	E	0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.29		0.040	1.6		0.22
Cyclohexane	110-82-7	1.1		0.040	3.8		0.14
Carbon Tetrachloride	56-23-5	0.12		0.040	0.75		0.25
2,2,4-Trimethylpentane	540-84-1	2.0		0.040	9.3		0.19
Benzene	71-43-2	3.7		0.040	12		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	1.7		0.040	7.0		0.16
Trichloroethene	79-01-6	2.3		0.040	12		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	11	E	0.040	41	E	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.076		0.040	0.52		0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-3

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661781

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	1.7		0.040	7.4		0.17
Xylene (m,p)	1330-20-7	7.0	E	0.040	30	E	0.17
Xylene (o)	95-47-6	2.4		0.040	10		0.17
Xylene (total)	1330-20-7	9.9	E	0.040	43	E	0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	1.6		0.040	7.9		0.20
1,3,5-Trimethylbenzene	108-67-8	0.57		0.040	2.8		0.20

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-4

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661783

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.65		0.040	3.2		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.080	U	0.080	0.18	U	0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.41		0.040	2.3		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.18
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.46		0.080	1.6		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.18
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.056		0.040	0.31		0.22
Cyclohexane	110-82-7	0.12		0.040	0.41		0.14
Carbon Tetrachloride	56-23-5	0.11		0.040	0.69		0.25
2,2,4-Trimethylpentane	540-84-1	0.16		0.040	0.75		0.19
Benzene	71-43-2	1.2		0.040	3.8		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.15		0.040	0.61		0.18
Trichloroethene	79-01-6	0.48		0.040	2.6		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	1.5		0.040	5.7		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

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Result Summary

CLIENT SAMPLE NO.

IA-4

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661783

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.46		0.040	2.0		0.17
Xylene (m,p)	1330-20-7	1.7		0.040	7.4		0.17
Xylene (o)	95-47-6	0.50		0.040	2.2		0.17
Xylene (total)	1330-20-7	2.4		0.040	10		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.14		0.040	0.69		0.20
1,3,5-Trimethylbenzene	108-67-8	0.053		0.040	0.26		0.20

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Result Summary

CLIENT SAMPLE NO.

IA-5

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661785

Date Analyzed: 03/27/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.74		0.080	3.7		0.40
1,2-Dichlorotetrafluoroethane	76-14-2	0.080	U	0.080	0.56	U	0.56
Vinyl Chloride	75-01-4	0.16	U	0.16	0.41	U	0.41
1,3-Butadiene	106-99-0	0.16	U	0.16	0.35	U	0.35
Bromomethane	74-83-9	0.16	U	0.16	0.62	U	0.62
Chloroethane	75-00-3	0.16	U	0.16	0.42	U	0.42
Bromoethene	593-60-2	0.16	U	0.16	0.70	U	0.70
Trichlorofluoromethane	75-69-4	0.38		0.080	2.1		0.45
1,1-Dichloroethene	75-35-4	0.080	U	0.080	0.32	U	0.32
3-Chloropropene	107-05-1	0.16	U	0.16	0.50	U	0.50
Methyl tert-Butyl Ether	1634-04-4	0.24		0.080	0.87		0.29
trans-1,2-Dichloroethene	156-60-5	0.080	U	0.080	0.32	U	0.32
n-Hexane	110-54-3	3.6		0.16	13		0.56
1,1-Dichloroethane	75-34-3	0.080	U	0.080	0.32	U	0.32
1,2-Dichloroethene (total)	540-59-0	0.080	U	0.080	0.32	U	0.32
cis-1,2-Dichloroethene	156-59-2	0.080	U	0.080	0.32	U	0.32
Chloroform	67-66-3	0.080	U	0.080	0.39	U	0.39
1,1,1-Trichloroethane	71-55-6	0.21		0.080	1.1		0.44
Cyclohexane	110-82-7	4.5		0.080	15		0.28
Carbon Tetrachloride	56-23-5	0.12		0.080	0.75		0.50
2,2,4-Trimethylpentane	540-84-1	1.2		0.080	5.6		0.37
Benzene	71-43-2	2.3		0.080	7.3		0.26
1,2-Dichloroethane	107-06-2	0.16	U	0.16	0.65	U	0.65
n-Heptane	142-82-5	2.7		0.080	11		0.33
Trichloroethene	79-01-6	4.3		0.080	23		0.43
1,2-Dichloropropane	78-87-5	0.16	U	0.16	0.74	U	0.74
Bromodichloromethane	75-27-4	0.080	U	0.080	0.54	U	0.54
cis-1,3-Dichloropropene	10061-01-5	0.080	U	0.080	0.36	U	0.36
Toluene	108-88-3	12	E	0.080	45	E	0.30
trans-1,3-Dichloropropene	10061-02-6	0.080	U	0.080	0.36	U	0.36
1,1,2-Trichloroethane	79-00-5	0.080	U	0.080	0.44	U	0.44
Tetrachloroethene	127-18-4	0.088		0.080	0.60		0.54
Dibromochloromethane	124-48-1	0.080	U	0.080	0.68	U	0.68

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-5

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661785

Date Analyzed: 03/27/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.080	U	0.080	0.61	U	0.61
Ethylbenzene	100-41-4	1.6		0.080	6.9		0.35
Xylene (m,p)	1330-20-7	5.8		0.080	25		0.35
Xylene (o)	95-47-6	1.9		0.080	8.3		0.35
Xylene (total)	1330-20-7	8.1	E	0.080	35	E	0.35
Bromoform	75-25-2	0.080	U	0.080	0.83	U	0.83
1,1,2,2-Tetrachloroethane	79-34-5	0.080	U	0.080	0.55	U	0.55
4-Ethyltoluene	622-96-8	1.6		0.080	7.9		0.39
1,3,5-Trimethylbenzene	108-67-8	0.69		0.080	3.4		0.39

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-6

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661788

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.54		0.040	2.7		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.21		0.080	0.46		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.31		0.040	1.7		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.18
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.21		0.080	0.74		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.18	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.16		0.040	0.87		0.22
Cyclohexane	110-82-7	0.10		0.040	0.34		0.14
Carbon Tetrachloride	56-23-5	0.11		0.040	0.69		0.25
2,2,4-Trimethylpentane	540-84-1	0.077		0.040	0.36		0.19
Benzene	71-43-2	1.8		0.040	5.8		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.18		0.040	0.74		0.18
Trichloroethene	79-01-6	2.3		0.040	12		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	1.2		0.040	4.5		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-6

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661788

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.19		0.040	0.83		0.17
Xylene (m,p)	1330-20-7	0.59		0.040	2.6		0.17
Xylene (o)	95-47-6	0.16		0.040	0.69		0.17
Xylene (total)	1330-20-7	0.80		0.040	3.5		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.13		0.040	0.64		0.20
1,3,5-Trimethylbenzene	108-67-8	0.059		0.040	0.29		0.20

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-7

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661790

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.68		0.040	3.4		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.23		0.080	0.51		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.82		0.040	3.5		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	2.3		0.080	8.1		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.040	U	0.040	0.20	U	0.20
1,1,1-Trichloroethane	71-55-6	0.10		0.040	0.55		0.22
Cyclohexane	110-82-7	0.63		0.040	2.2		0.14
Carbon Tetrachloride	56-23-5	0.13		0.040	0.82		0.25
2,2,4-Trimethylpentane	540-84-1	0.48		0.040	2.2		0.19
Benzene	71-43-2	1.1		0.040	3.5		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	3.5		0.040	14		0.16
Trichloroethene	79-01-6	3.0		0.040	16		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	15	E	0.040	57	E	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.057		0.040	0.39		0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-7

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661790

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	1.1		0.040	4.8		0.17
Xylene (m,p)	1330-20-7	4.6	E	0.040	20	E	0.17
Xylene (o)	95-47-6	1.2		0.040	5.2		0.17
Xylene (total)	1330-20-7	6.2	E	0.040	27	E	0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	1.4		0.040	6.9		0.20
1,3,5-Trimethylbenzene	108-67-8	0.49		0.040	2.4		0.20

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-8

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661792

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.62		0.040	3.1		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.26		0.080	0.58		0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.41		0.040	2.3		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.078		0.040	0.28		0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	1.4		0.080	4.9		0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.049		0.040	0.24		0.20
1,1,1-Trichloroethane	71-55-6	0.094		0.040	0.51		0.22
Cyclohexane	110-82-7	0.36		0.040	1.2		0.14
Carbon Tetrachloride	56-23-5	0.12		0.040	0.75		0.25
2,2,4-Trimethylpentane	540-84-1	0.38		0.040	1.8		0.19
Benzene	71-43-2	1.1		0.040	3.5		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.56		0.040	2.3		0.16
Trichloroethene	79-01-6	1.5		0.040	8.1		0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	8.7	E	0.040	33	E	0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

IA-8

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661792

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	1.1		0.040	4.8		0.17
Xylene (m,p)	1330-20-7	4.3	E	0.040	19	E	0.17
Xylene (o)	95-47-6	1.2		0.040	5.2		0.17
Xylene (total)	1330-20-7	5.8	E	0.040	25	E	0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	1.2		0.040	5.9		0.20
1,3,5-Trimethylbenzene	108-67-8	0.55		0.040	2.7		0.20

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

031406-AMB

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661793

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	0.57		0.040	2.8		0.20
1,2-Dichlorotetrafluoroethane	76-14-2	0.040	U	0.040	0.28	U	0.28
Vinyl Chloride	75-01-4	0.080	U	0.080	0.20	U	0.20
1,3-Butadiene	106-99-0	0.080	U	0.080	0.18	U	0.18
Bromomethane	74-83-9	0.080	U	0.080	0.31	U	0.31
Chloroethane	75-00-3	0.080	U	0.080	0.21	U	0.21
Bromoethene	593-60-2	0.080	U	0.080	0.35	U	0.35
Trichlorofluoromethane	75-69-4	0.30		0.040	1.7		0.22
1,1-Dichloroethene	75-35-4	0.040	U	0.040	0.16	U	0.16
3-Chloropropene	107-05-1	0.080	U	0.080	0.25	U	0.25
Methyl tert-Butyl Ether	1634-04-4	0.040	U	0.040	0.14	U	0.14
trans-1,2-Dichloroethene	156-60-5	0.040	U	0.040	0.16	U	0.16
n-Hexane	110-54-3	0.080	U	0.080	0.28	U	0.28
1,1-Dichloroethane	75-34-3	0.040	U	0.040	0.16	U	0.16
1,2-Dichloroethene (total)	540-59-0	0.040	U	0.040	0.16	U	0.16
cis-1,2-Dichloroethene	156-59-2	0.040	U	0.040	0.16	U	0.16
Chloroform	67-66-3	0.045		0.040	0.22		0.20
1,1,1-Trichloroethane	71-55-6	0.040	U	0.040	0.22	U	0.22
Cyclohexane	110-82-7	0.040	U	0.040	0.14	U	0.14
Carbon Tetrachloride	56-23-5	0.11		0.040	0.69		0.25
2,2,4-Trimethylpentane	540-84-1	0.040	U	0.040	0.19	U	0.19
Benzene	71-43-2	0.17		0.040	0.54		0.13
1,2-Dichloroethane	107-06-2	0.080	U	0.080	0.32	U	0.32
n-Heptane	142-82-5	0.040	U	0.040	0.18	U	0.16
Trichloroethene	79-01-6	0.040	U	0.040	0.21	U	0.21
1,2-Dichloropropane	78-87-5	0.080	U	0.080	0.37	U	0.37
Bromodichloromethane	75-27-4	0.040	U	0.040	0.27	U	0.27
cis-1,3-Dichloropropene	10061-01-5	0.040	U	0.040	0.18	U	0.18
Toluene	108-88-3	0.14		0.040	0.53		0.15
trans-1,3-Dichloropropene	10061-02-6	0.040	U	0.040	0.18	U	0.18
1,1,2-Trichloroethane	79-00-5	0.040	U	0.040	0.22	U	0.22
Tetrachloroethene	127-18-4	0.040	U	0.040	0.27	U	0.27
Dibromochloromethane	124-48-1	0.040	U	0.040	0.34	U	0.34

TO-14/15
Result Summary

CLIENT SAMPLE NO.

031406-AMB

Lab Name: STL Burlington

SDG Number: NY113231

Case Number:

Sample Matrix: Air

Lab Sample No.: 661793

Date Analyzed: 03/25/2006

Date Received: 03/17/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	0.040	U	0.040	0.31	U	0.31
Ethylbenzene	100-41-4	0.040	U	0.040	0.17	U	0.17
Xylene (m,p)	1330-20-7	0.057		0.040	0.25		0.17
Xylene (o)	95-47-6	0.040	U	0.040	0.17	U	0.17
Xylene (total)	1330-20-7	0.061		0.040	0.26		0.17
Bromoform	75-25-2	0.040	U	0.040	0.41	U	0.41
1,1,2,2-Tetrachloroethane	79-34-5	0.040	U	0.040	0.27	U	0.27
4-Ethyltoluene	622-96-8	0.040	U	0.040	0.20	U	0.20
1,3,5-Trimethylbenzene	108-67-8	0.040	U	0.040	0.20	U	0.20

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AIR CANISTER CERTIFICATION REPORT

Date: 3/8/06 Batch ID: GAGA Cleaning System ID: arep

Analyst: MTP Canister ID/Vacuum: 247 / -30.4 Time/Date Off System: 1015 / 3/8/06

Supporting Documentation:

Certify for Low Level

- ____ Initial Calibration (ICAL)
- ____ Instrument Run Logs
- ____ BFB Tune Report
- ____ Continuing Calibration Verification (CCV)
  - Chromatogram
  - Quantiation Report
  - Average RF & %D Summary
- ____ Method Blank Report
  - Chromatogram
  - Quantiation Report
  - Target Summary (clp.rp)
- ____ Laboratory Control Sample Report
  - Quantiation Report
  - Percent Recovery Summary (spike.rp)
- ____ Certified Canister Report
  - Chromatogram
  - Quantitation Report
  - Target Summary (clp.rp)
  - Internal Standard Area and RT Summary (istd.rp)

Associated Canisters:

Port 1	2612	Port 5	3407	Port 9	4002	Port 13	
Port 2	3389	Port 6	2717	Port 10	2867	Port 14	
Port 3	3303	Port 7	2522	Port 11	4001	Port 15	
Port 4	2670	Port 8	4005	Port 12	4003	Port 16	

Comments:

FAI023:04.13.05:2
STL Burlington

GC/MS INSTRUMENT RUN LOG
Air Lab Instrument ID: G

Batch / Method ID: GAGAT015
Start Date: 3/7/06 Time: 2320
Close Date: 3/8/06 Time: 2320
Calibration Std. Lot # AT02230603
Internal Std. Lot # AT0200606
ICV/LCS Lot # AT02270609

Instrument Performance Check (ICAL or CCAL)
✓ Tune Standard ✓ RT & Ratios Updated
✓ RF Summary ✓ Internal Std. Response
Room Temp °C Barometric Pressure 3022 "Hg

Injection Time	Lab ID	Summa Can ID	ETR	Inlet #	Volume (mL)	Dilution Factor	Internal Std.	Result Conc.	Analyst	Comments
2320	GAG03PV									
0039	GAG10AV			—	—	NA	-	-		
0105	GAG10AQ			1	250		✓	✓		
0147	GAG10AQD			1	250		✓	↓		
0229	GAG10AQ2			1	250		✓	↓		
0438	GAG10AQ3			1	250		✓	↓		
0521	GAG10AQ4			1	250		✓	✓		
0603	GAGB1A			~~2~~ 1	250		✓	✓		
0646	GAGB02A MBK			~~3~~ 2	500		✓	✓		
0930	3381	3381		2	500		✓	✓		
1013	2619	2619		5	500		✓	✓	NTP	C
1056	3141	3141		6	500		✓	↑		
1140	3136	3136		7	500		✓	✓		TOL 0.013
1307	2619 I2	2619		8	500		✓	✓		C
1223	2717	2717		6	500		✓	✓		C
1430	4008	4008		9	500		✓	✗		TOL 0.013
1514	4010	4010		5			✓	✓		C
1558	4009	4009		6			✓	✓		
1641	4011	4011		7			✓	✓		
1725	4015	4015		8			✓	✓		
1809	4012	4012		9			✓	✓		
1852	4013	4013		10			✓	✓		
1935	4014	4014		11			✓	✓		
2018	4016	4016		12			✓	✓		
				13			✓	✓		

3/8/06

Legend: C=Complete • R=Reanalyze • ↑ = High • ↓= Low • ✓=Reviewed and Acceptable

STL Burlington Data Qualifier Definitions

Organic

U: Compound analyzed but not detected at a concentration above the reporting limit.

J: Estimated value.

N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.

P: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified in project QA plan, the lower of the two values is reported on the Form I.

C: Pesticide result whose identification has been confirmed by GC/MS.

B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.

E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.

D: Concentrations identified from analysis of the sample at a secondary dilution.

A: Tentatively identified compound is a suspected aldol condensation product.

X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

E: Reported value is estimated due to the presence of interference.

N: Matrix spike sample recovery is not within control limits.

* Duplicate sample analysis is not within control limits.

B: The result reported is less than the reporting limit but greater than the instrument detection limit.

U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

Soil Vapor Sampling

SEVERN TRENT STL®

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

Tel: 802 655 1203 Fax: 802 655 1248
www.stl-inc.com

May 17, 2006

Mr. Mark Distler
O'Brien & Gere Laboratories
5000 Brittonfield Parkway
PO Box 4942
Syracuse, NY 13221

Re: Laboratory Project No. 26000
Case: 26000; SDG: NY114172

Dear Mr. Distler:

Enclosed are the analytical results for the samples that were received by STL Burlington on May 5th, 2006. Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 05/05/06 ETR No: 114172		
668349	SV-1	05/03/06	Air
668350	SV-2	05/03/06	Air
668351	SV-4	05/03/06	Air
668352	SV-5	05/03/06	Air
668353	SV-DUP	05/03/06	Air
668354	SV-7	05/04/06	Air
668355	SV-8	05/04/06	Air
668356	SV-9	05/04/06	Air
668357	SV-10	05/04/06	Air
668358	SV-6	05/04/06	Air

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

The volatile organics analyses for the samples in this delivery group were accomplished at dilution based on screen analyses that showed the presence of non-target analytes in concentrations sufficient to interfere with the instrumentation in full strength acquisitions.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,

Don Dawicki
Project Manager

Enclosure

STL Burlington Data Qualifier Definitions

Organic

U: Compound analyzed but not detected at a concentration above the reporting limit.

J: Estimated value.

N: Indicates presumptive evidence of a compound. This flag is used only for tentatively identified compounds (TICs) where the identification of a compound is based on a mass spectral library search.

P: SW-846: Greater than 40% difference for detected concentrations between two GC columns. Unless otherwise specified the higher of the two values is reported on the Form I.

CLP SOW: Greater than 25% difference for detected concentrations between two GC columns. Unless otherwise specified the lower of the two values is reported on the Form I.

C: Pesticide result whose identification has been confirmed by GC/MS.

B: Analyte is found in the sample and the associated method blank. The flag is used for tentatively identified compounds as well as positively identified compounds.

E: Compounds whose concentrations exceed the upper limit of the calibration range of the instrument for that specific analysis.

D: Concentrations identified from analysis of the sample at a secondary dilution.

A: Tentatively identified compound is a suspected aldol condensation product.

X,Y,Z: Laboratory defined flags that may be used alone or combined, as needed. If used, the description of the flag is defined in the project narrative.

Inorganic/Metals

E: Reported value is estimated due to the presence of interference.

N: Matrix spike sample recovery is not within control limits.

* Duplicate sample analysis is not within control limits.

B: The result reported is less than the reporting limit but greater than the instrument detection limit.

U: Analyte was analyzed for but not detected above the reporting limit.

Method Codes:

P	ICP-AES
MS	ICP-MS
CV	Cold Vapor AA
AS	Semi-Automated Spectrophotometric

SEVERN TRENT STL
SEVERN TRENT LABORATORIES, INC.

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446 Tel 802 655 1203

CHAIN OF CUSTODY RECORD

Report to:
Company: O'Brien & Gere
Address: 5000 Brittonfield Pkwy
E. Syracuse NY 13057
Contact: Mark Distler
Phone: 315-437-6100
Fax: 315-463-7554
Contract/Quote: Site 25463 soil vapor

Invoice to:
Company: SAME
Address:
Contact:
Phone:
Fax:

Lab Use Only
Due Date:

Temp. of coolers when received (C°):

1	2	3	4	5

Custody Seal N / Y
Intact N / Y
Screened For Radioactivity ☐

Sampler's Name: Christopher Finke
Sampler's Signature:

Proj. No.: 26000
Project Name: Accurate Die
No/Type of Containers²: 10 6L Summa

ANALYSIS REQUESTED: Standard TO-15

Matrix¹	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	VOA	A/G 1 Lt.	250 ml	P/O	Standard TO-15										Lab/Sample ID (Lab Use Only)
Air	5/3/06	0923	✓		SV-1 (Can# 4013)				✓	✓										
	5/3/06	0947	✓		SV-2 (can# 2567)				✓											
	5/3/06	1233	✓		SV-4 (can# 3625)				✓											
	5/3/06	1241	✓		SV-5 (can# 2968)				✓											
	5/3/06	1241	✓		SV-DUP (can # 2662)				✓											
	5/4/06	0944	✓		SV-7 (can # 3661)				✓											
	5/4/06	1047 [illegible]	✓		SV-8 (can # 4171)				✓											
	5/4/06	1054	✓		SV-9 (can # 2644)				✓											
	5/4/06	1100	✓		SV-10 (can # 3199)				✓											
	5/4/06	1107	✓		SV-6 (can # 3343)				✓	✓										

Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
	5/4/06	1600	Fed Ex	5/4/06	1600
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time
				5-5-06	0945
Relinquished by: (Signature)	Date	Time	Received by: (Signature	Date	Time

Remarks

Client's delivery of samples constitutes acceptance of Severn Trent Laboratories terms and conditions contained in the Price Schedule.

¹Matrix WW - Wastewater W - Water S - Soil L - Liquid A - Air bag C - Charcoal Tube SL - Sludge O - Oil
²Container VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth P/O - Plastic or other 6L Summa

STL cannot accept verbal changes. Please Fax written changes to (802) 655-1248

STLB234-200 (12/02)

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-1

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668349

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.6		2.5	9.2		8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	11		1.0	44		4.0
cis-1,2-Dichloroethene	156-59-2	11		1.0	44		4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.7		1.0	5.9		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	2.7		1.0	8.6		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	4.5		1.0	18		4.1
Trichloroethene	79-01-6	6.8		1.0	37		5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	18		1.0	68		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-1

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668349

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	3.8		1.0	17		4.3
Xylene (m,p)	1330-20-7	16		2.5	69		11
Xylene (o)	95-47-6	5.4		1.0	23		4.3
Xylene (total)	1330-20-7	21		1.0	91		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	2.8		1.0	14		4.9
1,3,5-Trimethylbenzene	108-67-8	1.2		1.0	5.9		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-2

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668350

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.6		2.5	9.2		8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	3.3		1.0	11		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	3.8		1.0	12		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.7		1.0	7.0		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.8
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	17		1.0	64		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-2

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668350

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	1.5		1.0	6.5		4.3
Xylene (m,p)	1330-20-7	5.3		2.5	23		11
Xylene (o)	95-47-6	1.9		1.0	8.3		4.3
Xylene (total)	1330-20-7	7.1		1.0	31		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	1.0	U	1.0	4.9	U	4.9
1,3,5-Trimethylbenzene	108-67-8	1.0	U	1.0	4.9	U	4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-4

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668351

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.0	U	1.0	3.4	U	3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	1.0	U	1.0	3.2	U	3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.0	U	1.0	4.1	U	4.1
Trichloroethene	79-01-6	6.8		1.0	37		5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	5.8		1.0	22		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-4

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668351

Date Analyzed: 05/15/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	1.5		1.0	6.5		4.3
Xylene (m,p)	1330-20-7	5.2		2.5	23		11
Xylene (o)	95-47-6	1.6		1.0	6.9		4.3
Xylene (total)	1330-20-7	6.6		1.0	29		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	1.0		1.0	4.9		4.9
1,3,5-Trimethylbenzene	108-67-8	1.0	U	1.0	4.9	U	4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-5

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668352

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.0	U	1.0	3.4	U	3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	1.6		1.0	5.1		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.5		1.0	6.1		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	19		1.0	72		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	6.5	U	8.5

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TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-5

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668352

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	3.3		1.0	14		4.3
Xylene (m,p)	1330-20-7	14		2.5	61		11
Xylene (o)	95-47-6	4.6		1.0	20		4.3
Xylene (total)	1330-20-7	18		1.0	78		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	4.2		1.0	21		4.9
1,3,5-Trimethylbenzene	108-67-8	2.2		1.0	11		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-DUP

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668353

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.0	U	1.0	3.4	U	3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	1.8		1.0	5.8		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.3		1.0	5.3		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	17		1.0	64		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-DUP

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668353

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	3.3		1.0	14		4.3
Xylene (m,p)	1330-20-7	14		2.5	61		11
Xylene (o)	95-47-6	4.8		1.0	21		4.3
Xylene (total)	1330-20-7	18		1.0	78		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	3.8		1.0	19		4.9
1,3,5-Trimethylbenzene	108-67-8	1.9		1.0	9.3		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-6

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668358

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.8	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.6		2.5	9.2		8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.1		1.0	3.8		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	8.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	2.9		1.0	9.3		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	3.6		1.0	15		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	19		1.0	72		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

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Result Summary

CLIENT SAMPLE NO.

SV-6

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668358

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	4.2		1.0	18		4.3
Xylene (m,p)	1330-20-7	20		2.5	87		11
Xylene (o)	95-47-6	6.2		1.0	27		4.3
Xylene (total)	1330-20-7	26		1.0	110		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	4.0		1.0	20		4.9
1,3,5-Trimethylbenzene	108-67-8	2.2		1.0	11		4.9

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Result Summary

CLIENT SAMPLE NO.

SV-7

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668354

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.0	U	1.0	3.4	U	3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	2.1		1.0	6.7		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	2.0		1.0	8.2		4.1
Trichloroethene	79-01-6	18		1.0	86		5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	17		1.0	64		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-7

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668354

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	3.7		1.0	16		4.3
Xylene (m,p)	1330-20-7	16		2.5	69		11
Xylene (o)	95-47-6	5.6		1.0	24		4.3
Xylene (total)	1330-20-7	22		1.0	96		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	3.8		1.0	19		4.9
1,3,5-Trimethylbenzene	108-67-8	1.6		1.0	7.9		4.9

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Result Summary

CLIENT SAMPLE NO.

SV-8

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668355

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.1		1.0	3.8		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	1.8		1.0	5.8		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.7		1.0	7.0		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	8.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	16		1.0	60		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

Printed: 05/17/2006 10:30:10 AM

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-8

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668355

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	3.7		1.0	16		4.3
Xylene (m,p)	1330-20-7	17		2.5	74		11
Xylene (o)	95-47-6	5.6		1.0	24		4.3
Xylene (total)	1330-20-7	22		1.0	96		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	3.5		1.0	17		4.9
1,3,5-Trimethylbenzene	108-67-8	2.0		1.0	9.8		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-9

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668356

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.0	U	1.0	4.9	U	4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	1.0	U	1.0	3.4	U	3.4
Carbon Tetrachloride	56-23-5	2.4		1.0	15		6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	2.1		1.0	6.7		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	1.0	U	1.0	4.1	U	4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	20		1.0	75		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-9

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668356

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	4.3		1.0	19		4.3
Xylene (m,p)	1330-20-7	20		2.5	87		11
Xylene (o)	95-47-6	6.6		1.0	29		4.3
Xylene (total)	1330-20-7	26		1.0	110		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	4.0		1.0	20		4.9
1,3,5-Trimethylbenzene	108-67-8	1.9		1.0	9.3		4.9

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-10

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668357

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
Dichlorodifluoromethane	75-71-8	2.5	U	2.5	12	U	12
1,2-Dichlorotetrafluoroethane	76-14-2	1.0	U	1.0	7.0	U	7.0
Vinyl Chloride	75-01-4	1.0	U	1.0	2.6	U	2.6
1,3-Butadiene	106-99-0	2.5	U	2.5	5.5	U	5.5
Bromomethane	74-83-9	1.0	U	1.0	3.9	U	3.9
Chloroethane	75-00-3	1.0	U	1.0	2.6	U	2.6
Bromoethene	593-60-2	1.0	U	1.0	4.4	U	4.4
Trichlorofluoromethane	75-69-4	1.0	U	1.0	5.6	U	5.6
1,1-Dichloroethene	75-35-4	1.0	U	1.0	4.0	U	4.0
3-Chloropropene	107-05-1	2.5	U	2.5	7.8	U	7.8
Methyl tert-Butyl Ether	1634-04-4	2.5	U	2.5	9.0	U	9.0
trans-1,2-Dichloroethene	156-60-5	1.0	U	1.0	4.0	U	4.0
n-Hexane	110-54-3	2.5	U	2.5	8.8	U	8.8
1,1-Dichloroethane	75-34-3	1.0	U	1.0	4.0	U	4.0
1,2-Dichloroethene (total)	540-59-0	1.0	U	1.0	4.0	U	4.0
cis-1,2-Dichloroethene	156-59-2	1.0	U	1.0	4.0	U	4.0
Chloroform	67-66-3	1.4		1.0	6.8		4.9
1,1,1-Trichloroethane	71-55-6	1.0	U	1.0	5.5	U	5.5
Cyclohexane	110-82-7	2.4		1.0	8.3		3.4
Carbon Tetrachloride	56-23-5	1.0	U	1.0	6.3	U	6.3
2,2,4-Trimethylpentane	540-84-1	1.0	U	1.0	4.7	U	4.7
Benzene	71-43-2	3.3		1.0	11		3.2
1,2-Dichloroethane	107-06-2	1.0	U	1.0	4.0	U	4.0
n-Heptane	142-82-5	2.3		1.0	9.4		4.1
Trichloroethene	79-01-6	1.0	U	1.0	5.4	U	5.4
1,2-Dichloropropane	78-87-5	1.0	U	1.0	4.6	U	4.6
Bromodichloromethane	75-27-4	1.0	U	1.0	6.7	U	6.7
cis-1,3-Dichloropropene	10061-01-5	1.0	U	1.0	4.5	U	4.5
Toluene	108-88-3	21		1.0	79		3.8
trans-1,3-Dichloropropene	10061-02-6	1.0	U	1.0	4.5	U	4.5
1,1,2-Trichloroethane	79-00-5	1.0	U	1.0	5.5	U	5.5
Tetrachloroethene	127-18-4	1.0	U	1.0	6.8	U	6.8
Dibromochloromethane	124-48-1	1.0	U	1.0	8.5	U	8.5

TO-14/15
Result Summary

CLIENT SAMPLE NO.

SV-10

Lab Name: STL Burlington

SDG Number: NY114172

Case Number:

Sample Matrix: Air

Lab Sample No.: 668357

Date Analyzed: 05/16/2006

Date Received: 05/05/2006

Target Compound	CAS Number	Results in ppbv	Q	RL in ppbv	Results in ug/m3	Q	RL in ug/m3
1,2-Dibromoethane	106-93-4	1.0	U	1.0	7.7	U	7.7
Ethylbenzene	100-41-4	4.3		1.0	19		4.3
Xylene (m,p)	1330-20-7	19		2.5	83		11
Xylene (o)	95-47-6	6.3		1.0	27		4.3
Xylene (total)	1330-20-7	25		1.0	110		4.3
Bromoform	75-25-2	1.0	U	1.0	10	U	10
1,1,2,2-Tetrachloroethane	79-34-5	1.0	U	1.0	6.9	U	6.9
4-Ethyltoluene	622-96-8	4.0		1.0	20		4.9
1,3,5-Trimethylbenzene	108-67-8	1.9		1.0	9.3		4.9

SUMMA CANISTER CLEANING & CERTIFICATION REPORT

Canister Cleaning

System ID: Bottom RACK Start Date: 4/21/06 End Date: 4/24/06

Analyst: SML Start Time: 2211 End Time: 0830

System Setup

Port	Canister ID	Final Pressure Check				Comments
		(units)	Date	Time	Analyst	
1	2720	-30.3	4/28/06	1030	JKW	
2	3865	↓	↓	↓	↓	
3	4010	↓	↓	↓	↓	
4	4013	↓	↓	↓	↓	
5	3458	↓	↓	↓	↓	
6	3129	↓	↓	↓	↓	
7	3554	↓	↓	↓	↓	
8	4159	↓	↓	↓	↓	
9						
10						
11						
12						

Batch Certification

GC/MS Analyst: WRD

Analysis Date: 4/24/06

Batch ID: FAPI

Batch Can ID: 2720

Initial Pressure: -30.0 (units)

Tested Clean?

☑ Yes ☐ No

Attach Supporting Documentation: (As requested)

☐ Instrument Run Log(s)
☐ BFB Tune Report
☐ Initial Calibration Data
☐ Continuing Calibration Data
☐ Method Blank Report
☐ LCS Report
☐ Batch Canister Report

Additional Comments:

CERT @ 1000mLs

SUMMA CANISTER CLEANING & CERTIFICATION REPORT

Canister Cleaning

System ID: TOP RACK Start Date: 4/25/06 End Date: 4/26/06

Analyst: SML Start Time: 1340 End Time: 0815

System Setup

Port	Canister ID	Final Pressure Check				Comments
		(units)	Date	Time	Analyst	
1	3011	-30.0	04/28/06	1145	JKN	Shot 1000 ml
2	2895	↓	↓	↓	↓	
3	3199	↓	↓	↓	↓	
4	3566	↓	↓	↓	↓	
5	3153	↓	↓	↓	↓	
6	4171	↓	↓	↓	↓	
7	3708	↓	↓	↓	↓	
8	2953	↓	↓	↓	↓	
9						
10						
11						
12						

Batch Certification

GC/MS Analyst: MTP Batch Can ID: 2953 Tested Clean?

Analysis Date: 4/26/06 Initial Pressure: -30.0 (units) ☑ Yes ☐ No

Batch ID: FAPK T015

Attach Supporting Documentation: (As requested)

- ☐ Instrument Run Log(s)
- ☐ BFB Tune Report
- ☐ Initial Calibration Data
- ☐ Continuing Calibration Data
- ☐ Method Blank Report
- ☐ LCS Report
- ☐ Batch Canister Report

Additional Comments:

SUMMA CANISTER CLEANING & CERTIFICATION REPORT

Canister Cleaning

System ID: Bolton Rock	Start Date: 4/27/06	End Date: 4/27/06	
Analyst: JK	Start Time: 1200	End Time: 1700	

System Setup

Port	Canister ID	Final Pressure Check				Comments
		(units)	Date	Time	Analyst	
1	3661	-30.3"Hg	4/28/06	1340	JK	
2	4210	↓	↓	↓	↓	
3	3266	↓	↓	↓	↓	
4	2662	↓	↓	↓	↓	
5	2567	↓	↓	↓	↓	
6	3090	↓	↓	↓	↓	
7	2644	↓	↓	↓	↓	
8	3264	↓	↓	↓	↓	
9						
10						
11						
12						

Batch Certification

GC/MS Analyst: MTP	Batch Can ID: 3090	Tested Clean?
Analysis Date: 4/28/06	Initial Pressure: -30.0 (units)	☑ Yes ☐ No
Batch ID: FAPLT013		

Attach Supporting Documentation: (As requested)

- ☐ Instrument Run Log(s)
- ☐ BFB Tune Report
- ☐ Initial Calibration Data
- ☐ Continuing Calibration Data
- ☐ Method Blank Report
- ☐ LCS Report
- ☐ Batch Canister Report

Additional Comments:

SUMMA CANISTER CLEANING & CERTIFICATION REPORT

Canister Cleaning

System ID: Oven Start Date: 4/27/06 End Date: 4/27/06

Analyst: JKN Start Time: 0900 End Time: 1500

System Setup

Port	Canister ID	Final Pressure Check				Comments
		(units)	Date	Time	Analyst	
1	4098	-30.4"Hg	4/28/06	1315	JKN	
2	2968					
3	2533					
4	3343					
5	3529					
6	2986					
7	—					
8	3138					
9	3625					
10	—					
11	2900					
12	3544					

Batch Certification

GC/MS Analyst: amw

Analysis Date: 4/28/06

Batch ID: FAPL

Batch Can ID: ~~3544~~ 3138

Initial Pressure: -30.0 (units)

Tested Clean?

☑ Yes ☐ No

Attach Supporting Documentation: (As requested)

☐ Instrument Run Log(s)

☐ BFB Tune Report

☐ Initial Calibration Data

☐ Continuing Calibration Data

☐ Method Blank Report

☐ LCS Report

☐ Batch Canister Report

Additional Comments:

ATTACHMENT 4

Data Usability Summary Reports

On-Site Vapor Intrusion Sampling

MEMORANDUM

To: Mark Distler
From: KA Storne
Re: Review of Data for the Former Accurate Die Casting Site, Sampling Performed March 2006
File: 2488/25463.007.007
Date: April 27, 2006

cc: SJ Spiegel

This report addresses review of the indoor air, ambient air, sub-slab samples, and field duplicate collected for the Former Accurate Die Casting Site, in Fayetteville, New York. Sample collection activities were conducted by O'Brien & Gere on March 14, 2006.

The following table summarizes the analysis performed for this sampling event.

Table 1-1. *Analytical methods and references*

Parameter	Method	Reference
VOCs	USEPA Method TO-15*	1

Note:
1. United States Environmental Protection Agency. 1999. *Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air.* Cincinnati, Ohio.

VOCs indicates volatile organic compounds.
* Indicates that the indoor air samples (IA) were analyzed using low-level analysis.

STL Laboratories, Inc. of Burlington, Vermont (STL Burlington) performed the analyses.

The laboratory packages generated by STL Burlington contained quality control analysis and supportive raw data.

Full validation was performed on the samples collected for this sampling event.

The analytical data generated for this investigation were evaluated by O'Brien & Gere using the quality assurance/quality control (QA/QC) information presented in the following documents:

- United States Environmental Protection Agency. 1999. *Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air.* Cincinnati, Ohio.

- O'Brien & Gere Engineers, Inc. (O'Brien & Gere) 2006. *Vapor Intrusion Work Plan, Revision 1, Site Code 7-34-052. Former Accurate Die Casting Site, Fayetteville, New York.* Syracuse, New York.

Data affected by excursions from the previously mentioned QA/QC criteria were qualified using the following USEPA data validation guidance and professional judgment:

- United States Environmental Protection Agency (USEPA). 1994. *Region II Validating Canisters of Volatile Organics in Ambient Air,* HW-18, Revision 0. New York, New York.

Since the USEPA data validation guidelines apply to data generated using CLP methods, the application of these validation guidelines have been modified since a non-CLP method was used in the analysis of samples collected for this sampling event. Qualifiers were applied to data that failed to meet the quality control criteria presented in the USEPA method.

In accordance with the USEPA guidance, and utilizing professional judgment, the following qualifiers are used in this type of data validation:

"U" Indicates that the analyte was analyzed for, but was not detected. The associated value indicates the approximate sample concentration necessary to be detected.

"J" Indicates that the detected analyte is present but the reported value may not be accurate or precise. The result should be considered approximate based on excursions from QA/QC criteria.

"UJ" Indicates that the analyte was not detected and the quantitation limit may be inaccurate or imprecise. The result should be considered approximate based on excursions from QA/QC criteria.

"R" Indicates that the detection limit or sample result is unreliable and has been rejected due to a major excursion from QA/QC criteria. The analyte may or may not be present in the sample. The data should not be used for qualitative or quantitative purposes.

The validation included checking the following parameters:

- Chain-of-custody records
- Sample collection
- Holding times
- Calibrations
- Blank analysis
- Laboratory control sample (LCS)/ Laboratory control sample duplicate (LCSD) analysis
- Field duplicate analysis
- Internal standards performance
- Gas chromatography/mass spectrometry (GC/MS) instrument performance check
- Target analyte quantitation, identification, and reported detection limits
- Documentation completeness.

The samples that were submitted for data validation are listed in Table 1-2 presented in Attachment A.

The following sections of this memorandum present the results of the comparison of the analytical data to the QA/QC criteria specified above. Based on the QA/QC information review, an overall evaluation of the data's usability is also presented in the final section.

VALIDATION APPROACH

O'Brien & Gere applies the following general approach for application of data validation qualifiers when control limits are exceeded:

- If percent recoveries are less than laboratory control limits but greater than ten percent, non-detected and detected results are qualified as approximate (J, UJ).

- If percent recoveries are greater than laboratory control limits, detected results are qualified as approximate (J).

- If percent recoveries are less than ten percent, detected results are qualified as approximate (J) and non-detected results are qualified as rejected (R).

- If RPDs for field duplicates are outside of validation criteria, detected and non-detected results are qualified as approximate (UJ, J).

The calibration criteria used to evaluate the data generated for this investigation were based on the method criteria.

Laboratory established control limits were used to assess LCS and LCSD data.

The cumulative effect of the various QA/QC excursions is employed in assigning the final data qualifiers. For example, if a sample result is affected by low LCS recovery for which the "J" qualifier is applied, but severely low internal standard recoveries result in the rejection of the sample result (R), the final qualifier is "R".

Qualification of data associated with field duplicate excursions is limited to the field duplicate pair.

Field duplicate data were evaluated against relative percent difference (RPD) criteria of less than 25 percent for air samples when results were greater than five times the reporting limit. When sample results for field duplicate pairs were less than five times the reporting limit, the data were evaluated using control limits of plus or minus two times the reporting limit.

SAMPLE COLLECTION

As described in the Work Plan, canister blanks were not collected as part of this sampling event.

CHAIN-OF-CUSTODY RECORDS

A time gap was detected in the chain-of-custody records associated with samples collected 3/14/06. The samples were relinquished by the field representative on 3/16/06 at 08:15. Although the courier received the sample cooler from the field representative, the time that the cooler was received by the courier is listed on the record as 15:00. Couriers do not typically sign the chain-of-custody forms. The subsequent transfer of the samples to the laboratory was accurately documented on the record. In addition, the air bill was not included on the chain-of-custody record. However, a copy of the air bill was included in the laboratory data package.

VOLATILE ORGANIC COMPOUND IN AIR DATA EVALUATION SUMMARY

The following QA/QC parameters were found to meet method and validation criteria or did not result in additional qualification of sample results:

- Holding times
- Blank analysis
- Internal standards performance
- Field duplicate analysis
- GC/MS instrument performance check
- Target analyte identification

Excursions from method or validation criteria and additional observations are summarized below.

I. Calibration

As a result of calibration verification excursions, the results for target analytes in samples associated with the low level analysis calibration verification of 3/26/06 on instrument G were qualified as approximate (UJ, J) to indicate minor compromises in calibration linearity. Impacted target analytes and samples included:

- Results for 1,3-butadiene, chloroethane, n-hexane and n-heptane in sample IA-5.

II. LCS analysis

The recoveries for target analytes in LCS results were greater than the laboratory control limits in the low level analysis. As a result, detected sample results were qualified as approximate (J) to indicate minor accuracy excursions. Impacted analytes and samples included:

- Results for ethylbenzene, xylene (m,p) and 4-ethyltoluene in samples IA-1, IA-2, IA-3, IA-4, IA-6, IA-7, IA-8, 031406AMB.
- Result for xylene (m,p) in sample 031406AMB.
- Results for ethylbenzene and xylene (m,p) in sample IA-5.

III. Target analyte quantitation and reported detection limits

The following results were reported with concentrations that exceeded the upper calibration limit:

- Results for toluene and xylenes (total) in samples IA-1 and IA-5
- Results for toluene, xylenes (m, p) and xylenes (total) in samples IA-7 and IA-8
- Results for n-heptane, toluene, xylene (m,p), xylene (total) in samples IA-2 and IA-3

During the validation process, these impacted results, flagged as "E" by the laboratory, were qualified as "J" to indicate that the sample concentrations are approximate. As requested by the Project Manager, dilutions were not performed for these samples in order to achieve the project detection limits for the target analytes of concern.

Results were reported to the practical quantitation limit (PQL). Due to a recent revision in the laboratory reporting limits for undiluted air analysis, the reporting limits for nine target analytes were listed as 0.02 ppbv, which is greater than the reporting limit of 0.01 ppbv listed in the Work Plan.

DATA USABILITY

Overall data usability with respect to completeness for the final sample results reported is 100 percent for the VOC air data. The VOC air data were determined to be usable for qualitative and quantitative purposes. Based on the validation performed, the typical completeness goal of 95 percent was met for these analyses.

Soil Vapor Sampling

O'BRIEN & GERE

MEMORANDUM

To: Mark Distler
From: KA Storne
Re: Review of Data for the Former Accurate Die Casting Site, Sampling Performed May 2006
File: 2488/25463.007.007
Date: June 9, 2006

cc: SJ Spiegel

This report addresses review of the soil vapor samples and field duplicate collected for the Former Accurate Die Casting Site, in Fayetteville, New York. Sample collection activities were conducted by O'Brien & Gere on May 3 and May 4, 2006.

The following table summarizes the analysis performed for this sampling event.

Table 1-1. *Analytical methods and references*

Parameter	Method	Reference
VOCs	USEPA Method TO-15*	1

Note:
1. United States Environmental Protection Agency. 1999. *Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air.* Cincinnati, Ohio.

VOCs indicates volatile organic compounds.
* Indicates that the soil vapor samples (SV) were analyzed using standard level analysis.

STL Laboratories, Inc. of Burlington, Vermont (STL Burlington) performed the analyses.

The laboratory packages generated by STL Burlington contained quality control analysis and supportive raw data.

Full validation was performed on the samples collected for this sampling event.

The analytical data generated for this investigation were evaluated by O'Brien & Gere using the quality assurance/quality control (QA/QC) information presented in the following documents:

- United States Environmental Protection Agency. 1999. *Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air.* Cincinnati, Ohio.
- O'Brien & Gere Engineers, Inc. (O'Brien & Gere) 2006. *Vapor Intrusion Work Plan, Revision 1, Site Code 7-34-052. Former Accurate Die Casting Site, Fayetteville, New York.* Syracuse, New York.

Data affected by excursions from the previously mentioned QA/QC criteria were qualified using the following USEPA data validation guidance and professional judgment:

- United States Environmental Protection Agency (USEPA). 1994. *Region II Validating Canisters of Volatile Organics in Ambient Air,* HW-18, Revision 0. New York, New York.

Since the USEPA data validation guidelines apply to data generated using CLP methods, the application of these validation guidelines have been modified since a non-CLP method was used in the analysis of samples collected for this sampling event. Qualifiers are applied to data that fail to meet the quality control criteria presented in the USEPA method.

In accordance with the USEPA guidance, and utilizing professional judgment, the following qualifiers are used in this type of data validation:

"U" Indicates that the analyte was analyzed for, but was not detected. The associated value indicates the approximate sample concentration necessary to be detected.

"J" Indicates that the detected analyte is present but the reported value may not be accurate or precise. The result should be considered approximate based on excursions from QA/QC criteria.

"UJ" Indicates that the analyte was not detected and the quantitation limit may be inaccurate or imprecise. The result should be considered approximate based on excursions from QA/QC criteria.

"R" Indicates that the detection limit or sample result is unreliable and has been rejected due to a major excursion from QA/QC criteria. The analyte may or may not be present in the sample. The data should not be used for qualitative or quantitative purposes.

The validation included checking the following parameters:

- Chain-of-custody records
- Sample collection
- Holding times
- Calibrations
- Blank analysis
- Laboratory control sample (LCS)/ Laboratory control sample duplicate (LCSD) analysis
- Field duplicate analysis
- Internal standards performance
- Gas chromatography/mass spectrometry (GC/MS) instrument performance check
- Target analyte quantitation, identification, and reported detection limits
- Documentation completeness.

The samples that were submitted for data validation are listed in Table 1-2 presented in Attachment A.

The following sections of this memorandum present the results of the comparison of the analytical data to the QA/QC criteria specified above. Based on the QA/QC information review, an overall evaluation of the data's usability is also presented in the final section.

VALIDATION APPROACH

O'Brien & Gere applies the following general approach for application of data validation qualifiers when control limits are exceeded:

- If percent recoveries are less than laboratory control limits but greater than ten percent, non-detected and detected results are qualified as approximate (J, UJ).

- If percent recoveries are greater than laboratory control limits, detected results are qualified as approximate (J).

- If percent recoveries are less than ten percent, detected results are qualified as approximate (J) and non-detected results are qualified as rejected (R).

- If RPDs for field duplicates are outside of validation criteria, detected and non-detected results are qualified as approximate (UJ, J).

The calibration criteria used to evaluate the data generated for this investigation were based on the method criteria.

Laboratory established control limits were used to assess LCS and LCSD data.

The cumulative effect of the various QA/QC excursions is employed in assigning the final data qualifiers. For example, if a sample result is affected by low LCS recovery for which the "J" qualifier is applied, but severely low internal standard recoveries result in the rejection of the sample result (R), the final qualifier is "R".

Qualification of data associated with field duplicate excursions is limited to the field duplicate pair.

Field duplicate data were evaluated against relative percent difference (RPD) criteria of less than 25 percent for air samples when results were greater than five times the reporting limit. When sample results for field duplicate pairs were less than five times the reporting limit, the data were evaluated using control limits of plus or minus two times the reporting limit.

SAMPLE COLLECTION

As described in the Work Plan, canister blanks were not collected as part of this sampling event.

CHAIN-OF-CUSTODY RECORDS

The air bill number was not listed on the chain-of-custody record associated with samples collected 5/3/06 and 5/4/06. However, a copy of the air bill was included in the laboratory data package.

VOLATILE ORGANIC COMPOUND IN AIR DATA EVALUATION SUMMARY

The following QA/QC parameters were found to meet method and validation criteria or did not result in additional qualification of sample results:

- Holding times
- Calibrations
- Blank analysis
- LCS/ LCSD analysis
- Field duplicate analysis
- Internal standards performance
- GC/MS instrument performance check
- Target analyte identification
- Documentation completeness.

Excursions from method or validation criteria were not detected during the validation process. Additional observations are described below.

I. Target analyte quantitation and reported detection limits

Sample results were reported to the practical quantitation limit (PQL).

Samples were screened by the laboratory prior to performing the TO-15 standard level analysis. The screening results indicated that interferences, in the form of non-target analytes, were present in the sample chromatograms. As a result of the interferences detected in the samples, the samples were analyzed at a 1:5 dilution during the TO-15 analyses to reduce the impact of the interferences on the reported results. As a result, the detection limits reported for these analyses were elevated.

DATA USABILITY

Overall data usability with respect to completeness for the final sample results reported is 100 percent for the VOC air data. The VOC air data were determined to be usable for qualitative and quantitative purposes. Based on the validation performed, the typical completeness goal of 95 percent was met for these analyses.

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