

November 30, 2012

#### Mr. John C. Grathwol, P.E.

Remedial Bureau B - Div of Environmental Remediation New York State Department of Environmental Conservation 625 Broadway Albany, New York 12233-7016

RE: Former Accurate Die Casting Site, Fayetteville, New York (Site #7-34-052)

FILE: 3902.45845 Docs

#### Dear Mr. Grathwol:

This letter serves as the *Periodic Review Report* (PRR) to document the implementation of, and compliance with, Site Management (SM) requirements under the Order on Consent (#A7-0318-94-10) and the December 1994 *Record of Decision* (1994 ROD) for the Former Accurate Die Casting Site of Fayetteville, New York (Site #7-34-052) (Figure 1). As requested by the New York State Department of Environmental Conservation (NYSDEC) on October 30, 2012, this PRR is accompanied with the Site Management Periodic Review Report Notice and Institutional and Engineering Controls Certification Form (Attachment 1). Since this form is relatively new, the reporting period for this PRR is November 2, 1995 through December 1, 2012 as instructed by the NYSDEC.

#### I. EXECUTIVE SUMMARY

The NYSDEC added the Site to the Registry of Inactive Hazardous Waste Sites in January 1990 as a Class 2 site, based on an environmental assessment conducted for ITT Commercial Finance Company (ITT). A Remedial Investigation was then performed between 1990 and 1993, and the results presented in the *Remedial Investigation Report* (Stearns & Wheler, 1993) dated December 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 in the December 1994 ROD which could pose an unacceptable risk to human health if not addressed, as follows:

- Area 1 An area of soils containing polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). This area is also referred to as the PCB/PAH/VOC Soils Area (Figure 1).
- Area 2 Soils containing trichloroethylene (TCE) in an area located outside the northeast corner of the former Accurate Die Casting facility (Figure 1).
- Area 3 Overburden groundwater containing TCE above NYSDEC Class GA groundwater quality standards.
- Area 4 Shallow bedrock groundwater containing TCE above NYSDEC Class GA groundwater quality standards.
- Area 5 An abandoned septic tank containing sludge exhibiting concentrations of zinc above NYSDEC standards (Figure 1).

Remedial actions to address these five areas were conducted between 1995 and 1999, as described in Section II below. A *Final Engineering Report* (O'Brien & Gere, 2000) was provided to the NYSDEC in March 2000 certifying and documenting that the remedial actions required by the Consent Order and December 1994 ROD were complete. The *Final Engineering Report* provided commitment to on-going groundwater recovery from recovery wells RW-1 and RW-2 on the Site, and also from the sump outside Area 2 and the overburden groundwater interceptor trench downgradient of Area 1 when water is present, until Class GA Standards are achieved in monitoring wells or monitored groundwater concentrations reach an asymptotic level below which further reduction is not practicable.

On January 28, 2003, the NYSDEC provided a letter (NYSDEC, 2003) indicating it would reclassify the Site from Class 2 to Class 4 status on the Registry of Inactive Hazardous Waste Sites. However, NYSDEC subsequently decided not to pursue reclassification of the Site due to new vapor intrusion regulations being introduced by the NYSDEC.

On August 19, 2005 the NYSDEC prepared a letter (NYSDEC, 2005) requesting that a soil vapor intrusion evaluation be conducted for the Site. A response to NYSDEC agreeing to conduct a soil vapor study was provided in September 2005 (O'Brien & Gere, 2005). On-site and off-site soil vapor sampling programs were approved by NYSDEC and conducted by O'Brien & Gere between 2006 and 2008.

Presently, the NYSDEC requires sampling of select groundwater monitoring wells on Site on two occasions each year, during the Spring and Fall, and analyses for VOCs. As presented in Section III below, the results indicate that progress is being made toward meeting the remedial objectives for the Site, but the data also suggest that an asymptotic level likely will emerge below which further reduction is not practicable. Consequently, it is likely that the concentration of several VOCs may remain above the Class GA drinking water standards in overburden groundwater and bedrock groundwater on the Site for an indefinite period.

Regardless, the current remedy is protective since groundwater is not recovered for consumption or use on or near the Site because the community is served by the regional public water authority. VOCs in groundwater may, however, contribute to the potential for soil vapor and vapor intrusion. To mitigate this condition, the subslab ventilation systems installed in basements of residences and businesses bordering the Site will be maintained. Similarly, it is necessary that occupied facilities on the Site be equipped with sub-slab ventilation, either passive or active.

At present, the facility on Site is not equipped with a sub-slab ventilation system, since the configuration of the current slab makes completing the required modification impractical.

#### II. SITE OVERVIEW

The former Accurate Die Casting site (Site) is located at 547 East Genesee Street in Fayetteville, New York (Figure 1); it is currently zoned for commercial/industrial use, and is approximately 33 acres in size. 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 northern border.

The facility was constructed in the 1950's and had been used as a die casting operation until 1988 when it was abandoned. ITT, which possessed a mortgage on the real property, then foreclosed on the premises and was the successful bidder at the auction.

An environmental assessment was conducted by Stearns & Wheler for ITT in support of the real-estate transaction, and as a result of the site assessment it was concluded that the potential for environmental contamination existed at the Site. In January 1990 the Site was included in the Registry of Inactive Hazardous Waste Sites as a Class 2 site. Stearns & Wheler was also retained by ITT to perform a Phase II assessment of the Site, completing it in September 1990.

The NYSDEC subsequently required additional investigation activities which were completed in accordance with the *Remedial Investigation/Feasibility Study Work Plan* (Stearns & Wheler, May 1992). The *Final Report – Remedial Investigation* (Stearns & Wheler, December 1993) concluded that:

- Trichloroethene (TCE) was observed in both overburden and bedrock groundwater at concentrations above the NYSDEC groundwater standards.
- The highest TCE concentrations in soils were observed at about 20 to 25 ft below grade in the vicinity of MW-3, at the interface between the sand/gravel and till layers.
- TCE was not observed in soils beneath the floor of the building.

The NYSDEC then issued the December 1994 ROD in which it selected (1) excavation and off-site disposal for the contaminated soil, and (2) extraction and on-site treatment for the contaminated groundwater. The NYSDEC identified five areas in the December 1994 ROD requiring remedial action; as listed above in the Executive Summary. Summarized below are the remedial actions completed for each area.

#### Area 1 - PCB/PAH/VOC Soils Area

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 PAHs, PCBs, and VOCs above remedial action objectives (RAOs) in the northwest area of the site were excavated during September and October 1995. After excavating approximately 600 cy of soil, grab samples 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.

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 in the Corrective Action Management Unit (CAMU) (Area 1) identified in the ROD amendment (Figure 1). In accordance with the NYSDEC requirements, approximately 1 foot of general fill, topsoil, and grass seed was placed on top of the processed soils.

Pursuant to an *Explanation of Significant Differences* (ESD) Notice dated October 1998 (NYSDEC, 1998a), a groundwater collection trench was then constructed to intercept groundwater (if any) containing VOCs present in the sand lenses observed in Area 1. Construction plans (O'Brien & Gere, 1998) for the installation of a groundwater interceptor trench in Area 1 were submitted to the NYSDEC for review in August 1998 and approved by a letter dated October 7, 1998 (NYSDEC, 1998b). Construction of the trench was completed in July 1999 following the placement of approximately 300 cubic yards of soil, excavated during construction of the interceptor trench, into the CAMU as approved by the NYSDEC by the letter dated July 14, 1999 (NYSDEC, 1999). The location of the collection trench is shown on Figure 1. Collected groundwater is treated at the existing on-site treatment system.

#### Area 2 - Northeast Corner of Facility

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 IRM between May 24 and June 22, 1994. During that period, soils exhibiting TCE above the RAO of 0.7 mg/kg were removed to the extent practicable. Afterwards, the soil was mechanically processed on-site to enhance volatilization of the VOCs until residual levels 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).

#### Area 3 - Overburden Groundwater

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 (Figure 1). The sump extends to the clay layer that was found to be present at the base of the excavation made during the soil remediation activities. This sump is being utilized as one of the groundwater recovery points for the groundwater recovery and treatment system constructed at the Site to address the shallow/overburden groundwater.

Also, an overburden recovery well designated as RW-1 (Figure 1) was constructed on-site as part of the IRM. A 24-hour aquifer performance test was conducted using this recovery well on September 28 and 29, 1994 to evaluate the overburden aquifer characteristics and to assess the influence of pumping on the overburden aquifer. The results of the performance test are provided in the NYSDEC-approved Basis of Design Report for the System dated December 1994 (O'Brien & Gere, 1994c). This recovery well is being utilized to collect groundwater containing TCE in the overburden aquifer downgradient of the northeast corner of the facility.

Recovery and treatment of overburden groundwater using the sump and RW-1 has been ongoing since February 5, 1996 and is continuing.

#### Area 4 - Shallow Bedrock Groundwater

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 1). This well was installed between September 5 and 18, 1995, in accordance with the NYSDEC-approved *Remedial Design/Remedial Action (RD/RA) Work Plan* dated March 1995 (O'Brien & Gere, 1995b) and the letter from O'Brien & Gere dated May 26, 1995 (O'Brien & Gere, 1995c), as amended on July 17, 1995 (O'Brien & Gere, 1995e). An aquifer performance test was conducted using this recovery well between November 7 and 13, 1995. The results of the performance test were provided to the NYSDEC in a letter report dated January 12, 1996 (O'Brien & Gere, 1996).

Recovery and treatment of shallow bedrock groundwater using RW-2 was initiated on February 5, 1996 and is continuing.

#### Area 5 - Septic Tank

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. The spent washing liquid was collected and treated on-site using the groundwater treatment system. Subsequent to decontaminating the floor and walls of the septic tank, the concrete vault was filled and buried, completing remediation of this area.

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A *Final Engineering Report* (O'Brien & Gere, 2000) was provided to the NYSDEC in March 2000 certifying and documenting that the remedial actions required by the Consent Order to address the five areas identified in the 1994 ROD were complete. The *Final Engineering Report* provided commitment to on-going groundwater recovery from RW-1, RW-2, the sump outside Area 2, and the overburden groundwater interceptor trench downgrade of Area 1 until achieving Class GA Standards or reaching an asymptotic level below which further reduction is not practicable.

On January 28, 2003, the NYSDEC provided a letter (NYSDEC, 2003) indicating it would reclassify the Site from Class 2 to Class 4 status on the Registry of Inactive Hazardous Waste Sites. However, NYSDEC subsequently decided not to pursue reclassification of the Site due to new vapor intrusion regulations being introduced by the NYSDEC.

An *On-Site Soil Vapor Sampling Work Plan* (O'Brien & Gere, 2006a) and a letter revision (O'Brien & Gere, 2006b) were subsequently submitted to the NYSDEC on February 13, 2006 and February 16, 2006, respectively. The results of the on-Site sampling were reported to NYSDEC in a Technical Memorandum (TM) dated September 18, 2006 (O'Brien & Gere, 2006c). A soil vapor mitigation system for the on-site building was recommended but due to the changing occupancy and probable site redevelopment, NYSDEC allowed the mitigation system installation to be delayed until such changes were confirmed. The on-site building is currently unoccupied, and soil vapor mitigation is pending site/building redevelopment or re-occupancy.

The *On-Site Results Report* (O'Brien & Gere, 2006c) recommended off-Site vapor intrusion sampling. The final work plan for conducting off-Site sampling was submitted to NYSDEC on February 23, 2007 (O'Brien & Gere, 2007). The off-Site sampling was conducted in two phases. Phase I was conducted in March and April 2007 (2006/2007 heating season) and repeated at some off-site properties during the 2007/2008 heating season. Phase II was conducted at other off-site properties between February and April 2008. The off-site sampling resulted in the installation of vapor mitigation systems at five off-site properties. An *Operation and Maintenance Work Plan* (O'Brien & Gere, 2009) was approved by NYSDEC and is currently being followed by O'Brien & Gere and ITT.

#### III. EVALUATION OF REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

A record of the groundwater elevations measured prior to and since operation of the groundwater recovery and treatment system began is provided in Table 1, and Figures 2 and 3 depict the November 2011 overburden and bedrock groundwater flow contours.

- Figure 2 presents the groundwater elevations for the overburden zone. As indicated in the figure, groundwater flow in the overburden is to the north towards Bishop Brook under a hydraulic gradient of between 0.04 ft/ft and 0.06 ft/ft (before the top of the bank). RW-1 intercepts and captures a portion of the site overburden groundwater.
- Figure 3 presents the groundwater elevations for the bedrock zone. As indicated in the figure, the hydraulic gradient in the bedrock is to the northwest towards Bishop Brook under a hydraulic gradient of about 0.04 ft/ft. RW-2 captures site bedrock groundwater.

Tables 2 and 3 provide a record of the groundwater quality for the monitoring wells, and Figure 4 depicts the November 2011 TCE concentrations in groundwater. There are three areas on site where TCE was detected in the overburden groundwater, in November 2011, with a concentration near or above 100  $\mu$ g/L, as indicated on Figure 4.

• One area, below the existing building, is evidenced by monitoring well MW-13 which exhibited a TCE concentration of 278 μg/L. This area appears to be connected with either the former degreaser tank that once existed inside the facility, or the area outside the northeast corner of the building (Area 2) where the IRM was completed to remove and treat TCE-impacted soil.

- Another area is evidenced by monitoring wells PZ-1, PZ-2, and MW-17, which exhibited TCE concentrations ranging from 94.2 μg/L to 496 μg/L. This area appears, based on the overburden groundwater direction of flow, to be the plume extension (Area 3) related to the TCE-impacted soil formerly outside the northeast corner of the facility (Area 2), and perhaps remaining below the facility.
- The third area is evidenced by monitoring wells MW-24 and MW-18, which contained TCE concentrations ranging from 246 μg/L to 1,190 μg/L. This area appears to be related to the Former PCB/PAH/VOC Area (Area 1).

Presented as part of Attachment 2 are graphs depicting the trend of TCE concentrations observed in the 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. Observations based on these graphs are as follows:

Overburden Groundwater Quality near and downgradient of Northeast Corner of Building;

- TCE concentrations downgradient of the Area 2, represented by monitoring wells MW-5, MW-6, PZ-1, and PZ-2, initially exhibited declining trends but have been relatively stable at concentrations above the Class GA Standard for TCE (5  $\mu$ g/L) over the past 10 years. TCE concentrations fluctuated between 50  $\mu$ g/L and 150  $\mu$ g/L over this time period.
- TCE concentrations along the eastern property lines at wells MW-9 and MW-12, and to the west at well MW-17, are above the Class GA Standard for TCE (5  $\mu$ g/L). Historically, the TCE concentrations at MW-9 ranged between 50  $\mu$ g/L and 110  $\mu$ g/L, but during the last 10 years the TCE concentrations at well MW-9 exhibited a decreasing trend. At MW-12 the concentration has generally ranged between 15  $\mu$ g/L and 25  $\mu$ g/L. During the same period, MW-17 generally ranged between 100  $\mu$ g/L and 300  $\mu$ g/L, but the latest TCE concentration for MW-17 (496  $\mu$ g/L) was outside the range and is the highest observed at this monitoring well since 1998, requiring a continuation of monitoring. TCE concentrations within a consistent range are also observed at wells MW-13 and MW-14 located within the manufacturing building downgradient of the former TCE degreaser.

Overburden Groundwater Quality PCB/PAH/VOC Area (Area 1);

- Only monitoring well MW-22, located downgradient of Area 1, shows generally increasing TCE concentrations trends from 1 μg/L to approximately 30 μg/L over a 14 year period.
- TCE concentrations exhibit neither an increasing nor decreasing general trend at well MW-18, with concentrations above the Class GA Standard for TCE (5  $\mu$ g/L).
- Monitoring wells MW-21 and MW-24, located downgradient of Area 1, both exhibited a significant decline of TCE concentrations between 1998 and 2002, and have since remained at relatively low and stable concentrations.

#### Bedrock Groundwater Quality;

- TCE concentrations in the bedrock groundwater (Area 4) proximal to Area 2, represented by monitoring wells MW-10 and MW-11, exhibit declining trends over time but have been relatively stable during the last 10 years at concentrations above the Class GA Standard for TCE (5 μg/L).
- TCE concentrations have been stable and below Class GA Standards for TCE (5 μg/l) at bedrock monitoring well MW-16 located in the bedrock upgradient area. TCE concentrations at well MW-15, located in the bedrock upgradient area, have ranged between <5 μg/L and 30 μg/L with no general trend.

#### IV. INSTITUTIONAL CONTROL/ENGINEERING CONTROL COMPLIANCE REPORT

Digging on Site in the CAMU (Area 1) is not allowed, nor is construction of groundwater recovery wells for consumption or production use.

#### V. MONITORING PLAN COMPLIANCE REPORT

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 NYSDEC requires sampling of select monitoring wells on two occasions each year, during the Spring and Fall, and analyses for VOCs.

- For the Spring monitoring event, also referred to as the semi-annual event, the NYSDEC presently 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 NYSDEC presently 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, although other chlorinated compounds (cis-1,2-dichloroethene, methylene chloride, tetrachloroethene, and trans-1,2-dichloroethene) have been occasionally detected. The results of the groundwater monitoring events are provided to the NYSDEC with quarterly Operation and Maintenance reports. The latest report containing these results was submitted to NYSDEC on August 2, 2012.

#### VI. OPERATION AND MAINTENANCE PLAN COMPLIANCE REPORT

In accordance with the 1994 ROD, the groundwater recovery and treatment system (the "System") was constructed on Site and has been in operation since February 5, 1996. The System includes groundwater recovery well RW-1 that is screened in the overburden and groundwater recovery well RW-2 that is screened in the shallow bedrock (Figure 1). Groundwater is also recovered, when present, from the:

- Sump constructed outside the northeast corner of the facility (Area 2) where during 1994 the soil contaminated with TCE was removed and treated as part of an IRM (Figure 1); and
- 300 ft long groundwater interceptor trench (Area 1) constructed in accordance with the ESD dated October 1998 downgradient of the CAMU (Figure 1).

Recovered groundwater is first discharged to an influent equalization tank and then pumped through bag filters and two granular activated carbon (GAC) filters connected in series. The treated effluent from the System is discharged to the rip-rap lined bank of Bishop Brook (Figure 1) and monitored in accordance with the State Pollution Discharge Elimination System (SPDES) fact sheet issued by the NYSDEC. The results of monitoring performed in accordance with the SPDES fact sheet are submitted on a quarterly basis as presently required by the NYSDEC. Also, on a monthly basis, samples of water are collected both between and prior to the GAC filters to gauge System performance.

Table 4 provides a summary of the volume of groundwater recovered each year since operation of the System was initiated on February 5, 1996. The table identifies the average flow rate for each year calculated by taking the volume of groundwater recovered for a particular year, dividing it by the number of days in the period, and dividing it by the number of minutes in a day. Attachment 3 provides a graph depicting the annualized average flow rates and trends.

The shallow bedrock groundwater recovery well RW-2 has recovered an annual average flow between 4.3 and 6.1 gpm, and the average flow rate has been generally consistent since startup averaging approximately 5.2 gpm over 15 years.

The annual average flow rate from recovery well RW-1, however, has been more variable as might be expected for a well constructed in a relatively thin unconfined groundwater zone. The highest annual average flow for RW-1 was calculated to be 14 gpm for 1996, the year operation of the System was initiated. Between 1996 and 2005 the annual average flow for RW-1 declined steadily to an annual average flow rate of 2.4 gpm. Since 2006, the RW-1 flow rate has been more consistent with an annual average flow ranging between 3.1 and 5.0 gpm, averaging 3.9 gpm for the 6 years.

Table 5 provides a summary of the influent concentrations of TCE to the System. Attachment 4 provides a graph depicting the concentrations and trend of TCE quantified at the influent of the System over time. As indicated in the trend graph, between 1997 and 2003 the TCE concentrations fluctuated, ranging between 350  $\mu$ g/L and 2,300  $\mu$ g/L. A decreasing trend with considerably less fluctuation is observed after 2003 where the lowest TCE concentrations, in April 2006 (125  $\mu$ g/L) and January 2011 (177  $\mu$ g/L), were recorded since operations began in 1996.

Maintenance has been performed on the system as required, and included a replacement of the GAC filter vessels and several other components during December 2010/January 2011 as a preventative maintenance overhaul.

#### **VII. CONCLUSIONS AND RECOMMENDATIONS**

The remedial actions completed between 1995 and 1999 to address the five Areas identified in the December 1994 ROD have been maintained as required by the Order on Consent, and are protective of human health and the environment. As presented in Section III above, the results of monitoring conducted at the Site indicate that progress is being made toward meeting the remedial objectives established by the 1994 ROD, but the data also suggest that an asymptotic level likely will emerge below which further reduction is not practicable. Consequently, it is likely that the concentration of several VOCs may remain above the Class GA drinking water standards in impacted overburden groundwater and bedrock groundwater for an indefinite period.

Regardless, the current remedy is protective since groundwater is not recovered for consumption or use on or near the site, because the community is served by the regional public water authority. VOCs in groundwater may, however, contribute to the potential for soil vapor and vapor intrusion. To mitigate this condition, the subslab ventilation systems installed in basements of residences and businesses bordering the Site will be maintained. Similarly, it is necessary that occupied facilities on the Site be equipped with sub-slab ventilation; either passive or active.

At present, the facility on Site is not equipped with a sub-slab ventilation system, since the configuration of the current slab makes completing the required modification impractical.

If you have questions regarding this PRR or the requests presented in this letter, please do not hesitate to call or email Al Farrell, John Sutphen, or me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Daugles M. Crang L

Douglas M. Crawford, P.E.

Vice President

cc: T. Slutzky – The Anderson Company J. Sutphen – O'Brien & Gere T. Olmsted – ITT Corporation A. Farrell – O'Brien & Gere M. Distler – O'Brien & Gere G. Swenson – O'Brien & Gere

#### References:

NYSDEC, 1994 – Record of Decision for Former Accurate Die Casting Site, Fayetteville, New York, Site Number7-34-052. December 1994

NYSDEC, 1997 – Record of Decision Amendment for Former Accurate Die Casting Site, Fayetteville, New York, Site Number 7-34-052, October 1997

NYSDEC, 1998a – Explanation of Significant Differences, Former Accurate Die Casting Site, Fayetteville, New York, Site Number7-34-052, October 1998

NYSDEC, 1998b – October 7, 1998 letter from NYSDEC to O'Brien & Gere Engineers, Inc. regarding approval of groundwater interceptor trench construction plans

NYSDEC, 1999 – July 14, 1999 letter from NYSDEC to O'Brien & Gere Engineers, Inc. regarding establishment of a Corrective Action Management Unit (CAMU) on Site

NYSDEC, 2003 – January 28, 2003 letter from NYSDEC to O'Brien & Gere Engineers, Inc. regarding proposed reclassification of the Site from Class 2 to Class 4

NYSDEC, 2005 – August 19, 2005 letter from NYSDEC to O'Brien & Gere Engineers, Inc. requesting performance of a soil vapor intrusion evaluation for the Accurate Die Casting Site, Site Number 7-34-052

O'Brien & Gere, 1994a - Interim Remedial Measure (IRM) Soil Excavation Work Plan, May 1994

O'Brien & Gere, 1994b - Interim Remedial Measure Summary Report, October 1994

O'Brien & Gere, 1994c - Groundwater Recovery and Treatment System Basis of Design Report, December 1994

O'Brien & Gere, 1995a - PCB/PAH/VOC Soils Excavation Work Plan, February 1995

O'Brien & Gere, 1995b - Remedial Design/Remedial Action (RD/RA) Work Plan, March 1995

O'Brien & Gere, 1995c - May 26, 1995 letter from O'Brien & Gere Engineers, Inc. to NYSDEC

O'Brien & Gere, 1995d - PCB/PAH/VOC Soils Area Excavation Plan, June 1995

O'Brien & Gere, 1995e - July 17, 1995 letter from O'Brien & Gere Engineers, Inc. to NYSDEC

O'Brien & Gere, 1996 - Sampling and Analysis Plan, March 1996

O'Brien & Gere, 1998 – August 1998 letter from O'Brien & Gere Engineers, Inc. to NYSDEC regarding construction plans for groundwater interceptor trench

O'Brien & Gere, 2000 – Final Engineering Report, March 2000

O'Brien & Gere, 2005 – September 21, 2005 letter from O'Brien & Gere Engineers, Inc. to NYSDEC agreeing to conduct a soil vapor intrusion evaluation at the former Accurate Die Casting Site, Site Number 7-34-052

O'Brien & Gere, 2006a - On-Site Soil Vapor Sampling Work Plan, February 2006

O'Brien & Gere, 2006b – February 16, 2006 letter from O'Brien & Gere Engineers, Inc. to NYSDEC regarding revision of *On-Site Soil Vapor Sampling Work Plan* 

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O'Brien & Gere, 2006c – September 18, 2006 technical memorandum from O'Brien & Gere Engineers, Inc. to NYSDEC presenting results of the on-Site soil vapor sampling

O'Brien & Gere, 2007 - Final Work Plan for Conduct of Off-Site Sampling, February 2007

O'Brien & Gere, 2009 - Operation and Maintenance Work Plan, November 2009

Stearns & Wheler, 1993 - Remedial Investigation Report, December 1993

	1	ı	1	Groundwater							
	Ground	Well Casing	Screen Interval	Elevation (ft)							
Well ID			Elevation (ft)	5/28/1992	6/26/1992	8/7/1992	9/26/1994	9/27/1994	10/18/1994	11/2/1994	11/17/1994
MW-01	99.36	101.11	75.4 - 85.4	DRY	DRY	79.69			DRY		
MW-02	91.8	94.68	76.6 - 86.6	83.21	82.81	84.32	83.1	83.28	80.12		
MW-03	97.65	99.63	73.7 - 83.7	80.44		81.63					
MW-04	65.62	68.52	46.6 - 56.6	51.08	49.95	50.81	47.22	52.21	46.79		
MW-05	88.21	90.42	49.2 - 59.2	60.71	63.76	61.22	59.87	59.91	59.45		
MW-06	77.46	79.38	46.4 - 56.4	60.5	60.49	60.46	59.51	59.52	59.05		
MW-07 (B)	75.66	78.34	34.3 - 44.3	54.59	54.55	54.47	53.9	53.97	53.55		
MW-08	88.21	91.78	53.9 - 63.9	66.38	66.38	66.83	61.59	61.65	60.99		
MW-09	102.44	104.03	49.7 - 59.7	60.46	60.51	61.83	59.57	59.59	59.08		
MW-10 (B)	97.51	97.27	43 - 53	61.15	61.99	61.69			56.02	55.07	55.19
MW-11 (B)	91.48	93.8	43.1 - 53.1	62.34	63.7	63.66	58.41	58.39	57.47		56.68
MW-12	93.62	94.14	51.9 - 61.9	62.24	60.74	62.77	59.77	59.79	59.31		
MW-13	98.8	98.7	77.7 - 87.7	DRY	80.62	80.92			78.7	82.92	78.21
MW-14	98.76	100.62	74.6 - 84.6	75.11	79.07	81.54			86.18	80.12	80.54
MW-15 (B)	96.1	98.9	32.7 - 42.7						53.47		
MW-16 (B)	98.5	100.85	50.8 - 60.8						61.67		
MW-17	66.9	69.24	53.7 - 63.7				54.61	54.61	54.08		
MW-18	76.5	78.29	61.5 - 71.5								
MW-19	69.5	71.27	46.5 - 56.5								
MW-20	70.98	73.34	51.9 - 61.9								
MW-21	69.9	71.87	59.5 - 64.5								
MW-22	71.5	73.34	60.9 - 65.9								
MW-23 (B)	89.8	91.72	17.3 - 22.3								
MW-24*			-								
PZ-01	81.8	83.95	49.8 - 59.8				59.56	59.57	59.1		
PZ-02	80.6	83.06	42.8 - 52.8				59.35	59.36	58.89		
RW-01	78.4	80.28	.4 - 39.4, 45.4 - 50				56.88	56.89	58.22		
RW-02 (B)	91.58	95.18	-								
SUMP		97.93	-							76.04	74.83

Notes:



	Groundwater									
	Elevation (ft)									
Well ID	11/30/1994	12/15/1994	12/27/1994	1/13/1995	1/25/1995	2/9/1995	2/23/1995	3/9/1995	4/26/1995	7/25/1995
MW-01									DRY	DRY
MW-02									83.28	82.42
MW-03										
MW-04									51.44	45.94
MW-05									60.34	58.78
MW-06										58.52
MW-07 (B)									54.51	53.27
MW-08									63.41	59.82
MW-09									60.1	58.56
MW-10 (B)	54.94	55.19	55.02	54.94	54.95	54.52	54.36	55.02	57.49	54.6
MW-11 (B)	55.59	56.63	56.55	55.63	55.63	56.13	55.63	56.55	58.86	55.72
MW-12									60.3	58.76
MW-13	78.21	80.92	78.34	78.25	77.83	77.84	77.75	77.67	DRY	DRY
MW-14	80.54	80.2	80.54	80.62	80.45	78.95	79.54	80.12	80.61	80.61
MW-15 (B)									54.71	51.6
MW-16 (B)									63.86	59.41
MW-17									59.02	57.71
MW-18										
MW-19										
MW-20										
MW-21										
MW-22										
MW-23 (B)										
MW-24*										
PZ-01										58.58
PZ-02									59.88	58.37
RW-01									59.14	57.6
RW-02 (B)										
SUMP	75	75.17	74.83	75	75	74.88	75	78	75.09	75.25

Notes:



Well ID	Groundwater Elevation (ft) 10/17/1995	Groundwater Elevation (ft) 2/5/1996	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
MW-01	DRY	77.06	76.64	75.3	DRY	DRY	DRY	75.36	75.17	77.34
MW-02	84.22	84.04	83.87	83.41	83.34	83.15	83.32	83.67	83.5	84.24
MW-03										
MW-04		53.6	52.06	55.39	54.43	52.46	60.37	58.14	55.1	59.26
MW-05		61.26		60.8	60.73	60.5	60.4	60.14	59.73	58.85
MW-06	58.1	60.86	60.44	60.41	60.11	59.8	59.75	59.45	58.96	58.02
MW-07 (B)	52.71	55.16	54.67	55.03	54.52	54.45	54.58	54.46	54.32	54.29
MW-08	60.76	66.61	66.4	65.93	65.84	65.47	65.42	65.12	64.68	64.76
MW-09	58.16	60.95	60.7	60.48	60.35			59.71	59.22	58.3
MW-10 (B)	54.61	62	59.88	62.11	60.42	59.96	59.91	59.64	59.43	59.07
MW-11 (B)	55.31	62.63	60.37	62.67	60.88	60.35	60.29	59.99	59.78	59.38
MW-12	58.35	61.11	60.83	60.65	60.5	60.21	60.16	59.86	59.37	58.44
MW-13	DRY		79.98	79.91	79.9	79.88	79.87	79.86	79.77	79.68
MW-14	80.72	79.91		80.28	80.29	80.35	80.38	80.44	80.45	80.49
MW-15 (B)	50.47	59.24	59.37	59.79	59.63	59.56	59.56	59.46	59.4	59.14
MW-16 (B)	58.06	67.14	67.17	66.9	66.79	66.57	66.52	66.39	66.17	65.99
MW-17	DRY	60.29	60.17	59.75	59.7	59.52	59.64	59.42	59.28	59.3
MW-18										
MW-19										
MW-20										
MW-21										
MW-22										
MW-23 (B)										
MW-24*										
PZ-01	58.16	60.92	60.61	60.46	60.28	59.99	59.93	59.63	59.14	58.21
PZ-02	57.97	60.7	60.3	60.26	59.97	59.66	59.61	59.33	58.83	57.9
RW-01	57.11	59.64	55.04	59.22	54.71	54.4	54.35	54.05	53.58	52.76
RW-02 (B)	56.05	63.8	59.98	63.83	60.67		59.97	59.63	59.41	58.95
SUMP	76.94	74.67	74.68	74.64	74.63	74.63	75.3	74.9	74.65	74.87

Notes:



	Groundwater									
	Elevation (ft)									
Well ID	4/4/1996	4/10/1996	4/18/1996	5/2/1996	6/6/1996	7/16/1996	9/5/1996	10/21/1996	11/19/1996	1/16/1997
MW-01	DRY	DRY	DRY	77.73	DRY	DRY	DRY	DRY	76.6	75.15
MW-02	83.68	83.68	84.86	85.35	83.17	83.32	82.57	83.18	84.22	83.56
MW-03										
MW-04	52.66	54.43	60.28	59.7	51.63	52.45	DRY	55.91	55.91	53.12
MW-05	58.32	58.14	58.2	58.71	60.54	58.98	56.33	55.4	56.49	59.15
MW-06	57.48	57.28	57.41	58.17	59.91	58.13	54.95	53.71	55.61	58.39
MW-07 (B)	54.17	54.15	54.32	54.75	55.02	53.95	52.44	51.22	52.68	54.28
MW-08	64.1	63.83	64.08	65.43	67.07	64.5	59.05	59.56	63.61	64.67
MW-09	57.78	57.59	57.73	58.46	60.18	58.38	55.38	54.24	56.64	58.65
MW-10 (B)	58.81	58.72	58.61	59.72	62.25	59.11	53.88		54.95	59.61
MW-11 (B)	59.1	59.01	58.94	60.35	62.68	59.53	54.72	52.88	55.85	60.15
MW-12	57.93	57.74	57.86	58.59	60.33	58.54	55.48	54.3	56.18	58.81
MW-13	79.6	79.57	79.52	79.44	79.28	79.35	79.15	79.07	80.68	80.49
MW-14	80.52	80.55	78.14	79.29	80.56	80.66	80.59	80.61		80.59
MW-15 (B)	59.07	59.04	58.84	59.87	62.62	59.24	54.83	51.58	51.99	58.83
MW-16 (B)	65.99	65.9	65.84	67.02	68.4	65.57	63.31			66.13
MW-17	59.27	59.14	59.3	59.95	59.22	58.46	57.89	55.96	58.02	59.33
MW-18					72.95	72.32	70.81	70.77		73.31
MW-19					DRY	DRY	DRY	DRY	DRY	DRY
MW-20					DRY	50.26	DRY	DRY	DRY	DRY
MW-21										
MW-22										
MW-23 (B)										
MW-24*										
PZ-01	57.67	57.47	57.6	58.34		58.31	55.13	53.9	55.83	58.57
PZ-02	57.39	57.19	57.3	58.04	59.77	57.97	54.9	53.53	55.25	58.23
RW-01	52.24	52.03	52.11	52.69	53.82	51.94	48.05	41.8	47.33	50.74
RW-02 (B)	58.63	58.52	58.41	59.63	62.56	59.14		42.02	55.39	
SUMP	74.69	74.99	75.89	75.76	74.73	74.78	74.56	74.85	74.77	74.71

Notes:



	Groundwater									
	Elevation (ft)									
Well ID	2/4/1997	4/15/1997	7/8/1997	10/22/1997	1/29/1998	4/15/1998	10/20/1998	4/28/1999	10/19/1999	4/6/2000
MW-01		75.64	DRY	80.92						
MW-02		83.81		82.84	83.47	83.52	83.54	83.38	84.44	86.58
MW-03										
MW-04										
MW-05		59.83	59.16	58.34	60.86			59.91	55.35	60.52
MW-06		59.34	58.58	57.97	60.46	60.57	59.69	59.11	53.34	60.36
MW-07 (B)		54.7	52.93	50.63	52.9	53.82	51.76	54.57	51.73	54.87
MW-08		65.15	61.65	58.9	64.98	67.17	59.86	64.21	62.37	66.41
MW-09		59.6	58.76	58	60.51	60.56	59.71	59.68	54.25	60.62
MW-10 (B)		58.11	53.44	50.75	55.78		51.88	57.97	51.32	57.6
MW-11 (B)		58.59	55.2	52.5	56.75	61.73	53.98	58.36	53.31	59.39
MW-12		59.72	58.92	58.21	60.67	60.8	59.89	59.53	54.09	60.71
MW-13		80.33	79.84	79.53	78.87	78.67	78.31	78.08	80.75	80.89
MW-14		80.53	80.55	80.58	80.78	80.78	80.64	80.54	80.67	80.6
MW-15 (B)		59.83	56.63	50.48	56.34	62.1	52.58	58.94	50.95	58.81
MW-16 (B)		66.89	64.43	58.45	65.71	68.03	61.84	65.99	59.81	66.92
MW-17		59.64	58.33	DRY	59.7	59.51	57.93	58.76	57.47	60.28
MW-18	72.78	73.6	71.34	69.71	73.5	73.29	70.74	72.46	70.78	75.08
MW-19	DRY									
MW-20										
MW-21	63.69	63.74		62.93	63.82	63.54	63.23	63.31	62.69	64.42
MW-22	63.69	67.92	67.35	65.96	68.51	68.39	67.83	68.05	67.69	68.52
MW-23 (B)		37.71	35.61	32.29	34.95	37.95	33.57	36.76	32.48	36.69
MW-24*								-7.38	-10.22	-9.96
PZ-01		59.51	58.7	58.01	60.5	60.61	59.7	59.3	53.65	60.51
PZ-02		59.13	58.34	57.65	60.22	60.34	59.46	59.03	52.71	60.17
RW-01		50.3	43.34	42.03	43.13	32.6	32.36	54.69		50.73
RW-02 (B)		55.69	44.07	42.89	52.74	59.94	44.33	56.74		54.52
SUMP		74.94	75.01	74.75	74.89	74.96	75.2	75.26		78.49

Notes:



Well ID	Groundwater Elevation (ft) 11/7/2000	Groundwater Elevation (ft) 7/3/2001	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
MW-01	DRY	77.46	76.87	77.42	101.11	76.7	80.09	80.09	78.27	78.66
MW-02		84.33	83.67	84.28	83.6	83.67	85.01	85.01	84.1	85.14
MW-03										
MW-04										
MW-05	59.83	60.92	60.1	60.8	58.42	60.79	61.76	61.76	60.82	60.88
MW-06	59.4	55.87	59.67	60.42	59.84	60.35	61.45	61.45	60.36	70.35
MW-07 (B)	DRY	53.34	51.92	53.59	52.34	54.11	55.35	55.35		54.59
MW-08	61.45	65.63	60.92	64.16	60.73	63.24	67.83	67.83	64.14	65.22
MW-09	59.42	60.51	59.68	60.47	59.85	60.36	61.54	61.54	60.4	60.36
MW-10 (B)	52.73	57.22	52.6	56.07	54.57	54.86	60.38	60.38	55.76	58.75
MW-11 (B)	54.66	59.15	54.73	57.19	54.77	56.54	60.89	60.89	56.05	58.84
MW-12	59.62	60.63	59.87	60.64		60.54	61.67	61.67	60.58	60.54
MW-13	80.53	79.95	80.1	78.65	79.62	83.48	80.04	80.04	80.6	79.8
MW-14	80.75	79.74	80.77	80.48	82.87	81.72	84.69	84.69	82.77	82.71
MW-15 (B)	54.32	58.98	53.52	59.03	54.4	57.78	61.53	61.53	55.87	59.87
MW-16 (B)	63.57	66.14	63.58	66.25	63.5	65.64	68.75	68.75	65.35	66.31
MW-17	58.33	58.55	58.02	59.24	57.58	58.91	60.79	60.79	58.91	58.77
MW-18	71.61	72.09	71.36	73.75	69.84	72.88	74.61	74.61	72.33	72.54
MW-19	DRY	DRY	DRY	DRY	DRY	DRY		DRY	DRY	DRY
MW-20										
MW-21	62.59	62.53	62.58	63.39	61.82	62.54	63.92	63.92	62.62	62.24
MW-22	66.42	68.13	68.15	68.71	67.24	63.41	68.65	68.65	68.68	68.3
MW-23 (B)	33.97	36.21	33.25	35.68	33.63	36.49	39.32	39.32	35.43	37.72
MW-24*	-10.43	-10.41	-10.39	-10.35	-10.3	-10.33	-10.2	-10.2	-10.33	-10.4
PZ-01	59.44		59.7	60.45	59.87	60.4	61.48	61.48	60.38	60.37
PZ-02	59.16		59.48	60.18	59.65	60.23	61.28	61.28	60.22	60.19
RW-01	40.88		36.48	36.53	34.88					
RW-02 (B)	42.86		42.97	49.85	44.13					
SUMP	74.91	75.33	75.05	75.13	74.94					

Notes:



	Groundwater										
	Elevation (ft)										
Well ID	1/2/2007	11/29/2007	5/8/2008	11/21/2008	4/22/2009	11/20/2009	4/30/2010	11/17/2010	5/12/2011	11/29/2011	5/22/2012
MW-01	76.7	80.03	80.06	80.11	80.69	79.49	80.73	79.87	80.71	75.97	75.07
MW-02	83.58	85.6			83.26	83.24	83.13	83.6	NM	83.98	83.36
MW-03											
MW-04											
MW-05	60.65	61.62	60.72	60.24	60.86	60.32	60.7	60.62	62.32	60.66	60.54
MW-06	60.28	60.5	60.28	59.98	60.46	60.03	60.34	60.26	NM	60.26	60.16
MW-07 (B)	54.04	52.96	52.94		56.1	52.88	54.04	52.94	53.84	53.18	53.32
MW-08	63.24	66.86	66.82	66.88	66.5	61.93	65.94	64.7	NM	63	62.44
MW-09	60.36	60.55	60.33	60.53	60.49	60.03	60.37	60.27	61.9	60.25	60.19
MW-10 (B)	57.62	56.01	61.05	52.79	60.33	53.77	58.97	58.77	66.37	55.73	55.41
MW-11 (B)	57.81	55.72	60.32	52.42	59.4	52.98	57.95	57.84	64.85	54.56	54.2
MW-12	60.47	60.72	60.5	60.19	60.67	60.24	60.56	60.44	62.02	60.46	60.38
MW-13	79.44	78.68	78.23	DRY	DRY	78.02	Dry	Dry	Dry	Dry	Dry
MW-14	82.65	89.24	82.74	82.59	82.72	82.67	82.62	82.77	81.74	82.7	82.64
MW-15 (B)	59.26	54.35	61.89	52.85	61.74	54.7	60.4	60.1	62.56	57.88	57.6
MW-16 (B)	66.12	63.99	67.78	63.03	67.85	64.11	66.77	66.41	74.8	64.83	64.81
MW-17	59	58.46	58.96	57.9	59.36	58.38	58.96	58.89	60.26	58.96	58.92
MW-18	73.2	72.84	72.7	71.85	73.08	71.91	72.53	72.95	73.26	73.05	72.47
MW-19		DRY	DRY	DRY	DRY	47.11	Dry	47.13	DRY	47.13	47.12
MW-20											
MW-21	62.63	63.12	62.65	62.65	62.63	62.43	62.31	63.31	62.36	62.85	62.12
MW-22	68.59	68.94	68.6	68.51	68.44	68.29	68.26	68.88	68.44	68.74	68.3
MW-23 (B)	36.62	34.82	34.76	34.82	39.14	35.06	38.38	38.08	42.22	36.96	37.4
MW-24*	-10.23	-10.12	-10.35	-10.35	-10.45	-11.12	-10.5	-10.44	-10.4	-10.36	-10.48
PZ-01	60.35	60.53	60.32	59.99	60.49	60.03	60.37	60.27	61.85	60.27	60.2
PZ-02	60.09	60.36	60.12	59.81	60.3	59.86	60.18	60.1	61.61	60.11	60.02
RW-01											
RW-02 (B)											
SUMP											

Notes:

NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock Groundwater monitoring well,

\* - Measurement relative to top of well casing. Elevations based on assumed datum. 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.



Sample Date	August-89	December-89	May-90	May-92	July-94	October-94	February-95	April-95	July-95
	Trichloroethene								
	ug/L								
Location ID									
MW-01	112	ND	2	ND					
MW-02	ND	ND	1	ND		ND	ND	ND	ND
MW-03	ND	ND	440000	340000	ND	NI	NI	NI	NI
MW-04		7	43	6	270	23	13	16	
MW-05		340	344	110	330	410	290	280	
MW-06		700	454	510	390	360	330	280	270
MW-07		ND							
MW-08		ND	ND	ND		ND	ND	ND	ND
MW-09		109	106	60	72	74	74	84	75
MW-10				4500	1600	1300	1400	1200	900
MW-11				5200	5500	5300	4300	3900	4000
MW-12				36	44	35	33	30	25
MW-13				110	740	510			
MW-14				67	150	120	79	95	140
MW-15	NI	NI	NI	NI	NI	14	11	10	17
MW-16	NI	NI	NI	NI	NI	6	17	7	18
MW-17	NI	NI	NI	NI	260	140	200	130	160
MW-18	NI								
MW-20	NI								
MW-21	NI								
MW-22	NI								
MW-23	NI								
MW-24	NI								
PZ-01	NI	NI	NI	NI	NI				120
PZ-02	NI	NI	NI	NI	NI			490	400

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



Sample Date	October-95	January-96	April-96	May-96	July-96	October-96	January-97	April-97	July-97
'	Trichloroethene								
	ug/L								
Location ID	· ·	ŭ	· ·	· ·	· ·	· ·	· ·	· ·	· ·
MW-01									
MW-02	ND					1 U			
MW-03	NI								
MW-04	15					62	NI	NI	NI
MW-05						180			
MW-06	180	170	110		98	71	75	52	
MW-07	ND					1 U			
MW-08	ND					1 U			
MW-09	68	100	64		65	50	95	83	66
MW-10	890	900	820		960	1700	1900	1200	
MW-11	2600	2500	1500		1400	1600	1500	800	
MW-12	29					17			
MW-13						370			
MW-14	78	84	250		230	170	390	400	260
MW-15	7					20			
MW-16	20					11			
MW-17		180	350		460	300	450	220	150
MW-18	NI	NI	NI	1200		2900	850	410	1800
MW-20	NI	NI	NI	70			NI	NI	NI
MW-21	NI	NI	NI	NI	NI	NI	270	520	310
MW-22	NI	NI	NI	NI	NI	NI	2	1	3
MW-23	NI	1 U	1 U						
MW-24	NI								
PZ-01						32			
PZ-02						540			

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



Sample Date	October-97	January-98	April-98	October-98	November-98	April-99	October-99	April-00	November-00
	Trichloroethene								
	ug/L								
Location ID									
MW-01									
MW-02	1 U			1 U			1 U		1 U
MW-03	NI								
MW-04	NI								
MW-05	220			200			78		110
MW-06	58		140	92		63	72	30	48
MW-07	1 U			1 U			1 U		
MW-08				1 U			1 U		1 U
MW-09	61	140	120	80		120	46	69	60
MW-10	1300		930	880		720	700	530	690
MW-11	1600		920	1100		740	900	670	840
MW-12	19			22			15		17
MW-13	760			480			430		790
MW-14	560	560	460	400		460	260	250	280
MW-15	18			21			13		7
MW-16	14			4			15		3
MW-17		270	800	250		280	180	160	220
MW-18	3100	1000	1100	3600		620	1800	360	1900
MW-20	NI								
MW-21	450	120	1300	180		510	90	42	73
MW-22	8	5	10	14		10	9	13	12
MW-23	1 U	1 U		1 U			1 U		1 U
MW-24	NI	NI	NI	NI	6000	4300	4300	690	2400
PZ-01	48			85			410		29
PZ-02	420			250			18		160

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



Sample Date	July-01	November-01	April-02	June-02	October-02	May-03	December-03	July-04	December-04
	Trichloroethene								
	ug/L								
Location ID									
MW-01		1 U							
MW-02		1 U							
MW-03	NI								
MW-04	NI								
MW-05		120			100		110		98
MW-06	89	92			92		110		
MW-07		1 U							
MW-08		1 U							
MW-09	70	77			67		110		
MW-10	600	900	740		700	530	570	470	
MW-11	680	1000	870		760	940	620	490	
MW-12		19			18		20		21
MW-13		520		360	370				
MW-14	270	240			200	310	190		200
MW-15		27			21		26		2.1
MW-16		3			1		3		2.1
MW-17	240	230			290		310		140
MW-18	970	2000	350		2500	2100	2300	1600	
MW-20	NI								
MW-21	35	38					12		4.9
MW-22	13	13			4		18		18
MW-23		1 U							
MW-24	600	1500		470		390	190	170	96
PZ-01		79			79		92		120
PZ-02		260			160		150		130

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



Sample Date	April-05	November-05	April-06	January-07	February-07	May-07	November-07	May-08	November-08
	Trichloroethene								
	UG/L								
Location ID		- 3	- 3	- 3	- 3	- 5	- 5	- 3	- 3
MW-01									
MW-02									
MW-03	NI								
MW-04	NI								
MW-05		75.0		75.2			88		84.6
MW-06				142			120		84.1
MW-07									
MW-08									
MW-09		83.3		86.9			88		77.2
MW-10	450		486		448	448	440	476	126
MW-11	390		469		407	390	380	293	746
MW-12		19.6		23		24	38		24.3
MW-13	200		265		265	282	310	251	
MW-14		127		270			380		484
MW-15		0.50 U		0.54			0.82		0.5 U
MW-16		2.25		1.82			2.1		3.21
MW-17				132			240		210
MW-18	1300		1490		763	1590	1800	1160	1840
MW-20	NI								
MW-21		10.6		6.17			7.2		12.2
MW-22		15.8		13.5			27		28.9
MW-23									
MW-24	64	124	70.6	100		197	210	159	452
PZ-01		103		132			100		48.4
PZ-02		118		125			110		116

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



Sample Date	April-09	November-09	April-10	November-10	May-11	November-11	May-12	
	Trichloroethene							
	ug/l							
Location ID								
MW-01								
MW-02								
MW-03	NI	NI	NI	NI	NI	NI		
MW-04	NI	NI	NI	NI	NI	NI		
MW-05		77.8		82		73.1		
MW-06		75.8		83.8		52.6		
MW-07								
MW-08								
MW-09		71.2		62		52.6		
MW-10	329	285	369	395	416	169	135	
MW-11	260	452	379	406	255	926	891	
MW-12		16.5		19.5		21.9		
MW-13			208	262		278	234	
MW-14		426		438		17.8		
MW-15		0.65		22.9		0.5 U		
MW-16		1.96		1.69		1.53		
MW-17		190		79.6		496		
MW-18	1160	1290	609	1300	1460	1190	1020	
MW-20	NI	NI	NI	NI	NI	NI		
MW-21		12.3		6.1		6.76		
MW-22		19		19.4		23.6		
MW-23								
MW-24	118		193	331	62.1	246	162	
PZ-01		50.9		95		94.2		
PZ-02		101		100		96.6		

Notes:

ND - Not detected above unknown MDL, U - Not detected above known MDL, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.

 $\,$  MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



	Chemical Name	cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-01	11/8/2001	1 U	1 U	1 U	1 U	
MW-02	10/22/1996	1 U	1 U	1 U	1 U	
MW-02	10/22/1997	1 U	1 U	1 U	1 U	
MW-02	10/21/1998	1 U	1 U	1 U	1 U	
MW-02	10/19/1999	1 U	1 U	1 U	1 U	
MW-02	11/9/2000	1 U	1 U	1 U	1 U	
MW-02	11/10/2001	1 U	1 U	1 U	1 U	
MW-04	10/22/1996	12	1 U	1 U	1 U	
MW-05	10/21/1996	10 U	10 U	10 U	10 U	
MW-05	10/22/1997	10 U	10 U	10 U	10 U	
MW-05	10/20/1998	10 U	10 U	10 U	10 U	
MW-05	10/19/1999	10 U	10 U	10 U	10 U	
MW-05	11/8/2000	5 U	5 U	5 U	5 U	
MW-05	11/9/2001	5 U	5 U	5 U	5 U	
MW-05	10/10/2002	5 U	5 U	5 U	5 U	
MW-05	12/8/2003	5 U	5 U	5 U	5 U	
MW-05	12/28/2004	2.5 U	2.7	2.5 U	2.5 U	
MW-05	11/9/2005	2.50 U	2.50 U	2.50 U	2.50 U	
MW-05	1/2/2007	2.5 U	2.5 U	2.5 U	2.5 U	
MW-05	11/29/2007	0.5 U	2.5	0.5 U	0.5 U	
MW-05	11/1/2008	1.52	1.95	0.5 U	0.5 U	
MW-05	11/20/2009	1.15	2.25	0.5 U	0.5 U	
MW-05	11/17/2010	2.5 U	2.5 U	2.5 U	2.5 U	
MW-05	11/29/2011	2.5 U	2.5 U	2.5 U	2.5 U	
MW-06	1/17/1996		5 U	5 U		
MW-06	4/10/1996	<del></del>	5 U	5 U		
MW-06	7/16/1996	5 U	5 U	5 U	5 U	
MW-06	10/22/1996	2 U	2 U	2 U	2 U	
MW-06	1/16/1997	1 U	1 U	1 U	1 U	
MW-06	4/15/1997	1 U	1 U	1 U	1 U	
MW-06	10/23/1997	1 U	1 U	1 U	1 U	
MW-06	4/15/1998	5 U	5 U	5 U	5 U	
MW-06	10/20/1998	2 U	2 U	2 U	2 U	
MW-06	4/29/1999	2 U	2 U	2 U	2 U	
		2 U	2 U	2 U	2 U	
MW-06 MW-06	10/19/1999	1 U	2 U	1 U	2 U	
	4/6/2000					
MW-06	11/8/2000	1 U	1 U	1 U	1 U	
MW-06	7/3/2001	2 U	2 U	2 U	2 U	
MW-06	11/9/2001	2 U	2 U	2 U	2 U	
MW-06	10/10/2002	2 U	2 U	2 U	2 U	
MW-06	12/8/2003	5 U	5 U	5 U	5 U	
MW-06	1/2/2007	2.5 U	2.5 U	2.5 U	2.5 U	
MW-06	11/29/2007	0.65	0.5 U	0.5 U	0.5 U	
MW-06	11/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-06	11/20/2009	0.5 U	0.5 U	0.5 U	0.5 U	
MW-06	11/23/2010	1 U	1 U	1 U	1 U	
MW-06	11/29/2011	2.5 U	2.5 U	2.5 U	2.5 U	
MW-07	10/21/1996	1 U	1 U	1 U	1 U	
MW-07	10/22/1997	1 U	1 U	1 U	1 U	
MW-07	10/20/1998	1 U	1 U	1 U	1 U	
MW-07	10/19/1999	1 U	1 U	1 U	1 U	
MW-07	11/9/2001	1 U	1 U	1 U	1 U	
MW-08	10/22/1996	1 U	1 U	1 U	1 U	
MW-08	10/21/1998	1 U	1 U	1 U	1 U	
MW-08	10/19/1999	1 U	1 U	1 U	1 U	
MW-08	11/7/2000	1 U	1 U	1 U	1 U	
MW-08	11/8/2001	1 U	1 U	1 U	1 U	
MW-09	1/17/1996		5 U	5 U		
MW-09	4/10/1996		1 U	1 U		
MW-09	7/16/1996	1 U	1 U	1 U	1 U	
MW-09	10/21/1996	1 U	1 U	1 U	1 U	
MW-09	1/16/1997	5 U	5 U	5 U	5 U	
MW-09	4/15/1997	2 U	2 U	2 U	2 U	



Chemical Name		cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-09	7/8/1997	5 U	5 U	5 U	5 U	
MW-09	10/22/1997	5 U	5 U	5 U	5 U	
MW-09	1/29/1998	5 U	5 U	5 U	5 U	
MW-09	4/15/1998	5 U	5 U	5 U	5 U	
MW-09	10/20/1998	2 U	2 U	2 U	2 U	
MW-09	4/29/1999	2 U	2 U	2 U	2 U	
MW-09	10/19/1999	5 U	5 U	5 U	5 U	
MW-09	4/6/2000	2 U	2 U	2 U	2 U	
MW-09	11/8/2000	2 U	2 U	2 U	2 U	
MW-09	7/3/2001	2 U	2 U	2 U	2 U	
MW-09	11/10/2001	2 U	2 U	2 U	2 U	
MW-09	10/11/2002	2 U	2 U	2 U	2 U	
MW-09	12/8/2003	2 U	2 U	2 U	2 U	
MW-09	11/9/2005	2.50 U	2.50 U	2.50 U	2.50 U	
MW-09	1/2/2007	2.5 U	2.5 U	2.5 U	2.5 U	
MW-09	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-09	11/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-09	11/20/2009	2.5 U	2.5 U	2.5 U	2.5 U	
MW-09	11/17/2010	2.5 U	2.5 U	2.5 U	2.5 U	
MW-09	11/29/2011	2.5 U	2.5 U	2.5 U	2.5 U	
MW-10	1/17/1996		20 U	20 U		
MW-10	4/10/1996		50 U	50 U		
MW-10	7/16/1996	50 U	50 U	50 U	50 U	
MW-10	10/22/1996	50 U	50 U	50 U	50 U	
MW-10	1/16/1997	100 U	100 U	100 U	100 U	
MW-10	4/16/1997	100 U	100 U	100 U	100 U	
MW-10	10/23/1997	50 U	50 U	50 U	50 U	
MW-10	4/15/1998	50 U	50 U	50 U	50 U	
MW-10 MW-10	10/21/1998	50 U 25 U	50 U 25 U	50 U 25 U	50 U 25 U	
MW-10	4/29/1999 10/20/1999	25 U	25 U	25 U	25 U	
MW-10	4/6/2000	20 U	20 U	20 U	20 U	
MW-10	11/8/2000	20 U	20 U	20 U	20 U	
MW-10	7/3/2001	20 U	20 U	20 U	20 U	
MW-10	11/10/2001	20 U	20 U	20 U	20 U	
MW-10	4/3/2002	20 U	20 U	20 U	20 U	
MW-10	10/10/2002	20 U	20 U	20 U	20 U	
MW-10	5/1/2003	20 U	20 U	20 U	20 U	
MW-10	12/8/2003	20 U	20 U	20 U	20 U	
MW-10	7/19/2004	10 U	10 U	10 U	10 U	
MW-10	4/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	
MW-10	4/21/2006	10 U	10 U	10 U	10 U	
MW-10	2/7/2007	10 U	10 U	10 U	10 U	
MW-10	5/31/2007	10 U	10 U	10 U	10 U	
MW-10	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-10	5/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-10	11/1/2008	5 U	5 U	5 U	5 U	
MW-10	4/22/2009	10 U	10 U	10 U	10 U	
MW-10	11/20/2009	10 U	10 U	10 U	10 U	
MW-10	4/30/2010	10 U	10 U	10 U	10 U	
MW-10	11/17/2010	10 U	10 U	10 U	10 U	
MW-10	5/12/2011	10 U	10 U	10 U	10 U	
MW-10	11/29/2011	10 U	10 U	10 U	10 U	
MW-10	5/22/2012	5 U	5 U	5 U	5 U	
MW-11	1/17/1996		100 U	100 U		
MW-11	4/10/1996		100 U	100 U		
MW-11	7/16/1996	100 U	100 U	100 U	100 U	
MW-11	10/22/1996	100 U	100 U	100 U	100 U	
MW-11	1/16/1997	100 U	100 U	100 U	100 U	
MW-11	4/15/1997	50 U	50 U	50 U	50 U	
MW-11	10/23/1997	50 U	50 U	50 U	50 U	
MW-11	4/15/1998	50 U	50 U	50 U	50 U	
MW-11 MW-11	10/21/1998	50 U	50 U	50 U	50 U	
INIAA - I I	4/29/1999	50 U 25 U	50 U 25 U	50 U 25 U	50 U 25 U	



	Chemical Name	cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-11	4/6/2000	20 U	20 U	20 U	20 U	
MW-11	11/9/2000	20 U	20 U	20 U	20 U	
MW-11	7/3/2001	20 U	20 U	20 U	20 U	
MW-11	11/9/2001	20 U	20 U	20 U	20 U	
MW-11	4/3/2002	20 U	20 U	20 U	20 U	
MW-11	10/10/2002	20 U	20 U	20 U	20 U	
MW-11	5/1/2003	20 U	20 U	20 U	20 U	
MW-11	12/8/2003	50 U	50 U	50 U	50 U	
MW-11	7/19/2004	10 U	10 U	10 U	10 U	
MW-11	4/8/2005	1.1	0.50 J	0.50 U	0.50 U	
MW-11	4/21/2006	10 U	10 U	10 U	10 U	
MW-11	2/7/2007	5 U	5 U	5 U	5 U	
MW-11	5/31/2007	5 U	5 U	5 U	5 U	
MW-11	11/29/2007	1.2	0.5 U	0.5 U	0.5 U	
MW-11	5/1/2008	0.65	0.5 U	0.5 U	0.5 U	
MW-11	11/1/2008	10 U	10 U	10 U	10 U	
MW-11	4/22/2009	10 U	10 U	10 U	10 U	
MW-11	11/20/2009	10 U	10 U	10 U	10 U	
MW-11	4/30/2010	10 U	10 U	10 U	10 U	
MW-11	11/17/2010	10 U	10 U	10 U	10 U	
MW-11	5/21/2011	10 U	10 U	10 U	10 U	
MW-11	11/29/2011	10 U	10 U	10 U	10 U	
MW-11	5/22/2012	25 U	25 U	25 U	25 U	
MW-12	10/21/1996	1 U	1 U	1 U	1 U	
MW-12	10/22/1997	1 U	1 U	1 U	1 U	
MW-12	10/20/1998	1 U	1 U	1 U	1 U	
MW-12	10/19/1999	1 U	1 U	1 U	1 U	
MW-12	11/8/2000	1 U	1 U	1 U	1 U	
MW-12	11/9/2001	1 U	1 U	1 U	1 U	
MW-12	10/10/2002	1 U	1 U	2	1 U	
MW-12	12/8/2003	1 U	1 U	1 U	1 U	
MW-12	12/28/2004	0.50 U	0.50 U	0.50 U	0.50 U	
MW-12	11/9/2005	0.50 U	0.50 U	0.50 U	0.50 U	
MW-12	1/2/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	5/31/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	11/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	11/20/2009	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	11/17/2010	0.5 U	0.5 U	0.5 U	0.5 U	
MW-12	11/29/2011	0.5 U	0.5 U	0.5 U	0.5 U	
MW-13	10/24/1996	10 U	10 U	10 U	10 U	
MW-13	10/23/1997	50 U	50 U	50 U	50 U	
MW-13	10/21/1998	25 U	25 U	25 U	25 U	
MW-13	10/20/1999	20 U	20 U	20 U	20 U	
MW-13	11/9/2000	20 U	20 U	20 U	20 U	
MW-13	11/8/2001	20 U	20 U	20 U	20 U	
MW-13	6/11/2002	20 U	20 U	20 U	20 U	
MW-13	10/11/2002	20 U	20 U	20 U	20 U	
MW-13	4/8/2005	0.50 U	0.50 U	0.50 U	0.50 U	
MW-13	4/21/2006	5 U	5 U	5 U	5 U	
MW-13	2/7/2007	5 U	5 U	5 U	5 U	
MW-13	5/31/2007	5 U	5 U	5 U	5 U	
MW-13	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-13	5/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-13	11/1/2008	NS	NS	NS	NS	
MW-13	4/30/2010	5 U	5 U	5 U	5 U	
MW-13	11/17/2010	5 U	5 U	5 U	5 U	
MW-13	11/29/2011	5 U	5 U	5 U	5 U	
MW-13	5/22/2012	5 U	5 U	5 U	5 U	
MW-14	1/17/1996		5 U	5 U		
MW-14	4/10/1996		5 U	5 U		
MW-14	7/16/1996	10 U	10 U	10 U	10 U	
MW-14	10/22/1996	5 U	5 U	5 U	5 U	
				0.0		



	Chemical Name	cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-14	4/16/1997	10 U	10 U	10 U	10 U	
MW-14	7/8/1997	10 U	10 U	10 U	10 U	
MW-14	10/23/1997	10 U	10 U	10 U	10 U	
MW-14	1/29/1998	10 U	10 U	10 U	10 U	
MW-14	4/15/1998	10 U	10 U	10 U	10 U	
MW-14	10/21/1998	10 U	10 U	10 U	10 U	
MW-14	4/29/1999	10 U	10 U	10 U	10 U	
MW-14	10/20/1999	10 U	10 U	10 U	10 U	
MW-14	4/6/2000	5 U	5 U	5 U	5 U	
MW-14	11/8/2000	5 U	5 U	5 U	5 U	
MW-14	7/3/2001	5 U	5 U	5 U	5 U	
MW-14	11/8/2001	5 U	5 U	5 U	5 U	
MW-14	10/11/2002	5 U	5 U	5 U	5 U	
MW-14	5/1/2003	5 U	5 U	5 U	5 U	
MW-14	12/8/2003	10 U	10 U	10 U	10 U	
MW-14	12/28/2004	5.0 U	5.0 U	5.0 U	5.0 U	
MW-14	11/9/2005	5.00 U	5.00 U	5.00 U	5.00 U	
MW-14	1/2/2007	5 U	5 U	5 U	5 U	
MW-14	11/29/2007	0.94	0.5 U	0.5 U	0.5 U	
MW-14	11/1/2008	1	0.5 U	0.5 U	0.5 U	
MW-14	11/20/2009	12.5 U	12.5 U	12.5 U	12.5 U	
MW-14	11/17/2010	10 U	10 U	10 U	10 U	
MW-14	11/29/2011	0.5 U	0.5 U	0.5 U	0.5 U	
MW-15	10/22/1996	1 U	1 U	1 U	1 U	
MW-15	10/22/1997	1 U	1 U	1 U	1 U	
MW-15	10/21/1998	1 U	1 U	1 U	1 U	
MW-15	10/19/1999	1 U	1 U	1 U	1 U	
MW-15	11/9/2000	1 U	1 U	1 U	1 U	
MW-15	11/8/2001	1 U	1 U	1 U	1 U	
MW-15	10/11/2002	1 U	1 U	1 U	1 U	
MW-15	12/8/2003	1 U	1 U	1 U	1 U	
MW-15	12/28/2004	0.50 U	0.50 U	0.50 U	0.50 U	
MW-15 MW-15	11/9/2005	2.19	0.50 U	0.50 U	0.50 U	
	1/2/2007	1.8 1.7	0.5 U	0.5 U	0.5 U	
MW-15 MW-15	11/29/2007 11/1/2008	0.5 U	0.5 U	0.5 U 0.5 U	0.5 U 0.5 U	
MW-15	11/20/2009	0.50	0.5 U 0.5 U	0.5 U	0.5 U	
MW-15	11/17/2010	0.7 U	0.5 U	0.5 U	0.5 U	
MW-15	11/29/2011	0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	10/22/1996	1 U	1 U	1 U	1 U	
		1 U	1 U	1 U	1 U	
MW-16	10/22/1997					
MW-16	10/21/1998	1 U	1 U	1 U	1 U	
MW-16	10/19/1999	1 U	1 U	1 U	1 U	
MW-16	11/9/2000	1 U	1 U	1 U	1 U	
MW-16	11/8/2001	1 U	1 U	1 U	1 U	
MW-16	10/11/2002	1 U	1 U	1 U	1 U	
MW-16	12/8/2003	1 U	1 U	1 U	1 U	
MW-16	12/28/2004	0.50 U	0.50 U	0.50 U	0.50 U	
MW-16	11/9/2005	0.50 U	0.50 U	0.50 U	0.50 U	
	1/2/2007					
MW-16		0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	11/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	11/20/2009	0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	11/17/2010	0.5 U	0.5 U	0.5 U	0.5 U	
MW-16	11/29/2011	0.5 U	0.5 U	0.5 U	0.5 U	
MW-17	1/17/1996		5 U	5 U		
MW-17	4/10/1996		20	5 U		
MW-17	7/16/1996	10 U	10 U	10 U	10 U	
MW-17	10/22/1996	7	12	5 U	5 U	
MW-17	1/16/1997	10 U	22	10 U	10 U	



		cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-17	4/15/1997	10 U	15	10 U	10 U	
MW-17	7/8/1997	10 U	18	10 U	10 U	
MW-17	1/29/1998	10 U	12	10 U	10 U	
MW-17	4/15/1998	50 U	50 U	50 U	50 U	
MW-17	10/20/1998	10 U	17	10 U	10 U	
MW-17	4/29/1999	10 U	23	10 U	10 U	
MW-17	10/19/1999	10 U	10 U	10 U	10 U	
MW-17	4/6/2000	10 U	10 U	10 U	10 U	
MW-17	11/9/2000	15	7	5 U	5 U	
MW-17	7/3/2001	10	7	5 U	5 U	
MW-17	11/10/2001	10	8	5 U	5 U	
MW-17	10/11/2002	22	5 U	5 U	5 U	
MW-17	12/8/2003	10 U	10 U	10 U	10 U	
MW-17	12/28/2004	5.1	11	5.0 U	5.0 U	
MW-17	11/9/2005	17.9	9.50	2.50 U	2.50 U	
MW-17	1/2/2007	9.45	10.2	2.5 U	2.5 U	
MW-17	11/29/2007	22	6.9	0.5 U	0.5 U	
MW-17	11/1/2008	21.7	5.06	0.5 U	0.5 U	
MW-17	11/20/2009	11.6	6.1	5 U	5 U	
MW-17	11/17/2010	2.4	6.18	1.25 U	1.25 U	
MW-17	11/29/2011	20.2	19.7	5 U	5 U	
MW-18	5/29/1996	50 U	50 U	50 U	50 U	
MW-18	10/22/1996	81	50 U	50 U	50 U	
MW-18	1/16/1997	100 U	100 U	100 U	100 U	
MW-18	4/16/1997	10 U	10 U	10 U	10 U	
MW-18	7/8/1997	66	50 U	50 U	50 U	
MW-18	10/23/1997	100 U	100 U	100 U	100 U	
MW-18	1/29/1998	50 U	50 U	50 U	50 U	
MW-18	4/16/1998	50 U	50 U	50 U	50 U	
MW-18	10/21/1998	160	100 U	100 U	100 U	
MW-18	4/29/1999	37	25 U	25 U	25 U	
MW-18		100 U	100 U	100 U	100 U	
MW-18	10/19/1999	14		10 U	10 U	
MW-18	4/6/2000	100	10 U 50 U	50 U	50 U	
	11/9/2000			50 U	50 U	
MW-18	7/3/2001	50 U	50 U			
MW-18	11/10/2001	120	50 U	50 U	50 U	
MW-18	4/4/2002	10 U	10 U	10 U	10 U	
MW-18	10/15/2002	310	50 U	50 U	50 U	
MW-18	5/1/2003	130	50 U	50 U	50 U	
MW-18	12/8/2003	100 U	100 U	100 U	100 U	
MW-18	7/19/2004	140	50 U	50 U	50 U	
MW-18	4/8/2005	120	0.51	0.50 U	0.86	
MW-18	4/21/2006	127	25 U	25 U	25 U	
MW-18	2/7/2007	68.5	12.5 U	12.5 U	12.5 U	
MW-18	5/31/2007	136	12.5 U	12.5 U	12.5 U	
MW-18	11/29/2007	190	0.51	0.5 U	0.86	
MW-18	5/1/2008	108	0.5 U	0.5 U	0.81	
MW-18	11/1/2008	148	25 U	25 U	25 U	
MW-18	04/22/2009	79.5	25 U	25 U	25 U	
MW-18	11/20/2009	125	25 U	25 U	25 U	
MW-18	04/30/2010	38.5	25 U	25 U	25 U	
MW-18	11/17/2010	99	25 U	25 U	25 U	
MW-18	5/21/2011	73.5	25 U	25 U	25 U	
MW-18	11/29/2011	109	25 U	25 U	25 U	
MW-18	5/22/2012	74	25 U	25 U	25 U	



		cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-20	5/24/1996	46	1 U	1 U	1 U	
MW-21	1/21/1997	650	100 U	100 U	100 U	
MW-21	4/16/1997	630	50 U	50 U	50 U	
MW-21	7/8/1997	770	50 U	50 U	50 U	
MW-21	10/23/1997	800	50 U	50 U	50 U	
MW-21	1/29/1998	350	10 U	10 U	10 U	
MW-21	4/16/1998	1400	50 U	50 U	50 U	
MW-21	10/21/1998	340	50 U	50 U	50 U	
MW-21	4/29/1999	2100	100 U	100 U	100 U	
MW-21	10/19/1999	670	20 U	20 U	20 U	
MW-21	4/6/2000	140	5 U	5 U	5 U	
MW-21	11/7/2000	220	5 U	5 U	5 U	
MW-21	7/3/2001	130	5 U	5 U	5 U	
MW-21	11/10/2001	240	5 U	5 U	5 U	
MW-21	12/8/2003	32	1 U	1 U	1 U	
MW-21		2.8	0.50 U	0.50 U	0.50 U	
MW-21	12/28/2004	20.0			0.50 U	
	11/9/2005		0.50 U	0.50 U		
MW-21	1/2/2007	15.4	0.5 U	0.5 U	0.5 U	
MW-21	11/29/2007	25	0.5 U	0.5 U	0.5 U	
MW-21 MW-21	11/1/2008	45.2	0.5 U	0.5 U	0.5 U	
	11/20/2009	40.7	1 U	1 U	1 U	
MW-21	11/17/2010	22.6	1 U	1 U	1 U	
MW-21	11/29/2011	18.8	0.5 U	0.5 U	0.5 U	
MW-22	1/21/1997	5	1 U	1 U	1 U	
MW-22	4/16/1997	4	1 U	1 U	1 U	
MW-22	7/8/1997	9	1 U	1 U	1 U	
MW-22	10/23/1997	22	1 U	1 U	1 U	
MW-22	1/29/1998	11	1 U	1 U	1 U	
MW-22	4/16/1998	22	1 U	1 U	1 U	
MW-22	10/21/1998	35	1 U	1 U	1 U	
MW-22	4/29/1999	24	1 U	1 U	1 U	
MW-22	10/19/1999	28	1 U	1 U	1 U	
MW-22	4/6/2000	26	1 U	1 U	1 U	
MW-22	11/9/2000	29	1 U	1 U	1 U	
MW-22	7/3/2001	37	1 U	1 U	1 U	
MW-22	11/10/2001	36	1 U	1 U	1 U	
MW-22	10/11/2002	51	1 U	1 U	1 U	
MW-22	12/8/2003	52	2 U	2 U	2 U	
MW-22	12/28/2004	47	1.0 U	1.0 U	1.1	
MW-22	11/9/2005	56.3	1.00 U	1.00 U	1.00 U	
MW-22	1/2/2007	38.4	1 U	1 U	1 U	
MW-22	11/29/2007	37	0.5 U	0.5 U	0.77	
MW-22	11/1/2008	31.2	0.5 U	0.5 U	0.92	
MW-22	11/20/2009	30.6	1 U	1 U	1 U	
MW-22	11/17/2010	30.5	1 U	1 U	1 U	
MW-22	11/29/2011	33.4	0.5 U	0.5 U	1.16	
MW-23	4/15/1997	1 U	1 U	1 U	1 U	
MW-23	7/8/1997	1 U	1 U	1 U	1 U	
MW-23	10/22/1997	1 U	1 U	1 U	1 U	
MW-23	1/29/1998	1 U	1 U	1 U	1 U	
MW-23	10/21/1998	1 U	1 U	1 U	1 U	
MW-23		1 U			1 U	
	10/19/1999		1 U	1 U		
MW-23	11/7/2000	1 U	1 U	1 U	1 U	
MW-23	11/8/2001	1 U	1 U	1 U	1 U	



	Chemical Name	cis-1,2-Dichloroethene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	
Location ID	Sample Date	ug/l	ug/l	ug/l	ug/l	
MW-24	11/9/1998	2600	200 U	200 U	200 U	
MW-24	4/29/1999	1600	100 U	100 U	100 U	
MW-24	10/19/1999	3000	100 U	100 U	100 U	
MW-24	4/6/2000	250	20 U	20 U	20 U	
MW-24	11/7/2000	1200	50 U	50 U	50 U	
MW-24	7/3/2001	400	50 U	50 U	50 U	
MW-24	11/10/2001	2100	50 U	50 U	50 U	
MW-24	6/11/2002	680	50 U	50 U	50 U	
MW-24	5/1/2003	410	10 U	10 U	10 U	
MW-24	12/8/2003	81	10 U	10 U	10 U	
MW-24	7/19/2004	680	10 U	10 U	10 U	
MW-24	12/28/2004	69	5.0 U	5.0 U	5.0 U	
MW-24	4/8/2005	44	2.0 U	2.0 U	2.0 U	
MW-24	11/9/2005	75.6	2.50 U	2.50 U	2.50 U	
MW-24	4/21/2006	180	2.5 U	2.5 U	2.5 U	
MW-24	1/2/2007	5.15	2.5 U	2.5 U	2.5 U	
MW-24	5/31/2007	45.7	2.5 U	2.5 U	2.5 U	
MW-24	11/29/2007	42	0.5 U	0.5 U	0.5 U	
MW-24	5/1/2008	8.21	0.5 U	0.5 U	0.5 U	
MW-24	11/1/2008	51.9	5 U	5 U	5 U	
MW-24	04/22/2009	8.1	5 U	5 U	5 U	
MW-24	04/30/2010	11	2.5 U	2.5 U	2.5 U	
MW-24	11/17/2010	212	2.5 U	2.5 U	2.5 U	
MW-24	5/21/2011	492	5 U	5 U	5 U	
MW-24	11/29/2011	43.3	5 U	5 U	5 U	
MW-24	5/22/2012	36.9	5 U	5 U	5 U	
PZ-01	10/21/1996	1 U	1 U	1 U	1 U	
PZ-01	10/23/1997	1 U	1 U	1 U	1 U	
PZ-01	10/20/1998	2 U	2 U	2 U	2 U	
PZ-01	10/19/1999	10 U	10 U	10 U	10 U	
PZ-01	11/7/2000	1 U	1 U	1 U	1 U	
PZ-01	11/9/2001	2 U	2 U	2 U	2 U	
PZ-01	10/10/2002	2 U	2 U	2 U	2 U	
PZ-01	12/8/2003	5 U	5 U	5 U	5 U	
PZ-01	12/28/2004	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-01	11/9/2005	2.50 U	2.50 U	2.50 U	2.50 U	
PZ-01	1/2/2007	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-01	11/29/2007	0.5 U	0.5 U	0.5 U	0.5 U	
PZ-01	11/1/2008	0.5 U	0.5 U	0.5 U	0.5 U	
PZ-01	11/20/2009	0.5 U	0.5 U	0.5 U	0.5 U	
PZ-01	11/17/2010	1 U	1 U	1 U	1 U	
PZ-01	11/29/2011	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-02	10/21/1996	10 U	10 U	10 U	10 U	
PZ-02	10/23/1997	10 U	10 U	10 U	10 U	
PZ-02	10/20/1998	10 U	10 U	10 U	10 U	
PZ-02	10/19/1999	1 U	1 U	1 U	1 U	
PZ-02	11/9/2000	5 U	5 U	5 U	5 U	
PZ-02	11/10/2001	5 U	5 U	5 U	5 U	
PZ-02	10/11/2002	5 U	5 U	5 U	5 U	
PZ-02	12/8/2003	5 U	5 U	5 U	5 U	
PZ-02	12/28/2004	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-02	11/9/2005	2.50 U	2.50 U	2.50 U	2.50 U	
PZ-02	1/2/2007	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-02	11/29/2007	1.1	0.51	0.5 U	0.5 U	
PZ-02	11/1/2008	1	0.5 U	0.5 U	0.5 U	
PZ-02	11/20/2009	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-02	11/17/2010	2.5 U	2.5 U	2.5 U	2.5 U	
PZ-02	11/29/2011	2.5 U	2.5 U	2.5 U	2.5 U	



#### TABLE 4 - SUMMARY OF RECOVERED GROUNDWATER VOLUMES

### FORMER ACCURATE DIE CASTING SITE FAYETTEVILLE, NEW YORK

	RW-1		RV	V-2	Total (	Note 1)
	Volume (gal)	RW-1 annual avg. flow rate (gpm)	Volume (gal)	RW-2 annual avg. flow rate (gpm)	Volume (gal)	Total annual avg. flow rate (gpm)
1996 (note 2)	5,998,900	14	1,987,020	4.7	8,024,610	18.8
1997 (note 3)	6,519,770	12.4	2,494,900	4.8	9,036,730	17.2
1998 (note 4)	4,578,960	8.7	2,243,700	4.3	6,856,820	13
1999 (note 5)	, i		, i		, i	
2000	5,536,710	10.5	2,348,840	4.5	7,888,520	15
2001	4,382,540	8.3	2,285,500	4.3	6,668,320	12.7
2002	3,680,540	7	2,494,490	4.7	6,176,790	11.8
2003	1,702,150	3.2	2,850,890	5.4	4,560,930	8.7
2004	1,362,590	2.6	3,201,590	6.1	4,569,740	8.7
2005	1,242,760	2.4	2,935,610	5.6	4,179,920	8
2006	1,820,850	3.5	2,996,200	5.7	4,818,730	9.2
2007 (note 6)	2,269,640	4.3	2,997,210	5.7	5,267,350	10.0
2008 (note 7)	2,615,210	5.0	2,697,830	5.1	5,313,040	10.1
2009 (note 8)	2,183,860	4.2	2,773,920	5.3	4,957,780	9.5
2010 (note 9)	1,762,230	3.4	2,870,950	5.5	4,639,510	8.9
2011 (note 10)	1,610,860	3.1	3,051,580	5.8	4,662,440	8.8
2012 (note 11)	957,190	2.4	1,812,870	4.6	2,770,060	7.0

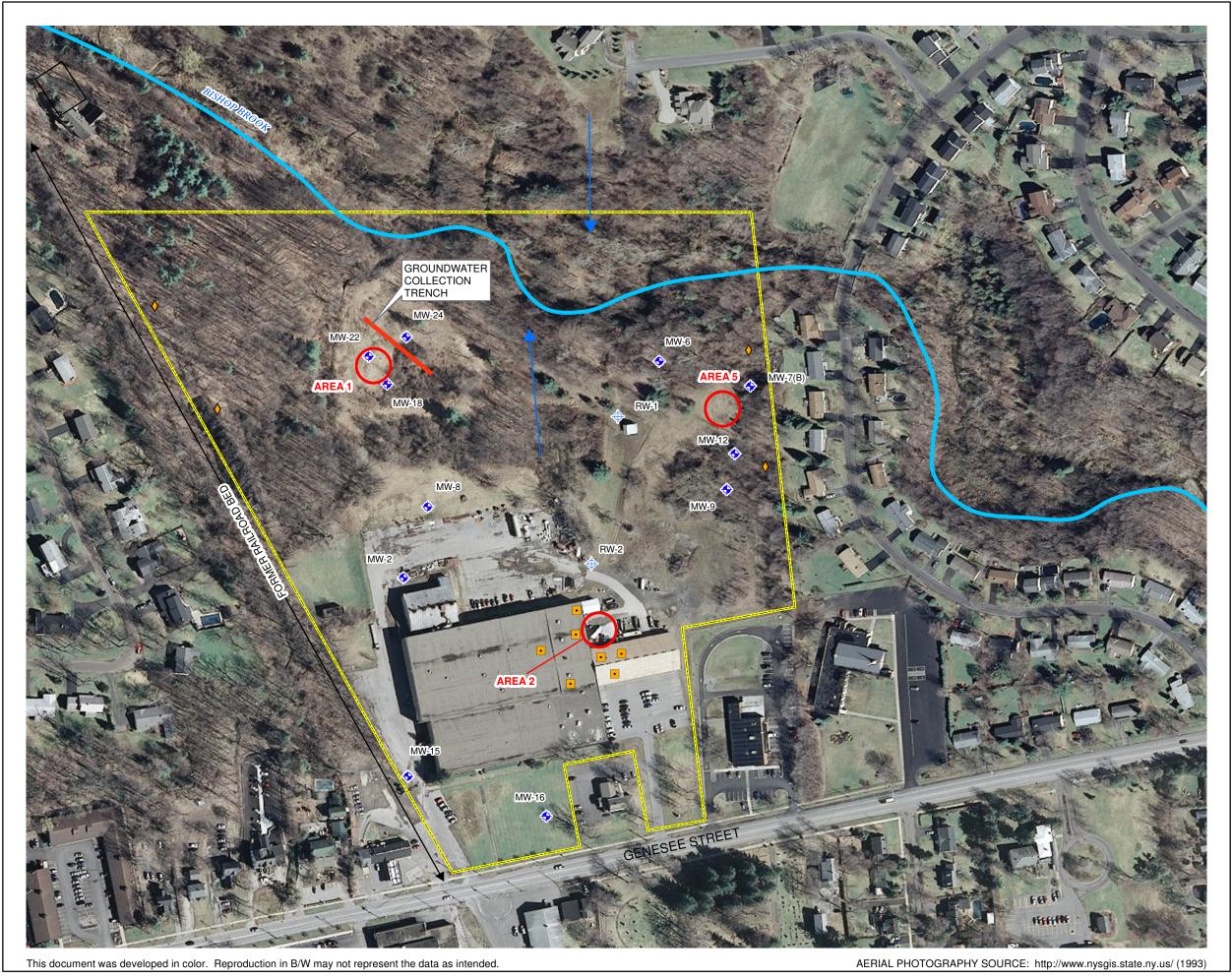
#### Notes

- 1. Total includes the flows, when applicable, from the sump and interceptor trench as well as the two recovery wells.
- 2. The groundwater recovery system was placed into operation on February 5, 1996. The data for 1996 includes volumes recovered between February 5, 1996 and November 27, 1996 as reported in February 7, 1997 letter to the NYSDEC. Average calculated by dividing period flow by 296 days in period.
- 3. The data for 1997 includes volumes recovered between December 2, 1996 and December 1, 1997 as reported in Jan 27, 1998 letter to the NYSDEC. Average calculated by dividing period flow by 364 days in period.
- 4. The data for 1998 includes volumes recovered between December 1, 1997 and December 1, 1998 as reported in Feb 25, 1999 letter to the NYSDEC. Average calculated by dividing period flow by 365 days in period.
- 5. Data for 1999 in central records and not recovered for preparation of table.
- 6. Volume of groundwater recovered between January 1, 2007 and January 2, 2008. Average calculated by dividing period flow by 366 days in period.
- 7. Volume of groundwater recovered between January 3, 2008 and January 2, 2009. Average calculated by dividing period flow by 365 days in period.
- 8. Volume of groundwater recovered between January 3, 2009 and December 30, 2009. Average calculated by dividing period flow by 361 days in period.
- 9. Volume of groundwater recovered between December 31, 2009 and December 27, 2010. Average calculated by dividing period flow by 361 days in period.
- 10. Volume of groundwater recovered between December 28, 2010 and December 29, 2011. Average calculated by dividing period flow by 366 days in period.
- 11. Volume of groundwater recovered between December 30, 2011 and September 28, 2012. Average calculated by dividing period flow by 273 days in period.

#### TABLE 5 - SUMMARY OF INFLUENT TCE CONCENTRATIONS

### FORMER ACCURATE DIE CASTING SITE FAYETTEVILLE, NEW YORK

	Influent TCE		Influent TCE		Influent TCE		Influent TCE
Sample date	Concentration						
4/4/1996	1900 ug/l	10/7/1998	840 ug/l	5/2/2001	1100 ug/l	4/7/2005	690 ug/l
5/2/1996	1900 ug/l	11/4/1998	750 ug/l	6/6/2001	1000 ug/l	7/7/2005	940 ug/l
5/21/1996	2100 ug/l	12/2/1998	580 ug/l	7/5/2001	740 ug/l	10/6/2005	876 ug/l
6/6/1996	2300 ug/l	1/6/1999	550 ug/l	8/1/2001	600 ug/l	1/6/2006	654 ug/l
7/3/1996	1900 ug/l	2/3/1999	1100 ug/l	9/5/2001	710 ug/l	4/6/2006	125 ug/l
8/2/1996	1700 ug/l	3/3/1999	1200 ug/l	10/3/2001	820 ug/l	7/6/2006	584 ug/l
9/5/1996	1400 ug/l	4/7/1999	1100 ug/l	10/3/2001	1900 ug/l	10/5/2006	698 ug/l
10/3/1996	750 ug/l	5/5/1999	590 ug/l	11/7/2001	710 ug/l	1/4/2007	609 ug/l
11/7/1996	500 ug/l	6/2/1999	510 ug/l	12/5/2001	550 ug/l	4/5/2007	560 ug/l
12/5/1996	460 ug/l	7/7/1999	530 ug/l	1/2/2002	530 ug/l	7/3/2007	682 ug/l
1/2/1997	800 ug/l	8/4/1999	420 ug/l	2/5/2002	610 ug/l	10/2/2007	416 ug/l
2/6/1997	1400 ug/l	9/2/1999	470 ug/l	3/5/2002	850 ug/l	1/11/2008	294 ug/l
3/5/1997	1100 ug/l	10/6/1999	350 ug/l	4/3/2002	610 ug/l	4/2/2008	425 ug/l
4/2/1997	1200 ug/l	11/3/1999	520 ug/l	5/1/2002	860 ug/l	7/10/2008	285 ug/l
5/7/1997	1300 ug/l	12/1/1999	400 ug/l	6/5/2002	850 ug/l	10/2/2008	319 ug/l
6/4/1997	1200 ug/l	1/5/2000	420 ug/l	7/2/2002	1400 ug/l	4/3/2009	297 ug/l
7/2/1997	1200 ug/l	2/2/2000	450 ug/l	8/6/2002	790 ug/l	7/7/2009	324 ug/l
8/5/1997	810 ug/l	3/1/2000	520 ug/l	9/4/2002	690 ug/l	8/6/2009	440 ug/l
9/3/1997	720 ug/l	4/5/2000	560 ug/l	10/2/2002	700 ug/l	10/8/2009	431 ug/l
9/30/1997	580 ug/l	5/3/2000	1300 ug/l	11/6/2002	540 ug/l	1/12/2010	368 ug/l
11/5/1997	590 ug/l	6/7/2000	1900 ug/l	11/6/2002	590 ug/l	4/6/2010	306 ug/l
12/3/1997	660 ug/l	7/5/2000	1300 ug/l	12/3/2002	600 ug/l	7/7/2010	403 ug/l
1/7/1998	940 ug/l	8/2/2000	1100 ug/l	1/2/2003	1000 ug/l	10/5/2010	363 ug/l
2/4/1998	790 ug/l	9/6/2000	900 ug/l	2/4/2003	670 ug/l	1/7/2011	177 ug/l
3/4/1998	880 ug/l	10/4/2000	740 ug/l	3/4/2003	640 ug/l	4/5/2011	560 ug/l
4/1/1998	1500 ug/l	11/1/2000	670 ug/l	4/3/2003	910 ug/l	7/7/2011	513 ug/l
5/5/1998	1700 ug/l	12/6/2000	480 ug/l	5/1/2003	1200 ug/l	10/4/2011	446 ug/l
6/3/1998	1300 ug/l	1/3/2001	460 ug/l	6/5/2003	970 ug/l	1/3/2012	460 ug/l
7/1/1998	960 ug/l	2/7/2001	500 ug/l	7/3/2003	930 ug/l	4/3/2012	479 ug/l
8/5/1998	880 ug/l	3/7/2001	680 ug/l	4/1/2004	850 ug/l	7/6/2012	558 ug/l
9/2/1998	1100 ug/l	4/4/2001	950 ug/l	10/7/2004	790 ug/l		





### **LEGEND**

PROPERTY LINE (approximate)

OVERBURDEN GROUND WATER FLOW

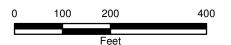
### **SAMPLE TYPE**

- ♦ MONITORING WELL
- RECOVERY WELL
- PROPOSED SOIL GAS SAMPLE
- PROPOSED SUBSLAB SAMPLE

FORMER ACCURATE DIE CASTING SITE FAYETTEVILLE, NEW YORK

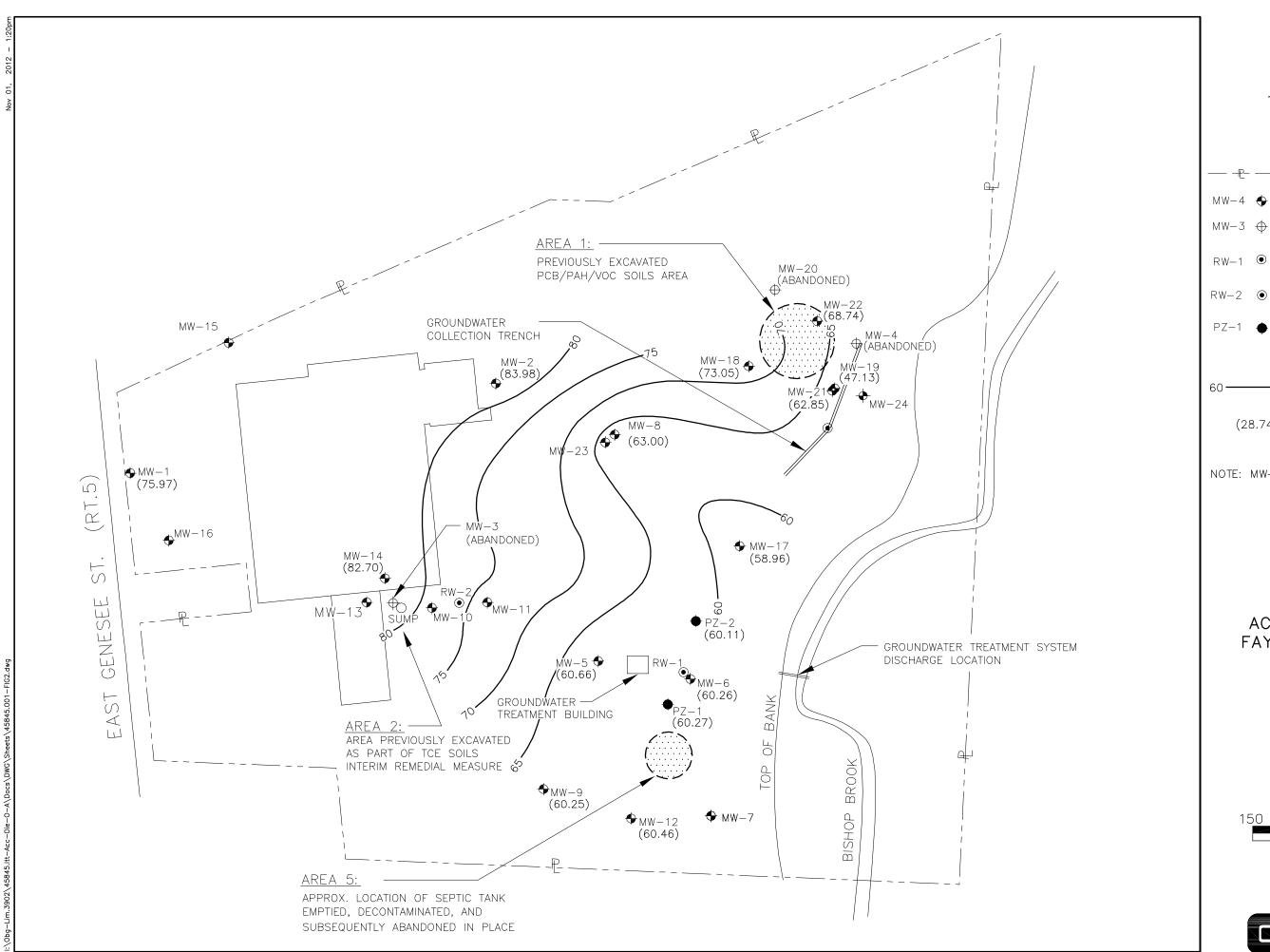
SITE CODE 7-34-052

### **SITE PLAN**



NOVEMBER 2012 3902.45845







### **LEGEND**

-P- → PROPERTY LINE

W-4 ♣ MONITORING WELL LOCATION

MW−3 ♦ FORMER MONITORING WELL

LOCATION

N−1 • OVERBURDEN AQUIFER RECOVERY WELL

BEDROCK GROUNDWATER

RECOVERY WELL

−1 ◆ PIEZOMETER LOCATION

FORCEMAIN

0 — 60 GROUNDWATER CONTOUR

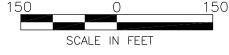
(DASHED WHERE INFERRED)

(28.74) GROUNDWATER ELEVATION

NOTE: MW-24 LOCATION IS APPROXIMATE

ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

OVERBURDEN
GROUNDWATER
ELEVATIONS
(11/29/11)



NOVEMBER 2012 FILE NO. 3902.45845.001





### **LEGEND**

PROPERTY LINE

MW-4 ♠ MONITORING WELL LOCATION

MW-3 ↔ FORMER MONITORING WELL

LOCATION

OVERBURDEN AQUIFER RECOVERY WELL

BEDROCK GROUNDWATER

RECOVERY WELL

PIEZOMETER LOCATION

FORCEMAIN

GROUNDWATER CONTOUR

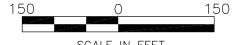
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(28.74)GROUNDWATER ELEVATION

NOTE: MW-24 LOCATION IS APPROXIMATE

ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

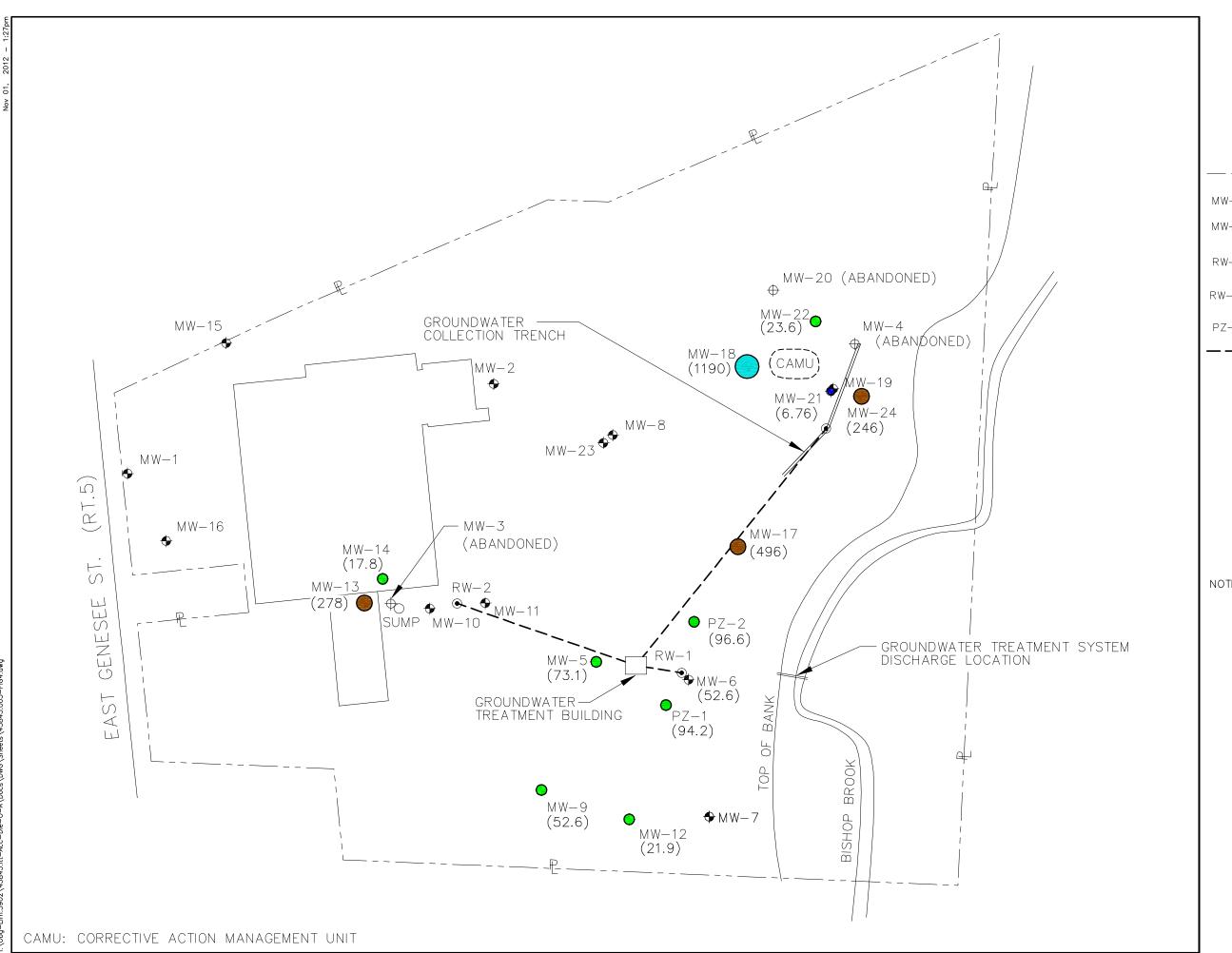
> BEDROCK GROUNDWATER **ELEVATIONS** (11/29/11)



SCALE IN FEET

NOVEMBER 2012 FILE NO. 3902.45845.002







### **LEGEND**

-P- — PROPERTY LINE

MW-4 ♣ MONITORING WELL LOCATION

MW-3 

◆ FORMER MONITORING WELL

LOCATION

RW-1 

● OVERBURDEN AQUIFER RECOVERY WELL

THE COVERT WELL

RW-2 ● BEDROCK GROUNDWATER RECOVERY WELL

-1 ◆ PIEZOMETER LOCATION

FORCEMAIN

TCE CONCENTRATIONS (ug/L)

• 1 - 10

> 10 - 100

>100 - 1000

>1000 - 10,000

NOTE: MW-24 LOCATION IS APPROXIMATE

ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

TCE CONCENTRATIONS (11/29/2011)



NOVEMBER 2012 FILE NO. 3902.45845.003



Site Management Periodic Review Report Notice

> Institutional and Engineering Controls Certification Form



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



Site Details Box 1 Site No. 7-34-052 Site Name Former Accurate Die Casting Site Address: 547 East Genessee Street Zip Code: 13066 City/Town: Fayetteville County: Onondaga Site Acreage: 33 Reporting Period: November 20,1995 to December 1, 2012 YES NO 1. Is the information above correct? Χ If NO, include handwritten above or on a separate sheet. 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? Χ 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? Χ 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? Χ If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. 5. Is the site currently undergoing development? Χ Box 2 YES NO 6. Is the current site use consistent with the use(s) listed below? Χ 7. Are all ICs/ECs in place and functioning as designed? Χ IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue. A Corrective Measures Work Plan must be submitted along with this form to address these issues. Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 7-34-052

#### **Description of Institutional Controls:**

In accordance with the December 1994 Record of Decision (ROD), October 1998 Explanation of Significant Difference (ESD), and letter from the New York State Department of Environmental Conservation (NYSDEC) dated July 14, 1999, a Corrective Action Management Unit (CAMU) was established in the portion of the Site designated in the 1994 ROD as Area 1 – PCB/PAH/VOC Soils Area. Intrusive activities (e.g. excavation) are not allowed to be undertaken in the CAMU without receiving prior approval to do so from the NYSDEC.

Also, groundwater may not be recovered on-site for consumption or production use.

#### **Description of Engineering Controls:**

In accordance with the December 1994 ROD, October 1998 ESD, and letter from the NYSDEC dated July 14, 1999, a CAMU was established in the portion of the Site designated in the 1994 ROD as Area 1 – PCB/PAH/VOC Soils Area. A groundwater intercept trench is located downgrade of the CAMU, in the overburden material, to collect groundwater (if any) present in sand lenses.

A groundwater recovery well RW-1 operates on site to address overburden groundwater (designated as Area 3 in the 1994 ROD) hydraulically downgradient of the location where trichloroethylene (TCE) was released to the surface outside the northeast corner of the facility (designated as Area 2 in the 1994 ROD). Also, a groundwater collection sump to collect overburden water (if any) is maintained in Area 2. Groundwater recovery well RW-2 operates near Area 2 to address shallow bedrock groundwater (designated as Area 4 in the 1994 ROD) beneath Area 2.

The collected groundwater is treated on site using bag filters and a pair of granular activated carbon (GAC) filters connected in series. The treated groundwater is discharged to the bank of Bishop Brook, where it is further aerated while flowing over the rip-rap lined discharge channel directing the flow to Bishop Brook. Samples of the treated groundwater are collected periodically in accordance with a State Pollutant Discharge Elimination System (SPDES) Fact Sheet to monitor compliance with the discharge standards established for the Site.

Periodic Review	Report (	PRR) C	ertification	Statements
I CITOGIC INCINC	report (	, .	Citiiloatioii	Otatements

1.	I certify by checking "YES" below that:					
a)	The Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;					
b)	To the best of my knowledge and belief, the work and conclusions described in this certific are in accordance with the requirements of the site remedial program, and generally acceeding practices; and the information presented is accurate and compete.					
	engineering practices, and the information presented is accurate and compete.	YES	NO			
		X				
2.	If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for early or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that a following statements are true:		utional			
	The Institutional Control and/or Engineering Control(s) employed at this site is unchanged introl was put in-place, or was last approved by the Department;	d since th	ne date that the			
(b) Nothing has occurred that would impair the ability of such Control, to protect public health and the environment;						
	Access to the site will continue to be provided to the Department, to evaluate the remedy, aluate the continued maintenance of this Control;	includin	g access to			
	Nothing has occurred that would constitute a violation or failure to comply with the Site Montrol; and	anagem	ent Plan for this			
	If a financial assurance mechanism is required by the oversight document for the site, the d sufficient for its intended purpose established in the document.	mechar	nism remains valid			
		YES	NO			
		X				
	IF THE ANOMED TO OUTOTION OIL NO sign and date below and					
IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.						
A Corrective Measures Work Plan must be submitted along with this form to address these issues.						
	Signature of Owner, Remedial Party or Designated Representative Date					

### IC CERTIFICATIONS SITE NO.

Box 6

## SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I <u>Douglas M. Crawford</u> at <u>O'Brien & Gere Engineers, Inc., 333 W. Washington St, Syracuse, NY</u> am print name print business address

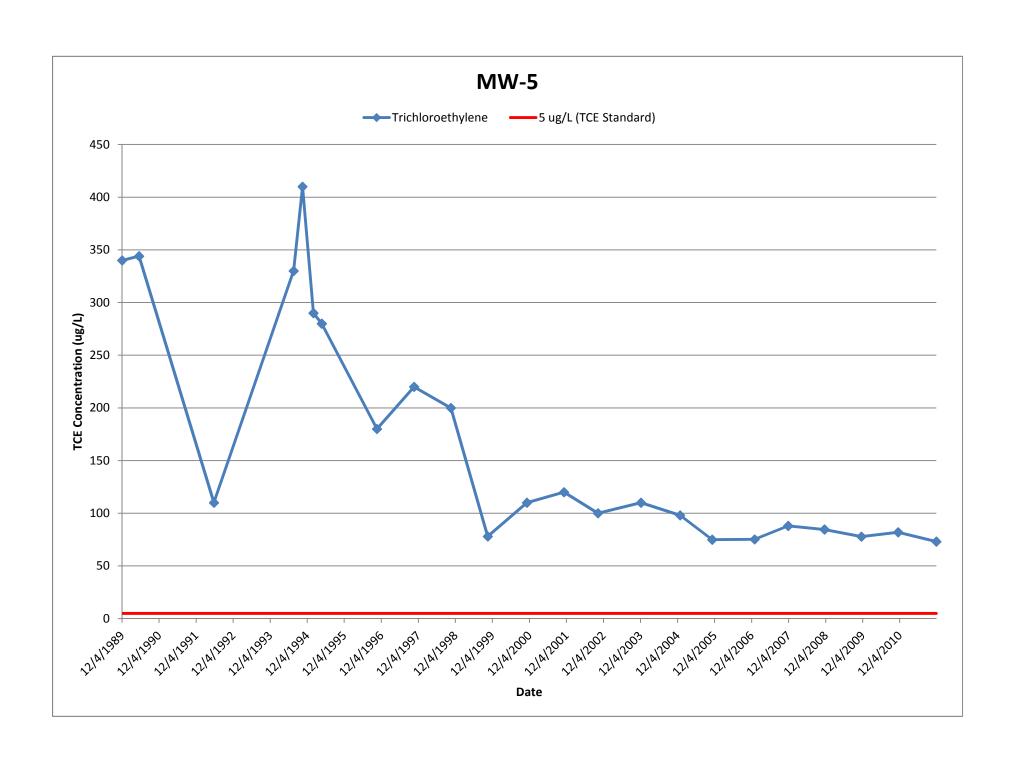
certifying as Representative for Remedial Party (ITT Corporation) (Owner or Remedial Party)

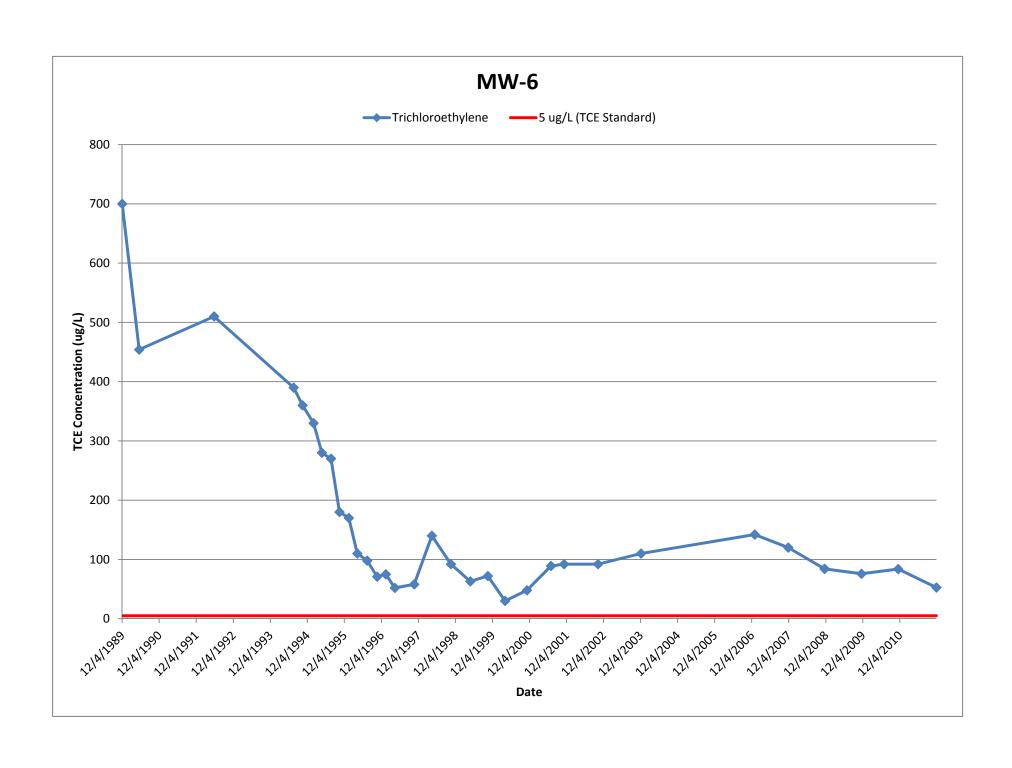
for the Site named in the Site Details Section of this form.

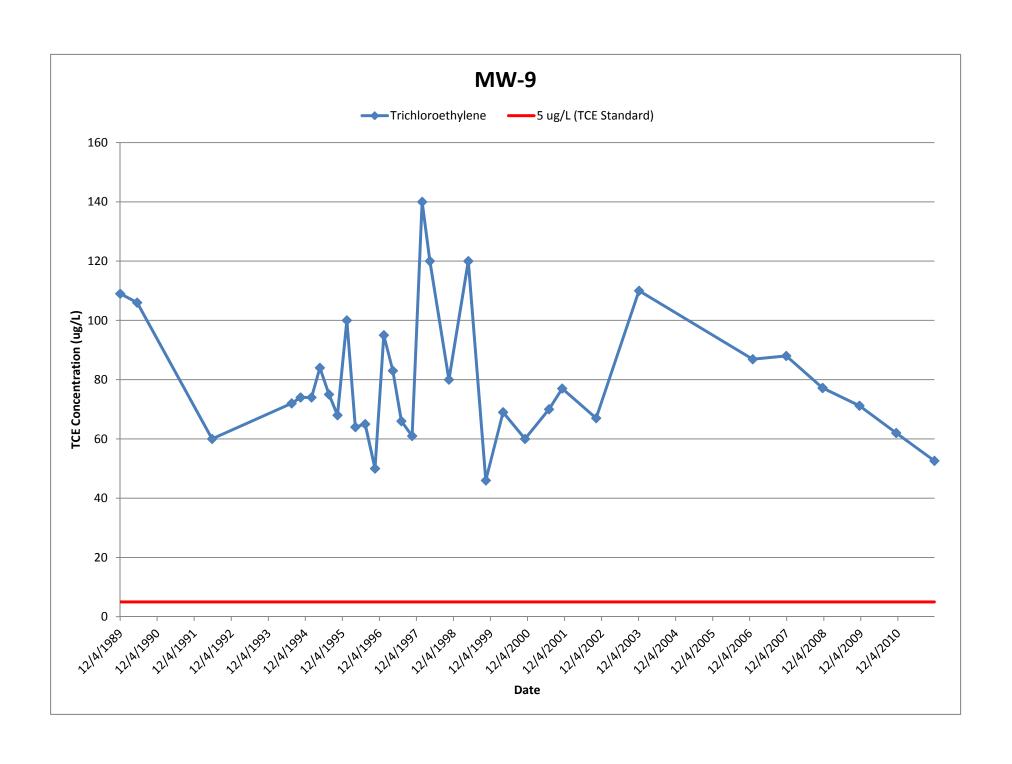
Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

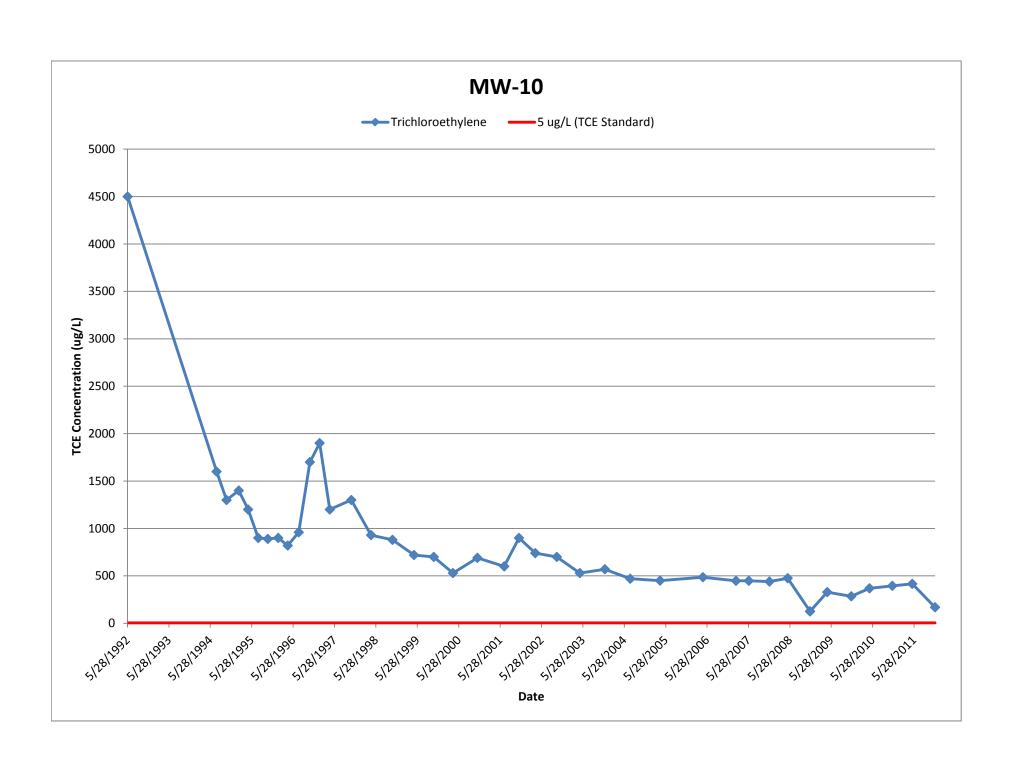
11/30/12 Date

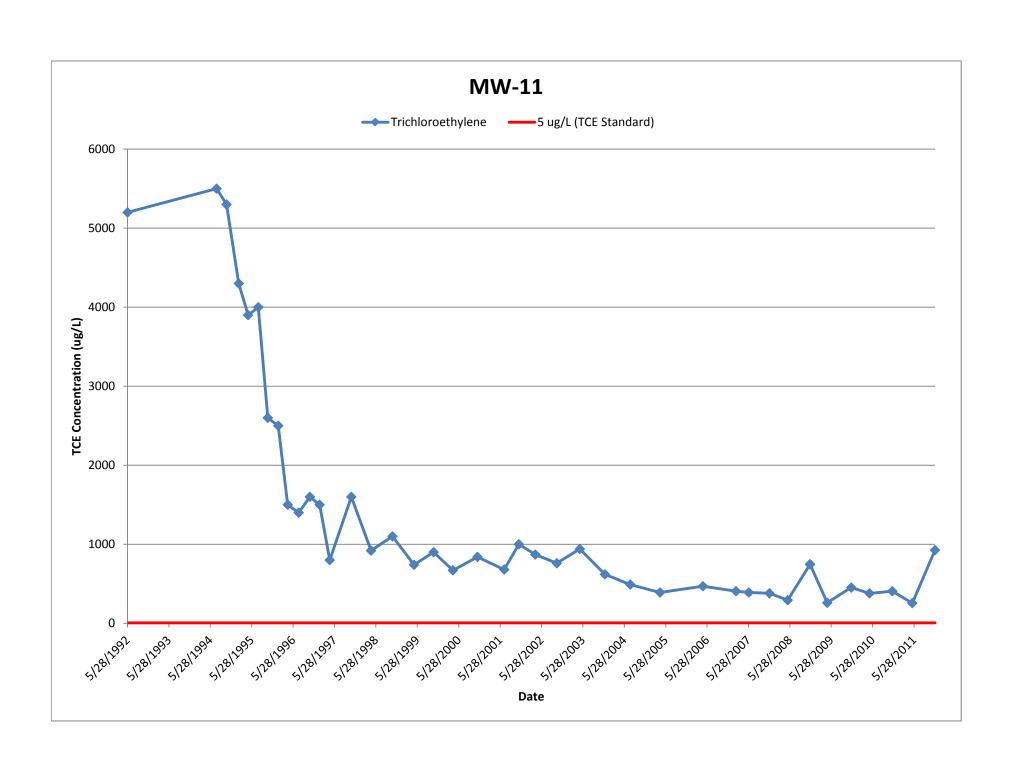
Monitoring Well TCE Concentration Trend Graphs

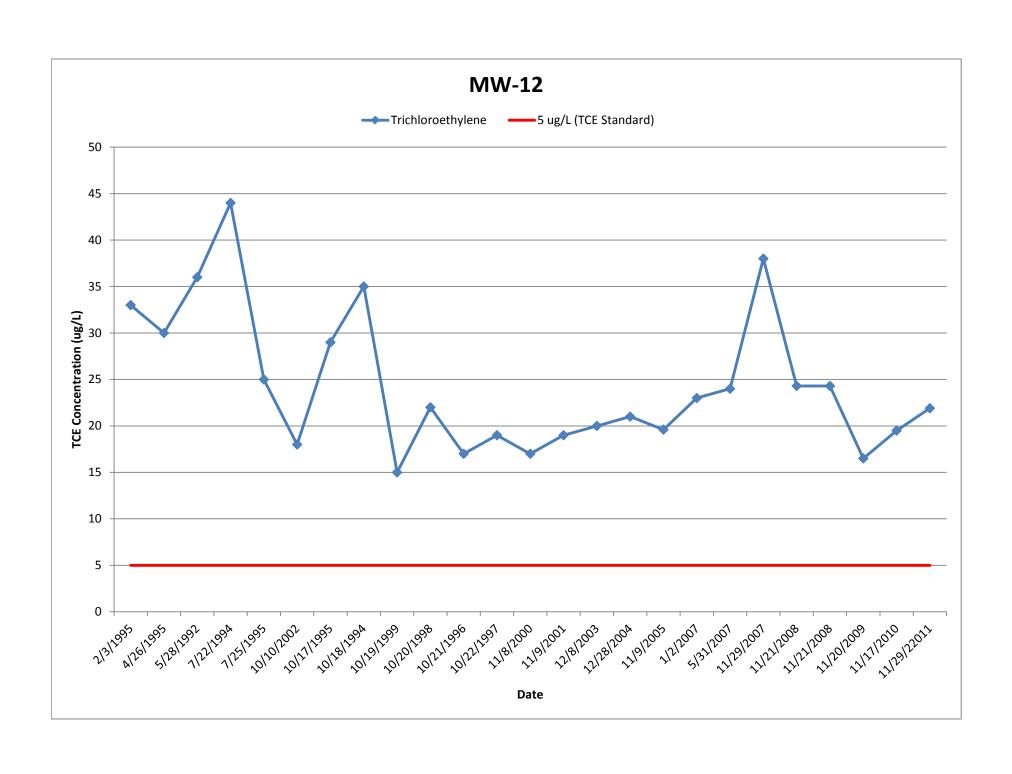


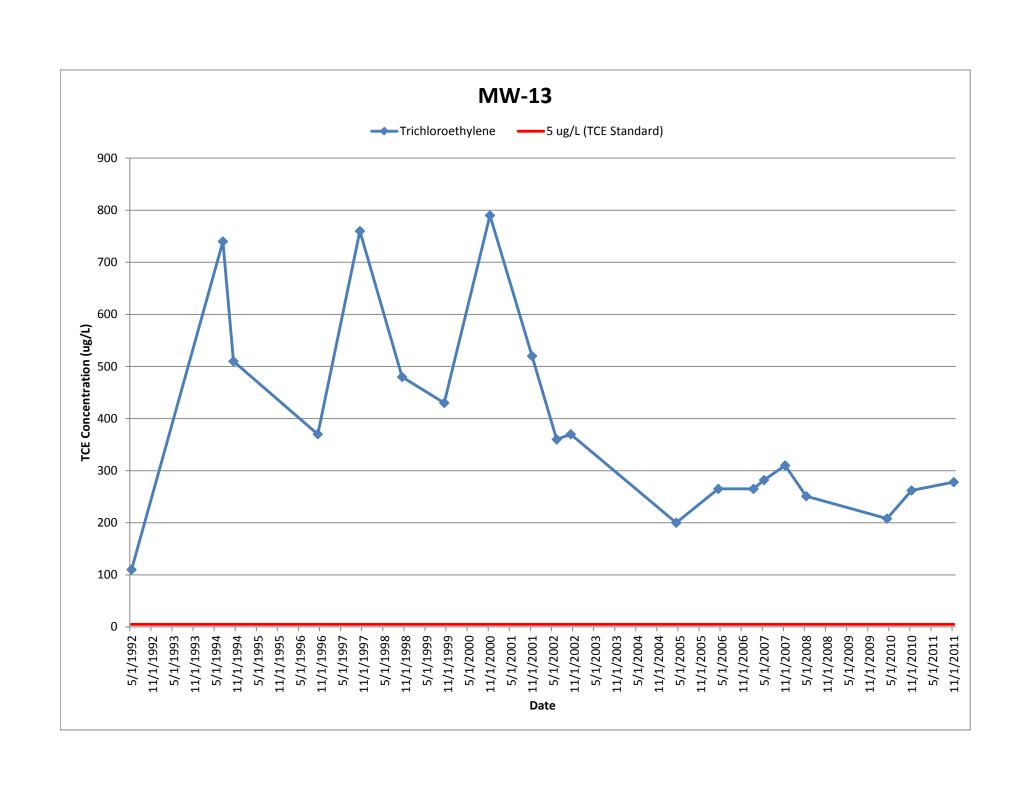


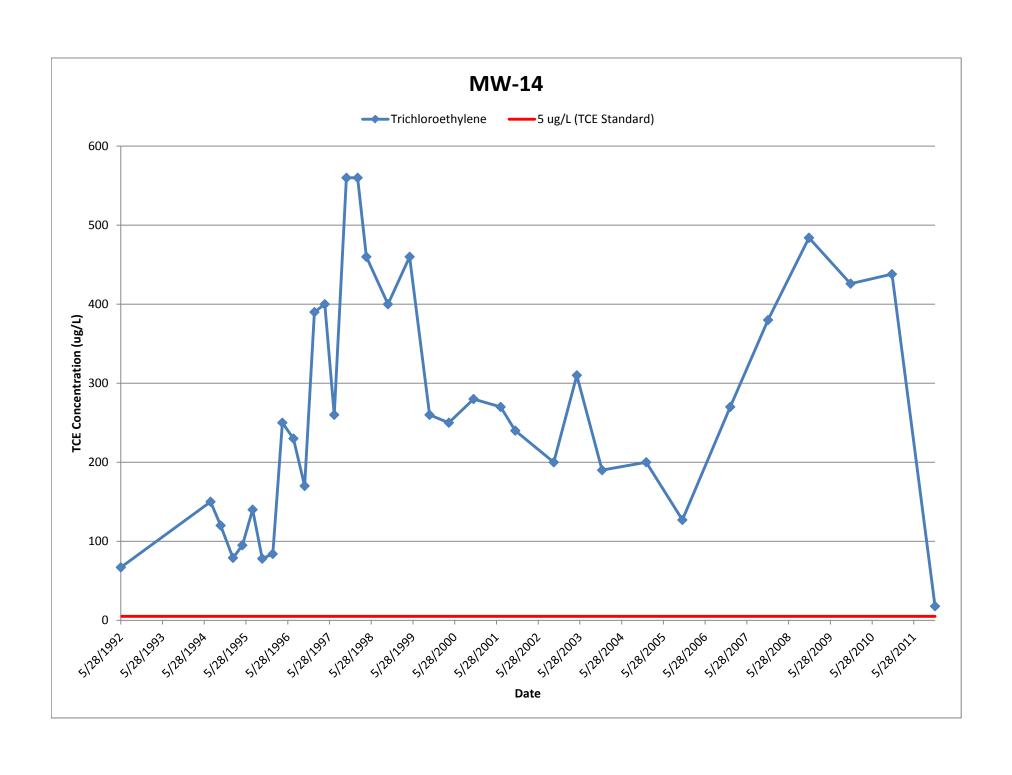


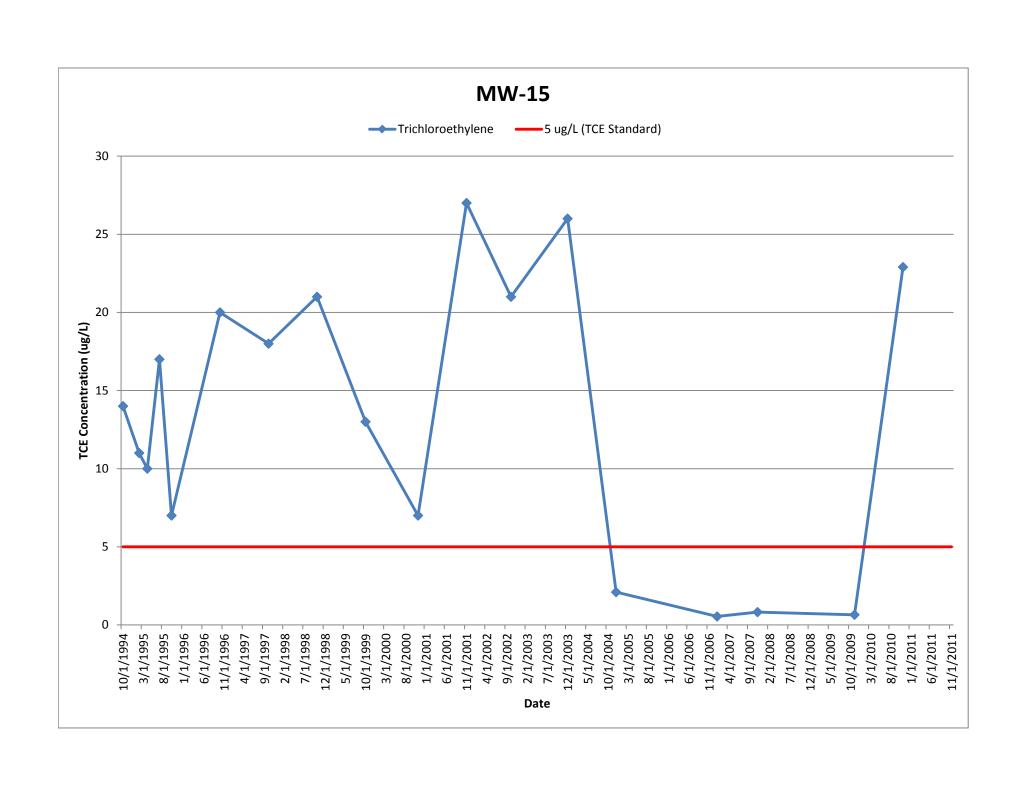


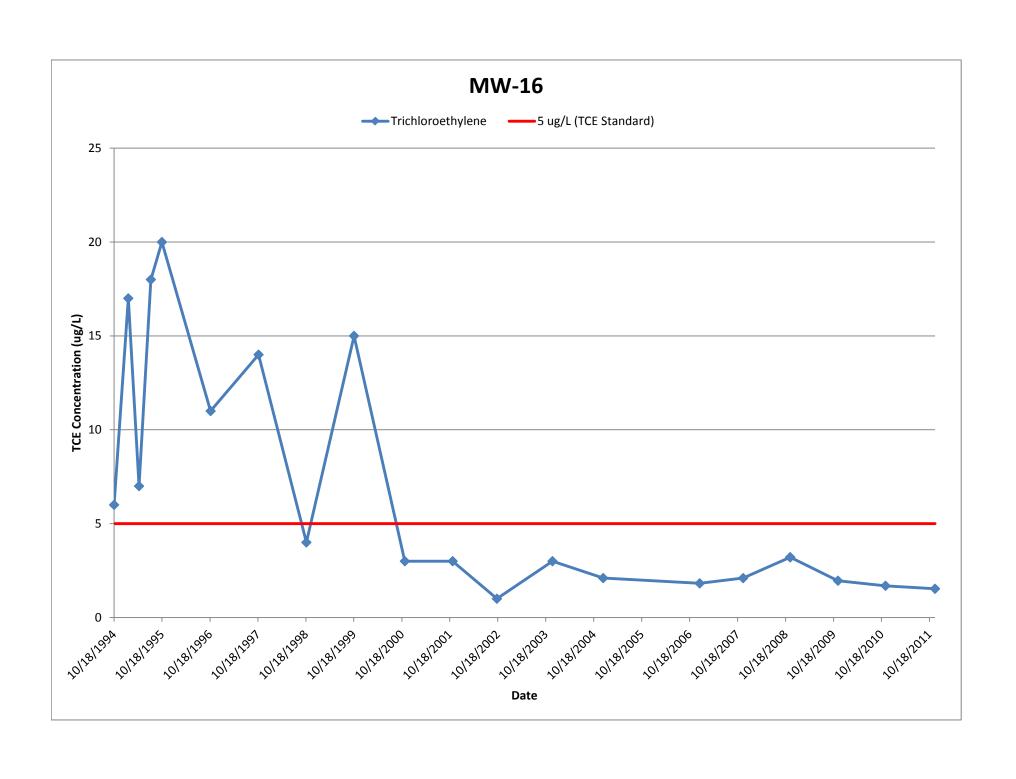


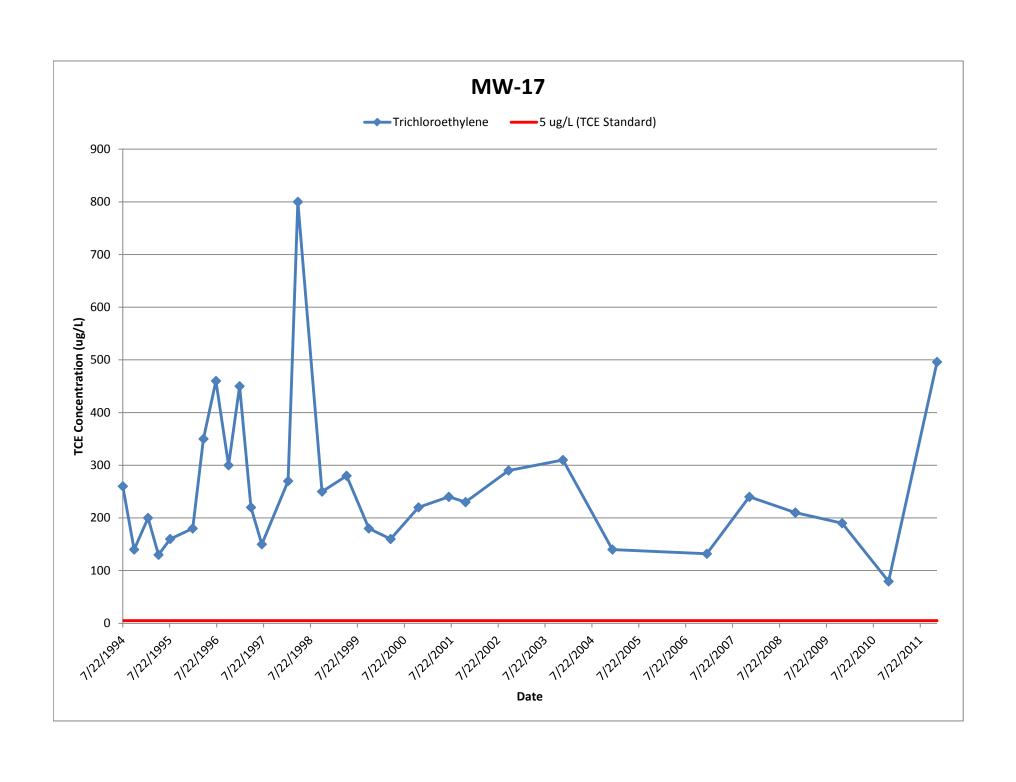


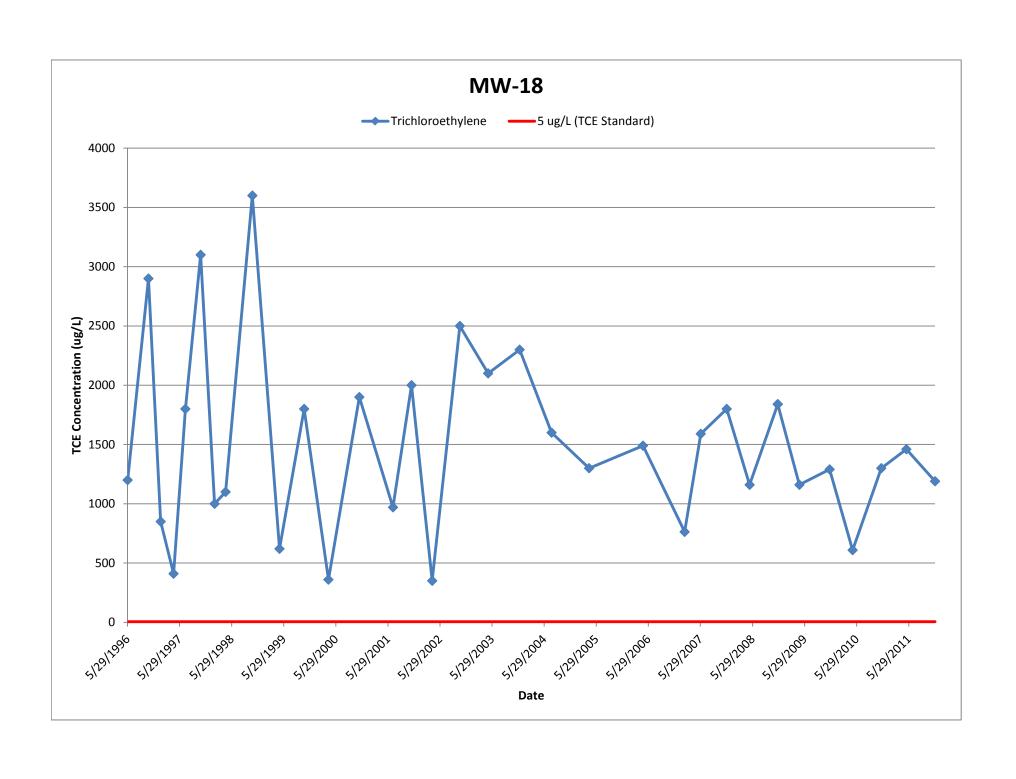


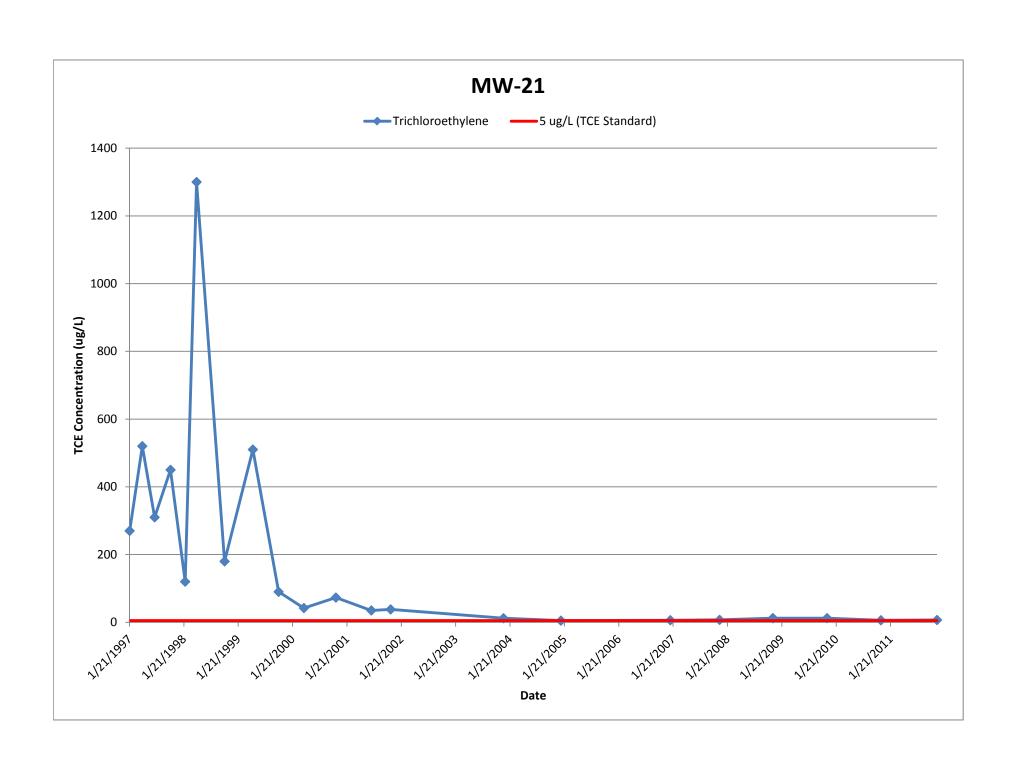


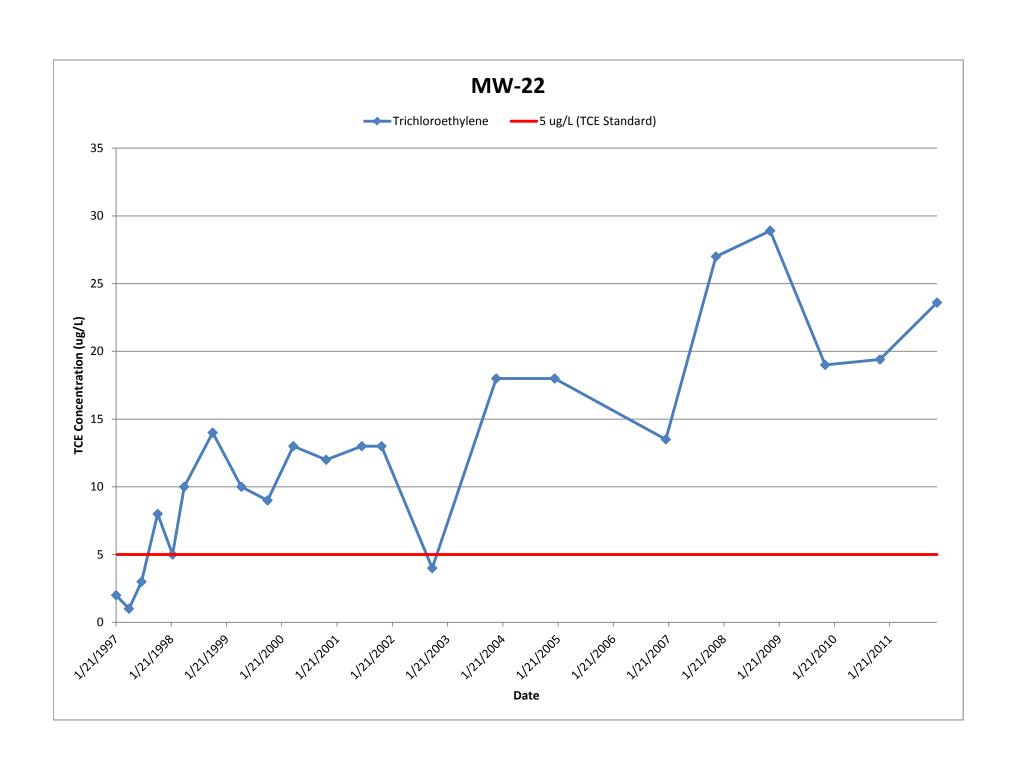


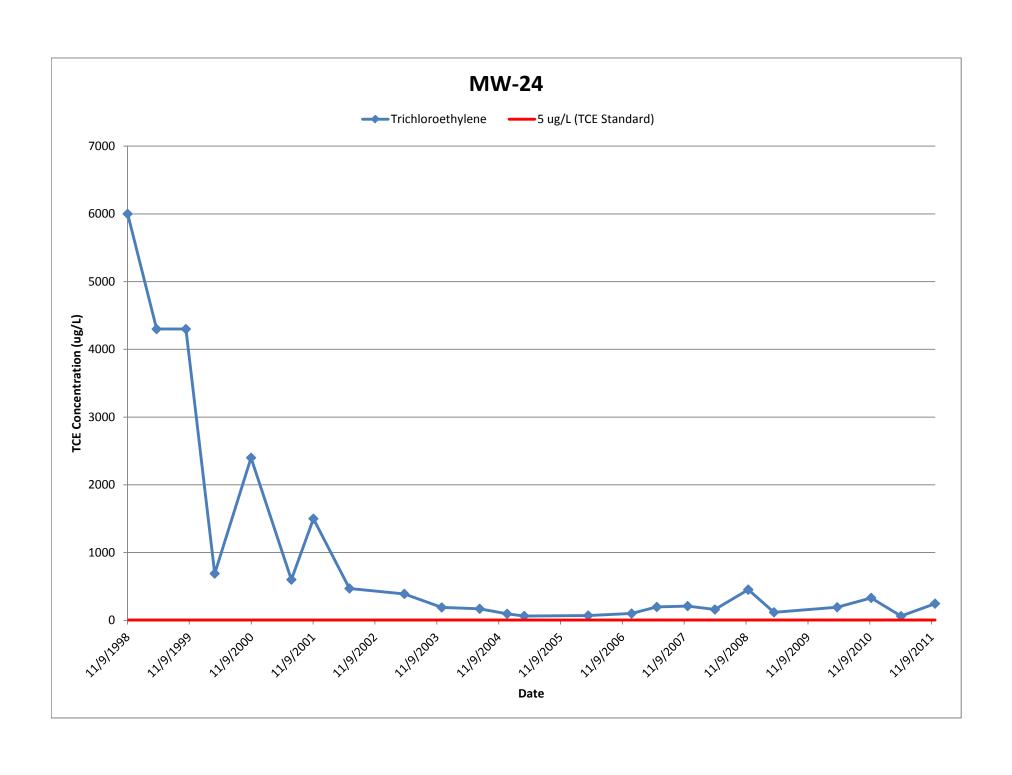


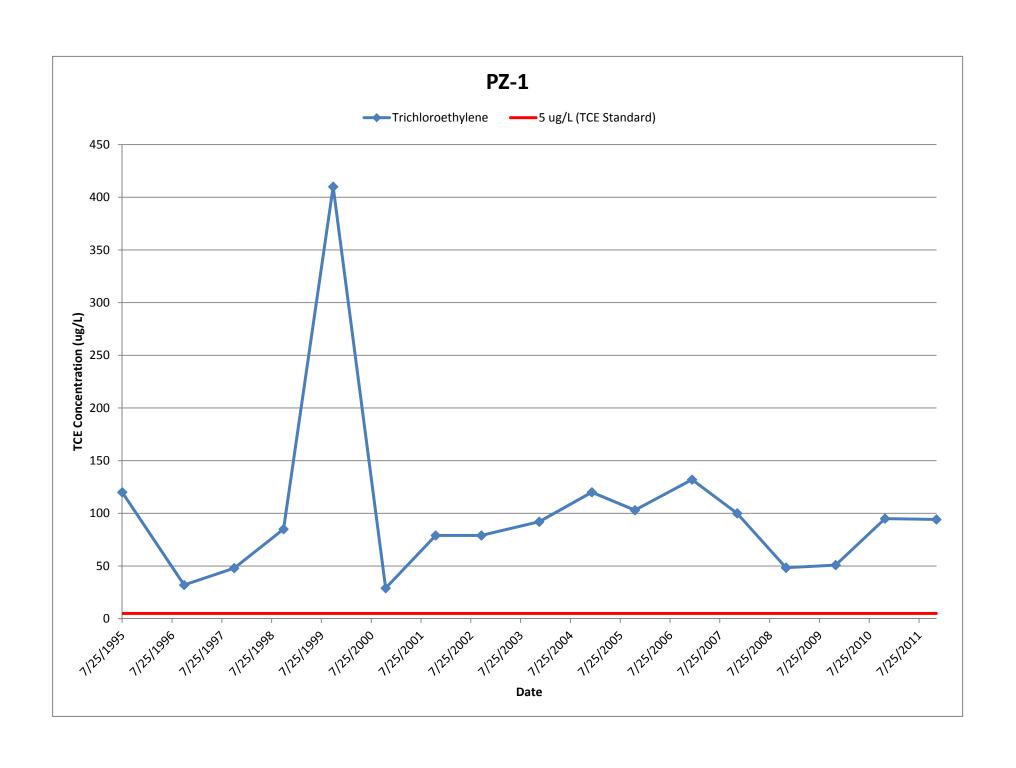


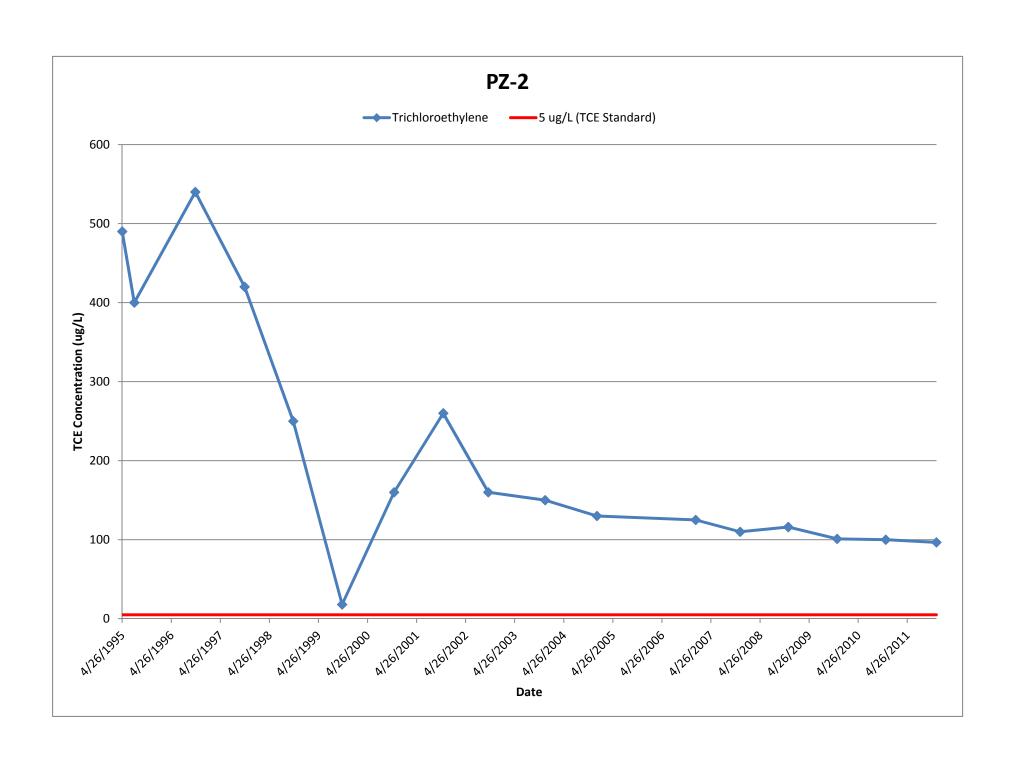




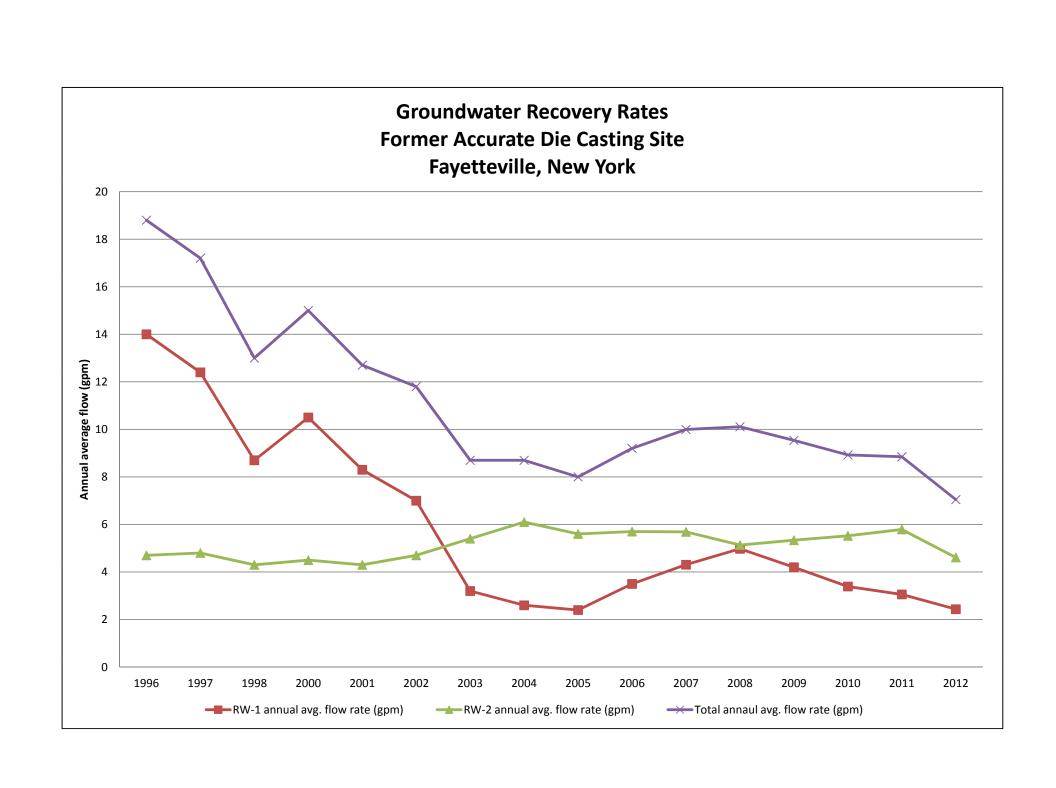








Annual Average Flow Rate Trends



Groundwater Treatment
System Influent TCE
Concentration Trend Graph

