2016 Periodic Review Report
Groundwater Monitoring and Sampling Annual Report

Roblin Steel Site
Site Number B00025
City of North Tonawanda

Prepared for
City of North Tonawanda

GHD | 285 Delaware Avenue, Buffalo, New York 14202 USA

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1. Site Background

1.1 Site Location

The Roblin Steel site was an inactive steel processing manufacturing facility in the City of North Tonawanda, Niagara County, New York. The site is bounded by East Avenue on the north, Oliver Street on the east, and Eighth Avenue on the south, and the Conrail-Erie Lackawanna railroad tracks on the west. One building, located on a 4.9 acre parcel adjacent to the northwest part of the site, represents an active facility occupied by Armstrong Pumps since 1985. In 1997, through tax delinquency, the City of North Tonawanda (City) obtained the former Roblin Steel facility. A site location map is presented on Figure 1.

1.2 Site History

Manufacturing operations were reported to have begun at the site in 1918, when the Buffalo Bolt Company owned the property. Roblin Seaway Industries, Inc. (a precursor to Roblin Industries, Inc.) purchased the manufacturing plant and property in 1961. From 1977 to 1987, Confer Plastics leased two long, narrow buildings on the west side of the site. In 1985, Roblin Industries sold a 4.9 acre portion of the site and the building on that portion of the site to Armstrong Pumps, Inc. In 1987, Roblin Industries declared bankruptcy, and all activities ceased at the site. In 1989, the property owned by Roblin Industries was divided. As a result of foreclosure for back taxes, the City assumed ownership of 11.5 acres of the former Roblin Steel site in 1992. At that time, Banac Enterprises owned the remaining 11.8 acres of the Roblin site. In 1995, this portion of the site was being used as an automobile salvage operation. The City currently owns the 11.8 acre parcel previously owned by Banac Enterprises, also acquired through foreclosure actions.

During the time that Roblin Industries owned the site from 1961 to 1987, operations taking place in the buildings included hot rolling of steel rods and bars, sulfuric acid pickling of steel coils, lime and oil coating of steel coils, annealing of steel coils, wire drawing and melting, and casting of nickel. Wastes were regularly staged near the center of the southern portion of the site prior to being sent off site for disposal. Wastes generated at the site included sludge from the phosphate tank, iron oxide scale, lime, spent pickle liquor, and waste oil.

Most of the site consisted of empty buildings in various states of disrepair and overgrown undeveloped property. Confer Plastics previously occupied two buildings on the western portion of the site, both of which had been burned prior to remediation efforts. The location of one of these buildings was identified only by the presence of brick piles, while the other building still had sections of walls standing.

The western portion of the rolling mill building that remained from the demolition project completed in 2000 contained flooring which consisted of stained, contaminated wood blocks. The block flooring had lifted off from the sub floor due to moisture. Trenches in the building appeared to be full of sediment and sludge. A soil floor comprised the eastern side of the building. Concrete-lined trenches were present in this portion of the building. Concrete-lined pickling tanks were present in the northwest portion of the mill building.

Waste piles, some from the previous operations at the site (identified as slag and scale during previous site investigations), and some containing building rubble/materials, were present on the western and southern sides of the site. Drums of various materials were present outside, near the

ROBLIN STEEL SITE
CITY OF NORTH TONAWANDA, NEW YORK
USGS QUAD: TONAWANDA WEST

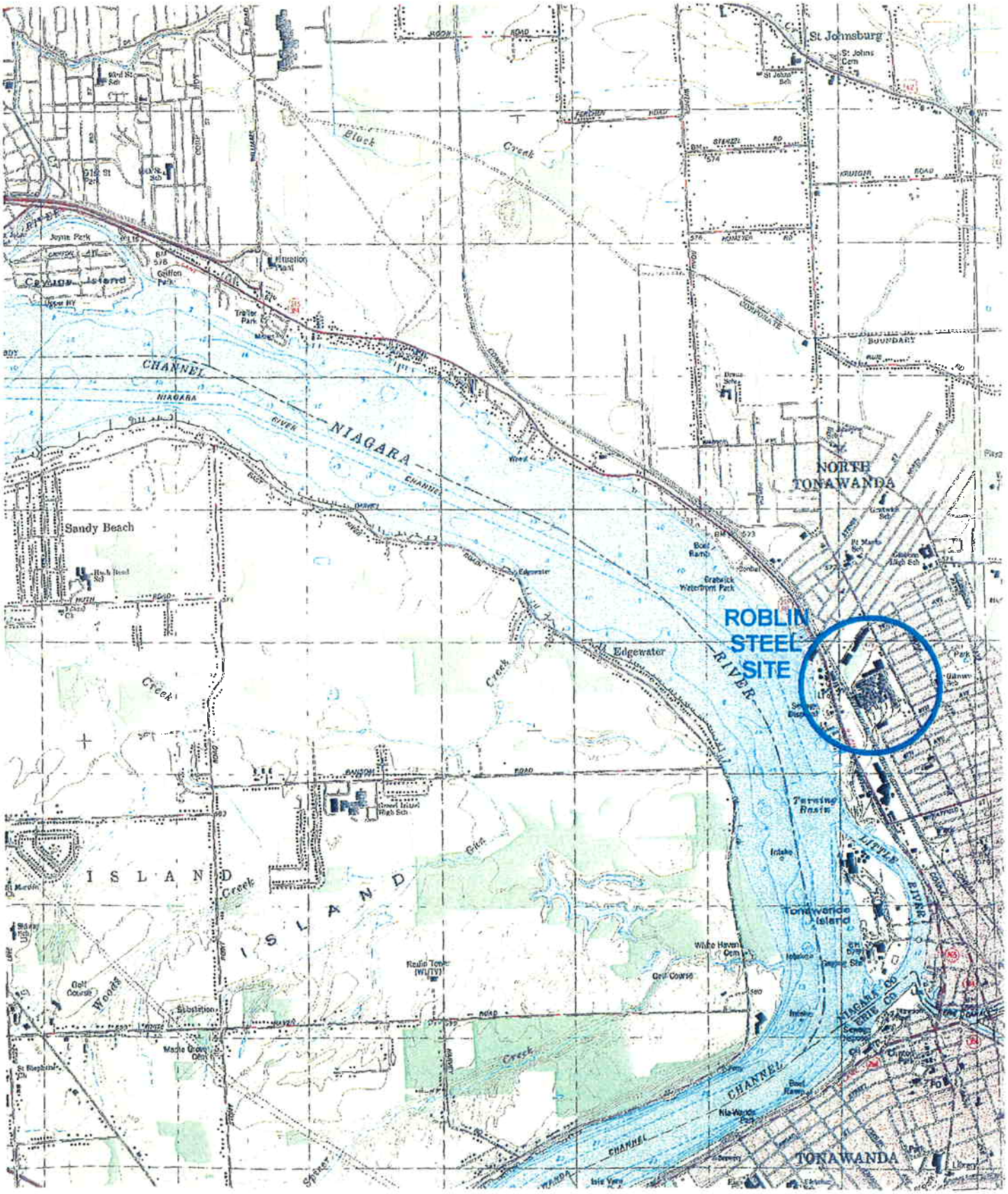

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Figure 1.

southeast corner of the former mill building, and inside the large brick building, located in the center of the site. Transformer cases were adjacent to the southeast side of the former mill building. Most of the area not covered by buildings or heavy vegetative cover contained areas of black, stained soil. A concrete reservoir from a former quenching pond was located in the approximate center of the site.

1.3 Regulatory History

In 1998, Stearns & Wheler, LLC was contracted by the City to provide engineering services and perform a Site Investigation/Remedial Alternatives Report (SI/RAR). The SI report and the preliminary RAR report were completed in 1999. In 2002, Stearns & Wheler developed a phased project approach for the site remediation based on the 1999 SI/RAR findings and earlier investigation completed in 1995 by the New York State Department of Environmental Conservation (NYSDEC). Based on the conclusions of the Site Investigation Report, Areas of Concern (AOC) were identified. The RAR addressed, defined and selected the most feasible remedial alternatives for the areas of concern.

The project was divided into two separate contracts due to the condition of the building ruins. Expedited demolition activities under emergency circumstances was required at the site responding to building conditions in close proximity to the adjacent, occupied business, Armstrong Pumps. The unsafe building conditions were the result of a fire in September 2002, which caused concern to the insurance carrier for Armstrong Pumps. Therefore, demolition of the site buildings and removal of asbestos containing materials was completed under the Phase I Contract. Remediation of site contamination and concrete foundation demolition was completed as Phase II.

1.4 Remediation Activities

Several waste removal and disposal operations have taken place since manufacturing operations ceased at the site. In 1990, a drum removal and disposal operations were conducted. In 1992, a transformer was cleaned out and PCB-impacted soil from the area surrounding the transformer pad was excavated and disposed off-site. The former wire mill building was demolished in 2000 so that the steel in the structure could be salvaged. An asbestos survey was completed prior to demolition.

In 2001, one 2,000 gallon and two 5,000 gallon steel underground storage tanks (USTs) were removed from the site. In addition, one 10,000 gallon fiberglass storage tank was excavated and demolished on-site. Approximately, 30 CY of contaminated soil related to the UST removal remained on site for later removal and disposal off-site during the site remediation activities in 2003 and 2004. UST removal and disposal activities can be referenced in the Tank Closure Report dated May 2001.

The City received a “brownfields” redevelopment grant through the 1996 New York State Clean Water/Clean Air Bond Act to facilitate the rehabilitation of the site. Site buildings were condemned by the City due to the deteriorated condition of building structure which posed a safety concern to the public. Immediate demolition of site buildings was required due to structural damage and the close proximity of the existing adjacent business known as Armstrong Pumps. This work was performed under Phase I construction and completed in 2003. Phase I construction also involved remediation of AOC.

Phase II was undertaken in 2004. Final completion occurred during June 2005. Phase II work included the remediation of the site as recommended in the RAR, Proposed Remedial Action Plan

(PRAP) and Record of Decision (ROD). Phase II construction involved remediation of the impacted soil and remediation of the former quench pond. Once the site was remediated, the site can be returned to beneficial use without posing an unacceptable risk to new occupants, neighbors, or the environment in the vicinity of the site.

2. Groundwater Monitoring Activities

The Monitoring Plan will include the necessary actions required to ready and maintain the site for monitoring once remedial construction is complete. The Monitoring Plan will be implemented once both remediation phases identified as Phases I and II are complete.

2.1 Site Hydrogeology

Results of groundwater sampling indicate that constituents in the soil/fill material have slightly impacted groundwater quality with volatile organic compounds (VOCs). Groundwater in the southeast corner of the site has been impacted with low concentrations of chlorinated VOCs. Groundwater in this portion of the site presumably flows toward the combined sewer line that runs down the west side of Oliver Street.

2.2 Monitoring Requirements

Annual monitoring will be performed on groundwater samples for a minimum period of 30 years or at reduced frequency and period as approved by NYSDEC. Groundwater monitoring was initially conducted after the remediation was completed and thereafter on an annual basis. Methods used will be consistent with NYSDEC requirements. The extent and frequency of the sampling and analysis will be evaluated with the NYSDEC after the first year and then every five years to determine if sampling points or analytes can be dropped from the monitoring program. The NYSDEC will be notified in advance of each sampling event and summary reports of the data will be submitted to NYSDEC for review.

2.3 Groundwater Monitoring

The groundwater monitoring system will be maintained and sampled during the post-remediation period. The NYSDEC will detail changes as appropriate after reviewing the annual summary reports. Under the approved Site Management Plan dated March 2007, the following groundwater monitoring locations were to be sampled and designated as GW-3S, GW-3, GW-11S, GW-12S, and GW-18S and tested for VOCs under EPA Method 8260 TCL.

The groundwater monitoring program was modified as proposed in the City's letter dated January 7, 2010 and presented in Appendix A. The City proposed to the NYSDEC to sample groundwater from one location at MW-3S. Analytical testing includes VOCs under EPA Method 8260 TCL. The NYSDEC has approved this change. As reported in the Site Investigation Report, impact to groundwater was localized detecting concentrations of VOCs in groundwater from only monitoring well MW-3S. VOC concentrations were detected above groundwater standards in groundwater sampled during the Site Investigation dated 1999 and as presented in Appendix A in Table 3. Groundwater from all other monitoring wells sampled was reported at non-detectable results or as estimated concentrations below groundwater standards.

Since the Site Management Plan has been finalized some changes have occurred to the site. All monitoring wells as listed in the Site Management Plan except for MW-11S have been reported from a recent site inspection as either damaged or missing. The City began site development in March 2010 which includes the 10th Avenue roadway extension with water and sewer utilities. The proposed roadway and 8 inch diameter waterline conflicted with monitoring well MW-3S location. As a result of this conflict, the City requested to the NYSDEC to replace monitoring well MW-3S and move its location approximately 65 feet to the north of its present location as stated in a letter dated January 7, 2010 and presented in Appendix A. Well relocation required drilling and installation of a new monitoring well. The NYSDEC approved this change.

However, during construction of the 10th Avenue roadway extension, the waterline was moved to the other side of the street which allowed for new monitoring well MW-3S to be installed at approximately the same location as the original monitoring well MW-3S location. The location of monitoring well MW-3S is presented in Appendix A.

Decommissioning of existing site monitoring wells was completed in 2010. During the drilling and installation of monitoring well MW-3S, the well installer decommissioned eight (8) existing monitoring wells.

2.4 2016 Groundwater Monitoring

The 2016 monitoring program at the Roblin Steel site consisted of one annual sampling event. Groundwater was sampled from monitoring well MW-3S on October 21, 2016. This sampling event represents the sixth event of the Roblin Steel groundwater monitoring program.

Groundwater sampling of monitoring MW-3S was collected using low-flow purging and sampling techniques. Prior to sampling, the monitoring well was purged using a disposable bailer. Groundwater parameters of pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP) were recorded. After the field parameters were recorded, groundwater sampling was collected with a disposable bailer into sample containers provided by the testing laboratory. Groundwater elevation data was recorded. Purge water generated from monitoring well MW-3S was discharged to the ground. Groundwater Field Sampling Records are presented in Appendix C.

Several quality control samples, including a trip blank and a field duplicate were collected during the sampling event. Samples were delivered under a chain of custody to ESC Lab Sciences for analysis of VOCs by USEPA SW-846 Method 8260. The specific sampling protocol to be used, including sample preservation techniques, QA/QC objectives, a description of chain-of-custody documentation, and analytical parameters are included in the approved Site Management Plan.

3. Groundwater Monitoring Results

This section includes the analytical test results of the 2016 annual groundwater sampling event and is presented in Table 1 and Appendix D. Included in this section are descriptions of the identification and distribution of constituents present in groundwater, and a comparison of historical data. Constituents are compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

TABLE 1
MONITORING WELL MW-3S
VOLATILE ORGANIC ANALYTICAL TEST RESULTS
ROBLIN STEEL SITE

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards[1]	Units	09/29/99	07/01/10	07/21/11	07/25/12	07/24/13	07/15/14	07/23/15	10/21/16
1,1,1-Trichloroethane	5	µg/L	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	µg/L	U	U	U	U	U	U	U	U
1,1,2-Trichlo-1,2,2-trifluoroethane	5	µg/L	-	U	U	U	U	U	U	U
1,1,2-Trichloroethane	1	µg/L	U	U	U	U	U	U	U	U
1,1-Dichloroethane	5	µg/L	U	U	U	U	U	U	U	U
1,1-Dichloroethene	5	µg/L	U	U	U	U	U	U	U	U
1,2,3-Trichlorobenzene	5	µg/L	-	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	5	µg/L	-	U	U	U	U	U	U	U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	U	U	U	U	U	U	U
1,2-Dibromoethane (EDB)	NE	µg/L	-	U	U	U	U	U	U	U
1,2-Dichlorobenzene	3	µg/L	-	U	U	U	U	U	U	U
1,2-Dichloroethane	0.6	µg/L	U	U	U	U	U	U	U	U
1,2-Dichloropropane	5	µg/L	U	U	U	U	U	U	U	U
1,3-Dichlorobenzene	3	µg/L	-	U	U	U	U	U	U	U
1,4-Dichlorobenzene	3	µg/L	-	U	U	U	U	U	U	U
2-Hexanone	50	µg/L	U	U	U	U	U	U	U	U
Acetone	50	µg/L	UJ	**29 J**	U	U	U	U	U	U
Benzene	1	µg/L	U	U	U	U	U	U	U	U
Bromoform	50	µg/L	U	U	U	U	U	U	U	U
Bromomethane	5	µg/L	UJ	U	U	U	U	UJ	UJ	UJ
Bromodichloromethane	50.0	µg/L	U	U	U	U	U	U	U	U
Carbon disulfide	60	µg/L	U	U	U	U	U	U	U	U
Carbon tetrachloride	5	µg/L	U	U	U	U	U	U	U	U
Chlorobenzene	5	µg/L	U	U	U	U	U	U	U	U
Chloroethane	5	µg/L	UJ	U	U	U	U	U	U	U
Chloroform	7	µg/L	U	U	U	U	U	U	U	U
Chloromethane	NE	µg/L	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	5	µg/L	**62.0**	**28.0**	**23.0**	**21.0**	**11.0**	**8.7**	**3.9**	**4.4**
cis-1,3-Dichloropropene	0.40	µg/L	U	U	U	U	U	U	U	U
Cyclohexane	NE	µg/L	-	**0.31J**	U	U	U	U	U	U
Dibromochloromethane	50	µg/L	U	-	-	-	-	-	-	-
Dichlorobromoethane	NE	µg/L	-	U	U	U	U	U	U	U
Dichlorodifluoromethane	5	µg/L	-	U	U	U	U	U	U	U
Ethylbenzene	5	µg/L	U	U	U	U	U	U	U	U
Isopropylbenzene	5	µg/L	-	U	U	U	U	U	U	U
Methyl acetate	NE	µg/L	-	U	U	U	U	U	U	U
Methyl Ethyl Ketone	50	µg/L	U	U	U	U	U	U	U	U
Methylcyclohexane	NE	µg/L	-	U	U	U	U	U	U	U
Methylene chloride	5	µg/L	U	U	U	U	U	U	**1.3J**	U
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	**4.9J**	**1.7**	**1.1**	**0.42J**	U	U	U
m,p-Xylene	5	µg/L	U	U	U	U	U	U	U	U
o-Xylene	5	µg/L	U	U	U	U	U	U	U	U
Styrene	5	µg/L	U	UJ	UJ	UJ	UJ	U	U	U
Tetrachloroethene	5	µg/L	**40**	U	U	U	**0.91J**	U	U	**0.7J**
Toluene	5	µg/L	U	U	U	U	U	U	U	U
Total Xylenes	5	µg/L	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	5	µg/L	U	**0.43J**	U	U	U	U	U	U
trans-1,3-Dichloropropene	0.4	µg/L	U	U	U	U	U	U	U	U
Trichloroethene	5	µg/L	**56**	**0.34J**	**1.5**	**0.64J**	**0.75J**	**0.66J**	**1.1**	U
Trichlorofluoromethane	5	µg/L	-	U	U	U	U	U	U	U
Vinyl Chloride	2	µg/L	U	**0.74J**	**0.42J**	U	U	U	U	U
Total VOCs		µg/L	158.0	63.7	26.6	22.7	13.1	9.4	6.3	5.1
Total VOCs		mg/L	0.158	0.064	0.027	0.023	0.013	0.009	0.006	0.005

Notes:
1. New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) 1.1.1:
Ambient Water Quality Standards and Guidance Values (µg/L)
Bolded concentrations indicated the analyte was detected.
Bolded and shaded concentrations indicate equal to or exceedance of TOGS 1.1.1 criteria.
NE = NYSDEC TOGS 1.1.1 water quality standard not established.
U = The analyte was analyzed for and Not Detected. The associated value is the analyte quantitation limit.
J = The analyte was positively identified; however, the associated numerical value is an estimated concentration below the lowest calibration point.
- = The analyte was not sampled for.

Data Usability Summary Reporting completed by Vali-Data of WNY, LLC on December 1, 2016 is presented in Appendix E. The QA/QC measurements examined for the data were within method specified or laboratory derived limits. No data were rejected as a result of the data validation.

Analytical testing from the 2016 sampling event detected cis-1,2-dichloroethene at concentrations that were below groundwater standards. Trend analysis from the comparison of site historical data dated 1999, 2010, 2011, 2012, 2013, 2014, 2015, and 2016 analytical test results showed decreasing concentrations of cis-1,2-dichloroethene.

Analytical testing from the 2016 sampling event detected concentrations of tetrachloroethene (estimated) below ground water standards. This was the second time tetrachloroethene was detected at estimated concentration and follows two yearly sampling events of non-detectable.

Total VOCs concentrations detected in groundwater decreased from 1999 to 2015 and 158 µg/L to 6.3 µg/L as presented in the following data. Total VOCs concentrations detected in groundwater in the 2016 sampling event increased from 2015 to 2016 from 6.3 µg/L to 5.1 µg/L. Overall trend analysis comparing site historical data indicates a decreasing trend with a reduced VOCs concentration.

1999	158.0 µg/L
2010	63.7 µg/L
2011	26.6 µg/L
2012	22.7 µg/L
2013	13.1 µg/L
2014	9.4 µg/L
2015	6.3 µg/L
2016	5.1 µg/L

4. Soil Management Plan

The objective of the Soils Management Plan (SMP) is to set guidelines for management of soil material during any future activities which would breach the cover system at the site. The SMP addresses environmental concerns related to soil management and has been reviewed and approved by the NYSDEC.

4.1 Description of Institutional and Engineering Controls

Institutional and engineering controls are required by the NYSDEC ROD dated February 2002 and include the environmental easement for future redevelopment and ownership of the site. The approved SMP addresses the excavation procedures for the remaining soils during future

redevelopment. The SMP includes soil management, characterization and disposal of excavated soils in accordance with the applicable NYSDEC regulations.

The ROD and environmental easement require the imposition of a deed restriction that requires compliance with the approved SMP and the future use of groundwater from the site. Deed restrictions are to be instituted that prohibit the installation of potable wells at the site. Any future use of groundwater at the site is prohibited. Annually, the future owners will be required to certify to the NYSDEC that the implemented remedy has been maintained in accordance with the SMP.

The site owner as required by the NYSDEC has included the signed Institutional and Engineering Controls Certification Form as presented in Appendix B.

4.2 Nature and Extent of Contamination

During site investigation activities, six areas of impacted soil were identified. These six impacted soil areas were excavated, removed and disposed off-site during the site remediation. Impacted soils were sampled and categorized to delineate the extent of the contamination for waste characterization for off-site disposal. The impacted soils were excavated to a depth of 1 foot as defined in the NYSDEC issued ROD.

Five impacted soil areas contained semi-volatile chemical compounds (SVOAs) which included polycyclic aromatic hydrocarbons (PAHs) and metals. The removed impacted soils were confined to surficial soils. Any visual soil impacted as defined as darken, oily materials beyond the depth of the first 12 inches were also removed. The potential exposure pathways include inhalation, absorption, ingestion and physical contact. Health effects from exposure to these chemical compounds are skin and respiratory irritants.

The sixth impacted soil area contained poly chlorinated byphenyls (PCBs), which were excavated, removed and disposed off-site to a depth ranging from 12 to 18 inches. After excavation of the PCB impacted soils, confirmatory soil samples were collected to confirm no PCB impacted soils were present. The potential exposure pathways include inhalation, absorption, ingestion and contact. Health effects from exposure to these chemical compounds are eye, skin and acne form irritants.

4.3 Contemplated Use

As part of the redevelopment project, the property has been identified for light industrial/commercial usage. Residential redevelopment will not be permitted. Deed restrictions will require compliance with the approved SMP. The future use of site groundwater will be prohibited.

4.4 Purpose and Description of Surface Cover System

The purpose of the surface cover system is to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system that was used to fill the excavated impacted soil areas was 12 inches of crushed concrete that was recycled from demolished site concrete foundations. An additional 4 inches of topsoil was spread over the crushed concrete fill to provide a vegetative supporting soil cover**.**

4.5 Management of Soils/Fill and Long Term Maintenance

The purpose of this section is to provide environmental guidelines for management of subsurface soils/fill and the long-term maintenance of the cover system during any future intrusive work which breaches the cover system. The SMP includes the following conditions:

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired area must be covered with clean soil and reseeded or covered with impervious product such as concrete or asphalt, as described in Section 4, to prevent erosion in the future.
- The immediate work area that will be disturbed must be monitored for particulate air monitoring. Particulate concentrations should be monitored continuously at the upwind and downwind perimeters of the work area at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (MIE DataRAM Aerosol Monitor) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level.

  If the downwind particulate level is 100 micrograms per cubic meter (mcg/m^3) greater than background (upwind perimeter) for the 15 minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind particulate levels do not exceed 150 mcg/m^3 above the upwind level and provided that no visible dust is migrating from the work area.

  If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m^3 above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m^3 of the upwind level and in preventing visible dust migration.
- Control of surface erosion and run-off of the entire property at all times, including during construction activities. This includes proper maintenance of the vegetative cover established on the property. Maintenance of the surface drainage system located at the northeastern corner of the site at Oliver Street and East Avenue will be required.
- Site soil that is excavated and is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.
- Soil excavated at the site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination, and is placed beneath a cover system component of 12 inches of clean fill from an acceptable source area.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Prior to any construction activities, workers are to be notified of the site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety.

4.6 Excavated and Stockpiled Soil/Fill Disposal

Every effort will be made to keep excavated soils on site. Soil/fill that is excavated as part of redevelopment that cannot be used as fill below the cover system will be characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil/fill with visual evidence of contamination (i.e., staining or elevated photoionization detector (PID) measurements), one composite sample and a duplicate sample will be collected for each 100 cubic yards of stockpiled soil/fill. For excavated soil/fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and a duplicate sample will be collected for 2,000 cubic yards of stockpiled soil, and a minimum of one sample will be collected for volumes less than 2,000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. One grab sample will be collected from the individual location with the highest PID measurement. If none of the five individual sample locations exhibit PID readings, one location will be selected at random. The composite sample will be analyzed by a NYSDOH ELAP-certified laboratory for pH (EPA Method 9045C), TCL, SVOCs, pesticides, and PCBs, and TAL metals. The grab sample will be analyzed for TCL VOCs.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually. If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received.

4.7 Subgrade Materials

Subgrade material used to backfill excavations or placed to increase site grades or elevation shall meet the following criteria.

- Subgrade material stockpiled on the surface for re-use must be placed on a liner material or other suitable surface to avoid the commingling of this material with clean topsoil or other surface materials. Stockpiled subgrade material should also be managed to prevent erosion and runoff of precipitation waters which may contact this material.
- Excavated on-site soil/fill which appears to be visually impacted shall be sampled and analyzed. If analytical results indicate that the contaminants, if any, are present at concentrations below the Soil Cleanup Objectives and Cleanup Levels (SCOCLs) as presented in Tables 2, 3, and 4, the soil/fill can be used as backfill on-site.
- Any off-site fill material brought to the site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination.
- Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a).

- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use.
- Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The soil will be acceptable for use as backfill provided that all parameters meet the SCOCLs.
- Non-virgin soils will be tested via collection of one composite sample per 500 cubic yards of material from each source area. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin soil source area and both samples of the first 1,000 cubic yards meet SCOCLs, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the SCOCLs.

4.8 Site Usage 2009 - 2016

2009 - 2010: No excavation took place on-site in 2009. Construction for the 10th Street Extension including water, sewer and natural gas utilities, was implemented and completed during 2010. Excavation and removal of soil was conducted in accordance with the SMP.

Site redevelopment included the property ownership transfer from the City to IDEK, LLC on October 22, 2010. Ownership transfer was completed to IDEK, LLC for two lots that are accessible from the new 10th Street Extension roadway**.** IDEK, LLC (a subsidiary and doing business as Aquasol Corporation). Aquasol Corporation is a manufacturer in welding and water soluble technology to include: water soluble paper, bags, tubes, confetti and water soluble packaging. NYSDEC Transfer of Ownership Certification is presented in Appendix F.

2011: No building activity took place in 2011. However, three trailers were found parked illegally and abandoned on site. Trailers contained old equipment, a car, and other common trash. Three 55 gallon drums were encountered that were filled with a white powder. This powder was evident throughout the one trailer that appears to be spilled materials from the drums. Approximately nine to ten 5 gallon drums were found sealed with full or half full contents of suspicious materials. No sampling of materials to date has yet been completed.

Site development is anticipated since construction is complete preparing lots with utility service connections. Additional site disturbances will occur once new development moves into the site. Future excavation will follow SMP guidelines.

2012: Site redevelopment included the property ownership transfer from the City to Taylor Devices, Inc. on February 14, 2012. Ownership transfer was completed to Taylor Devices, Inc. for three lots that are accessible from the new 10th Street Extension roadway**.** Incorporated in 1955, Taylor Devices, Inc. is the manufacturer that provides full analysis, development, manufacturing and testing capabilities of Shock Absorbers, Liquid Springs, Shock Isolation Systems, Seismic Isolators, Vibration Dampers, Powerplant Snubbers, and other types of Hydro-Mechanical Energy Management Products. NYSDEC Transfer of Ownership Certification is presented in Appendix F.

The three trailers as reported in 2011 were consolidated into one trailer in 2012 by the City. Two trailers that were emptied were removed from the Site. The City attempted to contract the sampling and waste disposal of these drums and wastes that have been moved into the only trailer on site.

Table 2
SEMI-VOLATILE ORGANIC COMPOUNDS

Compound	Soil Standard (mg/kg)
Naphthalene	500
Acenapthylene	500
Acenapthene	500
Fluorene	500
Phenanthrene	500
Anthracene	500
Fluoranthene	500
Pyrene	500
Benzo (a) anthracene	5.6
Chrysene	56
Benzo (b) fluoranthene	5.6
Benzo (k) fluoranthene	5.6
Benzo (a) pyrene	1
Indeno (1,2,3-c,d) pyrene	5.6
Dibenzo (a,h) anthracene	0.56
Benzo (g,h,i) perylene	500

Note: Standards based on Restricted Use Soil Cleanup Objectives for Commercial Use (NYSDEC, effective December 14, 2006)

Table 3
PCBs

Compound	Soil Standard (ug/kg)
Aroclor 1016	1,000
Aroclor 1221	1,000
Aroclor 1232	1,000
Aroclor 1242	1,000
Aroclor 1248	1,000
Aroclor 1254	1,000
Aroclor 1260	1,000

Note: Standards based on Determination of Soil Cleanup Objectives and Cleanup Levels (NYSDEC, January 1994)

Table 4
METALS

Compound	Soil Standard (mg/kg)
Aluminum	SB
Antimony	SB
Arsenic	16
Barium	400
Beryllium	590
Cadmium	9.3
Calcium	SB
Chromium	400
Cobalt	SB
Copper	270
Iron	SB
Lead	SB*
Magnesium	SB
Manganese	10,000
Mercury	2.8
Nickel	310
Potassium	SB
Selenium	1500
Silver	1500
Sodium	SB
Thallium	SB
Vanadium	SB
Zinc	10,000

Note: Standards based on Determination of Soil Cleanup (NYSDEC, effective December 14, 2006)
**Background levels for lead vary widely*
SB = Site Background

The existing building adjacent to the Site and located off-site near the southwest corner of the Site has been improved. Some site activities associated with this building renovation include a small concrete pad for electrical equipment and a driveway.

2013: No building activity took place in 2013. Site development activities included the installation of underground electrical duct bank to provide commercial power for future properties by National Grid along the 10th Street Extension Right of Way.

2014: No building activity took place in 2014. The last trailer was removed from the Site. The miscellaneous paint cans, tires and trailer was removed from the Site by the City's DPW department.

2015: No building activity took place in 2015.

2016: No building activity took place in 2016.

5. Conclusions

Analytical testing from the 2016 sampling event detected concentrations of two VOC compounds below the groundwater standard.

- Cis-1,2-dichloroethene
- Tetrachoroethene

Trend analysis of volatile compounds from the comparison of site historical data dated 1999, 2010, 2011, 2012, 2013, 2014, 2015, and 2016 analytical test results showed decreasing concentrations of cis-1,2-dichloroethene. Concentrations of methyl-t-butyl ether (MTBE) was not detected in 2014, 2015 and 2016 and decreased from 2010 to 2013. Concentrations of trichloroethene decreased from 1999 to 2016, being non-detectable in 2016.

Total VOCs concentrations detected in groundwater decreased from 1999 to 2015 from 158 µg/L to 6.3 µg/L and in 2016 decreased to 5.1 µg/L. Trend analysis comparing site historical data indicates an overall decreasing trend with a reduced total VOCs concentration.

Appendices

Appendix A
Groundwater Monitoring Program Revision

City of North Tonawanda
Department of Engineering
City Hall, 216 Payne Avenue
North Tonawanda, NY 14120-5493
www.northtonawanda.org

Dale W. Marshall, P. E.
City Engineer
Phone: **(716) 695-8565**
Fax: **(716) 695-8568**

January 7, 2010

Mr. Jeffrey Konsella, P.E.
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203

Re: Roblin Steel Groundwater Monitoring

Dear Mr. Konsella:

The City of North Tonawanda proposes modifications to the groundwater monitoring at the Roblin Steel Site. As stated in the approved Site Management Plan dated March 2007, annual monitoring will be performed on groundwater samples for a minimum period of 30 years or at a reduced frequency and period as approved by NYSDEC. Groundwater monitoring will initially be conducted after the remediation has been completed and thereafter on an annual basis. As stated in the Site Management Plan, groundwater samples will be collected from monitoring wells: GW-3S, GW-3, GW-11S, GW-12S, and GW-18S and tested for Volatile Organic Compounds (VOCs) under EPA Method 8260 TCL.

As reported in the Site Investigation Report, impacts to groundwater were localized detecting concentrations of volatile compounds in groundwater from only monitoring well MW-3S. Detected volatile concentrations were above groundwater standards as presented on the attached Table 3 of the Site Investigation Report. Groundwater from all other wells sampled was reported at non-detectable results or as estimated concentrations below groundwater standards.

Since the Site Management Plan has been finalized, some changes have occurred to the site. All monitoring wells as listed in the Site Management Plan except for MW-11S have been reported from a recent site inspection as either damaged or missing. The City has begun site development which includes a roadway extension of Tenth Avenue as presented on Figure 1. The proposed roadway and 8-inch diameter waterline conflicts with monitoring well MW-3S location.

The City proposes to replace monitoring well MW-3S and move its location approximately 65-feet to the north of its old location. The new location would be located within the proposed road right-of-way area outside from proposed pavement and curb area. The proposed location of monitoring well MW-3S is presented on Figure 1. The City proposes to only sample groundwater from monitoring well MW-3S. Analytical testing will include Volatile Organic Compounds (VOCs) under EPA Method 8260 TCL.

Very truly yours,

Dale Marshall, P.E.
City Engineer

Cc: file, w/a
David Rowlinson, Stearns & Wheler, LLC - GHD

MATCH LINE SEE UTILITY PLAN SHEET 2

INSTALL BENDS AS NECESSARY TO KEEP PIPE WITHIN THE RIGHT-OF-WAY (TYP)

INSTALL 45° BENDS

NEW 8" GATE VALVE

85 LF 12" SICPP

41 LF 8" PVC

DEFLECT WATERMAIN UNDER SEWER WITH BENDS AS NECESSARY TO ACHIEVE 18" MIN SEPARATION (TYP)

384 LF 8" PVC

45 LF 12" SICPP

28 LF 12" SICPP

155 LF 30" SICPP

155 LF 18" SICPP

88 LF 30" SICPP

59 LF 30" SICPP

NEW HYDRANT AND VALVE ASSEMBLY

NEW 8" GATE VALVES

ABANDONMENT NO 2
REMOVE EXISTING GATE VALVE AND INSTALL A CAP ON THE EXISTING MAIN. ABANDON EXISTING PIPE TO THE WEST IN PLACE.

ADJUST EXISTING MANHOLE RIM TO PROPOSED GRADE AS NECESSARY

34 LF 12" SICPP

CONTRACTOR TO RELOCATE EXISTING HYDRANT AND VALVE ASSEMBLY

TENTH (66' WIDE) AVENUE

PROPOSED 8" DIP WATERMAIN

237 LF 12" SICPP

AW-35 LOCATION
13-FEET OFF CURB

NEW 8" GATE VALVE

INTERCONNECTION NO 2
CUT A 12"x12"x8" TEE INTO THE EXISTING WATERMAIN AND CONNECT WITH SOLID SLEEVES.

ABANDONMENT NO 1
REMOVE EXISTING GATE VALVE AND INSTALL A CAP ON THE EXISTING MAIN. ABANDON EXISTING PIPE TO THE WEST IN PLACE.

16' WIDE ALLEY

12' WIDE ALLEY

OLIVER (76' WIDE) STREET

LOT 3
AREA = 3.02± ACRES

INTERCONNECTION NO 1
CUT EXISTING WATERMAIN AND CONNECT NEW WATERMAIN TO EXISTING PIPE TO THE WEST USING SOLID A SLEEVE. ABANDON EXISTING WATERMAIN TO THE EAST IN PLACE

PROPOSED 8" DIP WATERMAIN

181 LF 30" SICPP

LOT 2
AREA = 2.22± ACRES

REMOVE AND DISPOSE EXISTING VALVE, VALVE BOX AND HYDRANT AFTER EXISTING MAIN HAS BEEN ABANDONED

375 LF 8" PVC

LOT 1
AREA = 2.26± ACRES

ABANDON EXISTING SEWER MANHOLE

306 LF 36" SICPP

86 LF 24" PVC

312 LF 12" PVC

INSTALL SHEETING TO PROTECT EXISTING FOUNDATION DURING PIPE INSTALLATION

LOCATE EXISTING MANHOLE AND CONNECT NEW 18" PIPE TO IT. PLUG 30" PIPE TO THE WEST.

80 LF 24" PVC

130 LF 36" SICPP

51 LF 18" PVC

CONNECT TO EXISTING STORM CHAMBER PER DETAIL ON CS-905

INSTALL 36" CASING PIPE UNDER EXISTING 90" STORM SEWER BY BORING AND JACKING

CONNECT TO EXISTING 22" SANITARY SEWER PER DETAIL ON CS-905

77 LF 12" PVC

197 LF 12" PVC

235 LF 12" PVC

94 LF 12" PVC

191 LF 12" PVC

ABANDON EXISTING SEWER MANHOLE

NINTH (66' WIDE) AVENUE

IRONTON (66' WIDE) STREET

12' WIDE ALLEY

NOTE
WATERLINE INSTALLED ON NORTH SIDE OF ROADWAY

40' 20' 0 40'
SCALE 1"=40'

NOT
UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, PLAN OR REPORT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PRELIMINARY

Date: JULY 2009
Job No. 2009.0034.00
Designed by: RJT
Drawn by: RJT
Checked by: DJH
Dwg Scale: Horiz: 1" = 40' Vert: N/A

TVGA CONSULTANTS
100 MAIN STREET
BUFFALO, NEW YORK 14202-3530
P. 716.852.8642
F. 716.852.8937
www.tvga.com

CITY OF NORTH TONAWANDA, STATE OF NEW YORK
NIAGARA COUNTY

BUFFALO BOLT BUSINESS PARK
101 EAST AVENUE
UTILITY PLAN
SHEET 1

SHEET REFERENCE NUMBER:
CS-400
SHEET 8 OF 22

Appendix B
Institutional and Engineering Controls Certification Form

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Remediation
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518)402-9543 | F: (518)402-9547
www.dec.ny.gov

1/6/2017

Mr. Dale Marshall. P.E.
City Engineer
Municipal
City Hall
216 Payne Avenue
North Tonawanda, NY 14120

Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal
Site Name: Former Roblin Steel Site
Site No.: B00025
Site Address: 101 East Avenue
North Tonawanda, NY 14120

Dear Mr. Dale Marshall. P.E.:

This letter serves as a reminder that sites in active Site Management (SM) require the submittal of a periodic progress report. This report, referred to as the Periodic Review Report (PRR), must document the implementation of, and compliance with, site specific SM requirements. Section 6.3(b) of DER-10 *Technical Guidance for Site Investigation and Remediation* (available online at http://www.dec.ny.gov/regulations/67386.html) provides guidance regarding the information that must be included in the PRR. Further, if the site is comprised of multiple parcels, then you as the Certifying Party must arrange to submit one PRR for all parcels that comprise the site. The PRR must be received by the Department no later than **March 16, 2017**. Guidance on the content of a PRR is enclosed.

Site Management is defined in regulation (6 NYCRR 375-1.2(at)) and in Chapter 6 of DER-10. Depending on when the remedial program for your site was completed, SM may be governed by multiple documents (e.g., Operation, Maintenance, and Monitoring Plan; Soil Management Plan) or one comprehensive Site Management Plan.

A Site Management Plan (SMP) may contain one or all of the following elements, as applicable to the site: a plan to maintain institutional controls and/or engineering controls ("IC/EC Plan"); a plan for monitoring the performance and effectiveness of the selected remedy ("Monitoring Plan"); and/or a plan for the operation and maintenance of the selected remedy ("O&M Plan"). Additionally, the technical requirements for SM are stated in the decision document (e.g., Record of Decision) and, in some cases, the legal agreement directing the remediation of the site (e.g., order on consent, voluntary agreement, etc.).

When you submit the PRR (by the due date above), include the enclosed forms documenting that all SM requirements are being met. The Institutional Controls (ICs) portion of the form (Box 6) must be signed by you or your designated representative. The Engineering Controls (ECs) portion of the form (Box 7) must be signed by a Professional Engineer (PE). If you cannot certify that all SM requirements are being met, you must submit a Corrective Measures Work Plan that identifies the actions to be taken to restore compliance. The work plan must include a schedule to be approved by the Department. The Periodic Review process will not be considered complete until all necessary corrective measures are completed and all required controls are certified. Instructions for completing the certifications are enclosed.

All site-related documents and data, including the PRR, are to be submitted in electronic format to the Department of Environmental Conservation. The Department will not approve the PRR unless all documents and data generated in support of that report have been submitted in accordance with the electronic submissions protocol. In addition, the certification forms are required to be submitted in both paper and electronic formats.

Information on the format of the data submissions can be found at:
http://www.dec.ny.gov/regulations/2586.html

The signed certification forms should be sent to Brian Sadowski, Project Manager, at the following address:

New York State Department of Environmental Conservation
270 Michigan Ave
Buffalo, NY 14203-2915

Phone number: 716-851-7220. E-mail: brian.sadowski@dec.ny.gov

The contact information above is also provided so that you may notify the project manager about upcoming inspections, or for any other questions or concerns that may arise in regard to the site.

Enclosures

PRR General Guidance
Certification Form Instructions
Certification Forms

cc: w/ enclosures

Idek, LLC
Taylor Devices, Inc.

ec: w/ enclosures
Brian Sadowski, Project Manager
Mary Mcintosh, Section Chief
Chad Staniszewski, Hazardous Waste Remediation Engineer, Region 9

Enclosure 1

Certification Instructions

I. Verification of Site Details (Box 1 and Box 2):

Answer the three questions in the Verification of Site Details Section. The Owner and/or Qualified Environmental Professional (QEP) may include handwritten changes and/or other supporting documentation, as necessary.

II. Certification of Institutional Controls/ Engineering Controls (IC/ECs)(Boxes 3, 4, and 5)

1.1.1. Review the listed IC/ECs, confirming that all existing controls are listed, and that all existing controls are still applicable. If there is a control that is no longer applicable the Owner / Remedial Party should petition the Department separately to request approval to remove the control.

2. In Box 5, complete certifications for all Plan components, as applicable, by checking the corresponding checkbox.

3. If you cannot certify "YES" for each Control listed in Box 3 & Box 4, sign and date the form in Box 5. Attach supporting documentation that explains why the **Certification** cannot be rendered, as well as a plan of proposed corrective measures, and an associated schedule for completing the corrective measures. Note that this **Certification** form must be submitted even if an IC or EC cannot be certified; however, the certification process will not be considered complete until corrective action is completed.

If the Department concurs with the explanation, the proposed corrective measures, and the proposed schedule, a letter authorizing the implementation of those corrective measures will be issued by the Department's Project Manager. Once the corrective measures are complete, a new Periodic Review Report (with IC/EC Certification) must be submitted within 45 days to the Department. If the Department has any questions or concerns regarding the PRR and/or completion of the IC/EC Certification, the Project Manager will contact you.

III. IC/EC Certification by Signature (Box 6 and Box 7):

If you certified "YES" for each Control, please complete and sign the IC/EC Certifications page as follows:

- For the Institutional Controls on the use of the property, the certification statement in Box 6 shall be completed and may be made by the property owner or designated representative.

- For the Engineering Controls, the certification statement in Box 7 must be completed by a Professional Engineer or Qualified Environmental Professional, as noted on the form.

Enclosure 2

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

Site Details **Box 1**

Site No. **B00025**

Site Name Former Robiln Steel Site

Site Address: 101 East Avenue Zip Code: 14120
City/Town: North Tonawanda
County: Niagara
Site Acreage: 23.7

Reporting Period: February 14, 2016 to February 14, 2017

	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	☒

Box 2

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

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

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

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

SITE NO. B00025 Box 3

Description of Institutional Controls

Parcel	Owner	Institutional Control
181.12-1-14.11	City of North Tonawanda	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan

The summary of the Environmental Easement is as follows:

The property may be used for commercial/industrial purposes (excluding uses for day care, child care, and medical care, unless such use is approved in writing by the DEC and NYSDOH) as long as the following long-term engineering controls are employed:

(i) Soils and fill materials encountered during any construction or development activity below the crushed concrete cover layer must be handled in accordance with provisions of the Roblin Steel Site Soils Management Plan, dated February, 2006. Excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

(ii) Should subsequent construction or development activities require the decommissioning (removal) of existing groundwater monitoring wells, the wells will be decommissioned in accordance with DEC guidance. Replacement monitoring wells may be required by the DEC.

(iii) A long term ground water monitoring program is required per the approved Roblin Steel Operation, Maintenance, and Monitoring Plan, which is contained in the approved Roblin Steel Site Management Plan, dated February, 2006. The City of North Tonawanda is required to conduct the periodic sampling, analysis, and reporting for the groundwater monitoring program.

(iv) Future uses of the site groundwater are prohibited unless authorized in writing by the DEC and NYSDOH.

The property may not be used for a higher level of use such as residential use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

The City or any furture owners will submit annual (or such intervals as NYSDEC may allow)certification that the controls employed at the property are unchanged from the previous certification, or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment.

181.12-1-14.112	IDEK, LLC	Monitoring Plan Site Management Plan Ground Water Use Restriction Soil Management Plan Landuse Restriction

The summary of the Environmental Easement is as follows:

The property may be used for commercial/industrial purposes (excluding uses for day care, child care, and medical care, unless such use is approved in writing by the DEC and NYSDOH) as long as the following long-term engineering controls are employed:

(i) Soils and fill materials encountered during any construction or development activity below the crushed concrete cover layer must be handled in accordance with provisions of the Roblin Steel Site Soils Management Plan, dated February, 2006. Excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

(ii) Should subsequent construction or development activities require the decommissioning (removal) of existing groundwater monitoring wells, the wells will be decommissioned in accordance with DEC guidance. Replacement monitoring wells may be required by the DEC.

(iii) A long term ground water monitoring program is required per the approved Roblin Steel Operation, Maintenance, and Monitoring Plan, which is contained in the approved Roblin Steel Site Management Plan, dated February, 2006. The City of North Tonawanda is required to conduct the periodic sampling, analysis, and reporting for the groundwater monitoring program.

(iv) Future uses of the site groundwater are prohibited unless authorized in writing by the DEC and NYSDOH.

The property may not be used for a higher level of use such as residential use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

The City or any future owners will submit annual (or such intervals as NYSDEC may allow)certification that the controls employed at the property are unchanged from the previous certification, or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment.

181.12-1-14.113 IDEK, LLC

Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

Monitoring Plan
Site Management Plan

The summary of the Environmental Easement is as follows:

The property may be used for commercial/industrial purposes (excluding uses for day care, child care, and medical care, unless such use is approved in writing by the DEC and NYSDOH) as long as the following long-term engineering controls are employed:

(i) Soils and fill materials encountered during any construction or development activity below the crushed concrete cover layer must be handled in accordance with provisions of the Roblin Steel Site Soils Management Plan, dated February, 2006. Excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

(ii) Should subsequent construction or development activities require the decommissioning (removal) of existing groundwater monitoring wells, the wells will be decommissioned in accordance with DEC guidance. Replacement monitoring wells may be required by the DEC.

(iii) A long term ground water monitoring program is required per the approved Roblin Steel Operation, Maintenance, and Monitoring Plan, which is contained in the approved Roblin Steel Site Management Plan, dated February, 2006. The City of North Tonawanda is required to conduct the periodic sampling, analysis, and reporting for the groundwater monitoring program.

(iv) Future uses of the site groundwater are prohibited unless authorized in writing by the DEC and NYSDOH.

The property may not be used for a higher level of use such as residential use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

The City or any future owners will submit annual (or such intervals as NYSDEC may allow)certification that the controls employed at the property are unchanged from the previous certification, or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment.

181.12-1-24 Taylor Devices, Inc.

Monitoring Plan
Site Management Plan
Ground Water Use Restriction
Soil Management Plan
Landuse Restriction

The summary of the Environmental Easement is as follows:

The property may be used for commercial/industrial purposes (excluding uses for day care, child care, and medical care, unless such use is approved in writing by the DEC and NYSDOH) as long as the following long-term engineering controls are employed:

(i) Soils and fill materials encountered during any construction or development activity below the crushed concrete cover layer must be handled in accordance with provisions of the Roblin Steel Site Soils Management Plan, dated February, 2006. Excavated soil must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations and directives.

(ii) Should subsequent construction or development activities require the decommissioning (removal) of existing groundwater monitoring wells, the wells will be decommissioned in accordance with DEC guidance. Replacement monitoring wells may be required by the DEC.

(iii) A long term ground water monitoring program is required per the approved Roblin Steel Operation, Maintenance, and Monitoring Plan, which is contained in the approved Roblin Steel Site Management Plan, dated February, 2006. The City of North Tonawanda is required to conduct the periodic sampling, analysis, and reporting for the groundwater monitoring program.

(iv) Future uses of the site groundwater are prohibited unless authorized in writing by the DEC and NYSDOH.

The property may not be used for a higher level of use such as residential use and the above-stated engineering controls may not be discontinued without an amendment or extinguishment of the Environmental Easement.

The City or any future owners will submit annual (or such intervals as NYSDEC may allow)certification that the controls employed at the property are unchanged from the previous certification, or that any changes to the controls employed at the Controlled Property were approved by the NYSDEC, and that nothing has occurred that would impair the ability of such controls to protect the public health and environment.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
181.12-1-14.11	Cover System

Surface Cover System

The surface cover system was installed to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system that was used to fill the excavated impacted soil areas was 12 inches of crushed concrete that was recycled from demolished site concrete foundations. An additional 4 inches of topsoil was spread over the crushed concrete fill to provide a vegetative supporting soil cover.

181.12-1-14.112 Cover System

Surface Cover System

The surface cover system was installed to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system that was used to fill the excavated impacted soil areas was 12 inches of crushed concrete that was recycled from demolished site concrete foundations. An additional 4 inches of topsoil was spread over the crushed concrete fill to provide a vegetative supporting soil cover.

181.12-1-14.113 Cover System

Surface Cover System

The surface cover system was installed to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system that was used to fill the excavated impacted soil areas was 12 inches of crushed concrete that was recycled from demolished site concrete foundations. An additional 4 inches of topsoil was spread over the crushed concrete fill to provide a vegetative supporting soil cover.

181.12-1-24 Cover System

Parcel	Engineering Control

The surface cover system was installed to eliminate the potential for human contact with fill material and eliminate the potential for contaminated runoff from the property. The cover system that was used to fill the excavated impacted soil areas was 12 inches of crushed concrete that was recycled from demolished site concrete foundations. An additional 4 inches of topsoil was spread over the crushed concrete fill to provide a vegetative supporting soil cover.

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
☒	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
☒	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

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

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. B00025

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 Dale W. Marshall at 216 Payne Ave. N. Tonawanda, NY 14120
print name print business address

am certifying as City Engineer (Owner or Remedial Party)

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

Dale W. Marshall PE. 1/10/17
Signature of Owner, Remedial Party, or Designated Representative Date
Rendering Certification

IC/EC CERTIFICATIONS

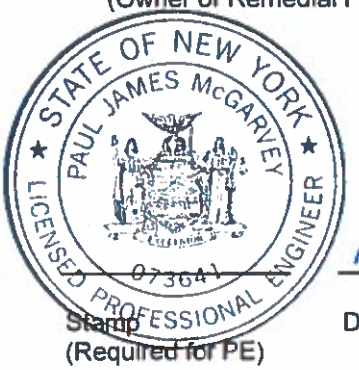
Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Paul McGarvey (print name) at 285 Delaware Ave, Suite 500, Buffalo, NY 14202 (print business address)

am certifying as a Professional Engineer for the City of North Tonawanda (Owner or Remedial Party)



Paul J. McGarvey — Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

1/17/17 — Date

Enclosure 3
Periodic Review Report (PRR) General Guidance

I. Executive Summary: (1/2-page or less)
   A. Provide a brief summary of site, nature and extent of contamination, and remedial history.
   B. Effectiveness of the Remedial Program - Provide overall conclusions regarding;
      1. progress made during the reporting period toward meeting the remedial objectives for the site
      2. the ultimate ability of the remedial program to achieve the remedial objectives for the site.
   C. Compliance
      1. Identify any areas of non-compliance regarding the major elements of the Site Management Plan (SMP, i.e., the Institutional/Engineering Control (IC/EC) Plan, the Monitoring Plan, and the Operation & Maintenance (O&M) Plan).
      2. Propose steps to be taken and a schedule to correct any areas of non-compliance.
   D. Recommendations
      1. recommend whether any changes to the SMP are needed
      2. recommend any changes to the frequency for submittal of PRRs (increase, decrease)
      3. recommend whether the requirements for discontinuing site management have been met.

II. Site Overview (one page or less)
   A. Describe the site location, boundaries (figure), significant features, surrounding area, and the nature and extent of contamination prior to site remediation.
   B. Describe the chronology of the main features of the remedial program for the site, the components of the selected remedy, cleanup goals, site closure criteria, and any significant changes to the selected remedy that have been made since remedy selection.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness
   Using tables, graphs, charts and bulleted text to the extent practicable, describe the effectiveness of the remedy in achieving the remedial goals for the site. Base findings, recommendations, and conclusions on objective data. Evaluations and should be presented simply and concisely.

IV. IC/EC Plan Compliance Report (if applicable)
   A. IC/EC Requirements and Compliance
      1. Describe each control, its objective, and how performance of the control is evaluated.
      2. Summarize the status of each goal (whether it is fully in place and its effectiveness).
      3. Corrective Measures: describe steps proposed to address any deficiencies in ICECs.
      4. Conclusions and recommendations for changes.
   B. IC/EC Certification
      1. The certification must be complete (even if there are IC/EC deficiencies), and certified by the appropriate party as set forth in a Department-approved certification form(s).

V. Monitoring Plan Compliance Report (if applicable)
   A. Components of the Monitoring Plan (tabular presentations preferred) - Describe the requirements of the monitoring plan by media (i.e., soil, groundwater, sediment, etc.) and by any remedial technologies being used at the site.
   B. Summary of Monitoring Completed During Reporting Period - Describe the monitoring tasks actually completed during this PRR reporting period. Tables and/or figures should be used to show all data.
   C. Comparisons with Remedial Objectives - Compare the results of all monitoring with the remedial objectives for the site. Include trend analyses where possible.
   D. Monitoring Deficiencies - Describe any ways in which monitoring did not fully comply with the monitoring plan.
   E. Conclusions and Recommendations for Changes - Provide overall conclusions regarding the monitoring completed and the resulting evaluations regarding remedial effectiveness.

VI. Operation & Maintenance (O&M) Plan Compliance Report (if applicable)
   A. Components of O&M Plan - Describe the requirements of the O&M plan including required activities, frequencies, recordkeeping, etc.
   B. Summary of O&M Completed During Reporting Period - Describe the O&M tasks actually completed during this PRR reporting period.
   C. Evaluation of Remedial Systems - Based upon the results of the O&M activities completed, evaluated the ability of each component of the remedy subject to O&M requirements to perform as

designed/expected.

D. O&M Deficiencies - Identify any deficiencies in complying with the O&M plan during this PRR reporting period.

E. Conclusions and Recommendations for Improvements - Provide an overall conclusion regarding O&M for the site and identify any suggested improvements requiring changes in the O&M Plan.

VII. Overall PRR Conclusions and Recommendations

A. Compliance with SMP - For each component of the SMP (i.e., IC/EC, monitoring, O&M), summarize;
   1. whether all requirements of each plan were met during the reporting period
   2. any requirements not met
   3. proposed plans and a schedule for coming into full compliance.

B. Performance and Effectiveness of the Remedy - Based upon your evaluation of the components of the SMP, form conclusions about the performance of each component and the ability of the remedy to achieve the remedial objectives for the site.

C. Future PRR Submittals
   1. Recommend, with supporting justification, whether the frequency of the submittal of PRRs should be changed (either increased or decreased).
   2. If the requirements for site closure have been achieved, contact the Departments Project Manager for the site to determine what, if any, additional documentation is needed to support a decision to discontinue site management.

VIII. Additional Guidance

Additional guidance regarding the preparation and submittal of an acceptable PRR can be obtained from the Departments Project Manager for the site.

Appendix C
Sampling and Well Logs

Stearns & Wheler, LLC
Environmental Engineers and Scientists

Boring/Well: MW-3S

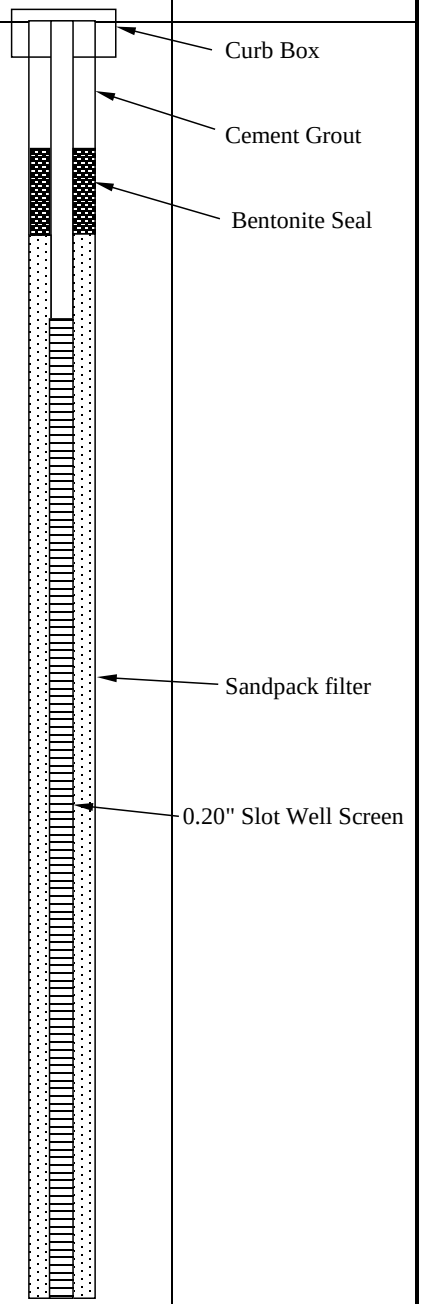
Page 1 of 1

Project No. 8612403

Date: 06/25/10

Weather: Partly Clear 70º

Project Name: Roblin Steel Groundwater Monitoring
Drilling Co.: SJB Services
S&W Representative: BPD
Drill Rig Type: Hollow Stem Auger
Drilling Method: Spilt Spoon

Depth (ft)	Sample No.	Recovery (%)	# of Blows	USCS Classification	Sample Description	Well Schematic	Comments
			3		Black Silt (Fill)		Curb Box
1	S-1	88	5	GM	- contains gravel with large cobbles		
			7				Cement Grout
2			7		2.0'		
			4		Reddish Tan Sandy Silt		
3	S-2	75	8		- dry		Bentonite Seal
			10	ML	- grades to rust/gray silt		
4			8				
			4				
5	S-3	88	6		5.0'		
			6		Grayish Tan Sandy Silt		
6			8		- wet		
			6				
7	S-4	63	6				
			8	ML			
8			10				Sandpack filter
			5				
9	S-5	50	7				
			8				0.20" Slot Well Screen
10			8		10.0'		
			7		Reddish Gray Clay		
11	S-6	88	8		- dry		
			5		- some sand		
12			9				
			6	CH			
13	S-7	88	6				
			8				
14			8				
			2		14.5'		
15	S-8	100	2	OH	Reddish Gray Clay		
			2		- wet 15.5'		
16			2		Augered to 16.0'		

Sample Log Key: Sample Depth Lab Analysis Groundwater

ROBLIN STEEL SITE
CITY OF NORTH TONAWANDA, NEW YORK
SITE INSPECTION LOG SHEET

Inspector (Print): Dave Rowlinson

Inspector (Signature):

Date of Inspection: 10/21/2016

1. Fencing, Gates, and Access

Fence Intact	Yes, fencing around east and west sides of the perimeter
Gates Working	NA
Locks Operable	NA
Access Road Condition	Good

2. Waterways and Ditches

Signs of Erosion	None
Blockage of Drainage Pathway	None
Culverts Clear of Obstructions	Yes
Ponded Water Areas	None

3. Monitoring Wells - Well Casing, Cap, and Locks in Place and in Good Condition

monitoring well MW-3S in good condition.

4. Evidence of Vandalism/Site Usage by Others

None

Comments/Action Required:

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE: Roblin Steel Site DATE: 10/21/16

Sampler: Dave Rowlinson SAMPLE ID: GW-3S

Depth of well (from top of casing).....	15 ft	EL 562.04
Initial static water level (from top of casing)....	7.2 ft	EL 569.8
Top of PVC Casing Elevation	577.04	

Evacuation Method:

Peristaltic		Centrifugal		1 in. casing:		ft. of water x .09 =	gallons
Airlift		Pos. Displ.		2 in. casing:	7.8	ft. of water x .16 =	1.25 gallons
Bailer	X	>>> No. of bails		3 in. casing:		ft. of water x .36 =	gallons

Well Volume Calculation

Volume of water removed: 3.74 gals.

> 3 volumes:	**YES**	no
dry:	yes	**NO**

Field Tests:

Temp:	17.3	C
pH	7.5	
Conductivity	1.22	mS/cm
DO	8.3	mg/L
Turbidity	-5	NTUs
Oxidation Reduction Potential (ORP)	315.0	mV

Sampling: Time: 1:00 PM

Sampling Method:

Peristaltic Pump	
Disposable Bailer	X
Disposable Tubing	

Observations:

Weather/Temperature: Rain, 55 ° F

Physical Appearance and Odor of Sample: Initially clear, then light brown and turbid. No odor.

Comments: 9/16" socket needed to open cover.
Well is at grade.

Appendix D
Analytical Test Results

ANALYTICAL REPORT

October 27, 2016

GHD

Sample Delivery Group:	L867853
Samples Received:	10/22/2016
Project Number:	230
Description:	Roblin Steel
Site:	8612403
Report To:	Mr. Dave Rowlinson 285 Delaware Ave. Suite 500 Buffalo, NY 14202

Entire Report Reviewed By:

T. Alan Harvill
Technical Service Representative

TABLE OF CONTENTS

GW-1 L867853-01 GW

Collected by: Dave R.
Collected date/time: 10/21/16 13:00
Received date/time: 10/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG920488	1	10/25/16 19:15	10/25/16 19:15	BMB

FIELD DUP L867853-02 GW

Collected by: Dave R.
Collected date/time: 10/21/16 13:00
Received date/time: 10/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG920488	1	10/25/16 19:36	10/25/16 19:36	BMB

TRIP BLANK L867853-03 GW

Collected by: Dave R.
Collected date/time: 10/21/16 00:00
Received date/time: 10/22/16 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG920488	1	10/25/16 18:14	10/25/16 18:14	BMB

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

T. Alan Harvill
Technical Service Representative

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3	10.0	50.0	1	10/25/2016 19:15	WG920488
Benzene	U		0.331	1.00	1	10/25/2016 19:15	WG920488
Bromochloromethane	U		0.520	1.00	1	10/25/2016 19:15	WG920488
Bromodichloromethane	U		0.380	1.00	1	10/25/2016 19:15	WG920488
Bromoform	U		0.469	1.00	1	10/25/2016 19:15	WG920488
Bromomethane	U		0.866	5.00	1	10/25/2016 19:15	WG920488
Carbon disulfide	U		0.275	1.00	1	10/25/2016 19:15	WG920488
Carbon tetrachloride	U		0.379	1.00	1	10/25/2016 19:15	WG920488
Chlorobenzene	U		0.348	1.00	1	10/25/2016 19:15	WG920488
Chlorodibromomethane	U		0.327	1.00	1	10/25/2016 19:15	WG920488
Chloroethane	U		0.453	5.00	1	10/25/2016 19:15	WG920488
Chloroform	U		0.324	5.00	1	10/25/2016 19:15	WG920488
Chloromethane	U		0.276	2.50	1	10/25/2016 19:15	WG920488
Cyclohexane	U		0.390	1.00	1	10/25/2016 19:15	WG920488
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	10/25/2016 19:15	WG920488
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2016 19:15	WG920488
1,2-Dichlorobenzene	U		0.349	1.00	1	10/25/2016 19:15	WG920488
1,3-Dichlorobenzene	U		0.220	1.00	1	10/25/2016 19:15	WG920488
1,4-Dichlorobenzene	U		0.274	1.00	1	10/25/2016 19:15	WG920488
Dichlorodifluoromethane	U		0.551	5.00	1	10/25/2016 19:15	WG920488
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2016 19:15	WG920488
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2016 19:15	WG920488
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2016 19:15	WG920488
cis-1,2-Dichloroethene	4.40		0.260	1.00	1	10/25/2016 19:15	WG920488
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2016 19:15	WG920488
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2016 19:15	WG920488
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2016 19:15	WG920488
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2016 19:15	WG920488
Ethylbenzene	U		0.384	1.00	1	10/25/2016 19:15	WG920488
2-Hexanone	U	J3	3.82	10.0	1	10/25/2016 19:15	WG920488
Isopropylbenzene	U		0.326	1.00	1	10/25/2016 19:15	WG920488
2-Butanone (MEK)	U	J3	3.93	10.0	1	10/25/2016 19:15	WG920488
Methyl Acetate	U		4.30	20.0	1	10/25/2016 19:15	WG920488
Methyl Cyclohexane	U		0.380	1.00	1	10/25/2016 19:15	WG920488
Methylene Chloride	U		1.00	5.00	1	10/25/2016 19:15	WG920488
4-Methyl-2-pentanone (MIBK)	U	J3	2.14	10.0	1	10/25/2016 19:15	WG920488
Methyl tert-butyl ether	U		0.367	1.00	1	10/25/2016 19:15	WG920488
Styrene	U		0.307	1.00	1	10/25/2016 19:15	WG920488
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2016 19:15	WG920488
Tetrachloroethene	0.696	J	0.372	1.00	1	10/25/2016 19:15	WG920488
Toluene	U		0.780	5.00	1	10/25/2016 19:15	WG920488
1,2,3-Trichlorobenzene	U		0.230	1.00	1	10/25/2016 19:15	WG920488
1,2,4-Trichlorobenzene	U		0.355	1.00	1	10/25/2016 19:15	WG920488
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2016 19:15	WG920488
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2016 19:15	WG920488
Trichloroethene	U	J3	0.398	1.00	1	10/25/2016 19:15	WG920488
Trichlorofluoromethane	U		1.20	5.00	1	10/25/2016 19:15	WG920488
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	10/25/2016 19:15	WG920488
Vinyl chloride	U		0.259	1.00	1	10/25/2016 19:15	WG920488
Xylenes, Total	U		1.06	3.00	1	10/25/2016 19:15	WG920488
(S) Toluene-d8	*98.7*			*90.0-115*		*10/25/2016 19:15*	WG920488
(S) Dibromofluoromethane	*95.6*			*79.0-121*		*10/25/2016 19:15*	WG920488
(S) a,a,a-Trifluorotoluene	*103*			*90.4-116*		*10/25/2016 19:15*	WG920488
(S) 4-Bromofluorobenzene	*104*			*80.1-120*		*10/25/2016 19:15*	WG920488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3	10.0	50.0	1	10/25/2016 19:36	WG920488
Benzene	U		0.331	1.00	1	10/25/2016 19:36	WG920488
Bromochloromethane	U		0.520	1.00	1	10/25/2016 19:36	WG920488
Bromodichloromethane	U		0.380	1.00	1	10/25/2016 19:36	WG920488
Bromoform	U		0.469	1.00	1	10/25/2016 19:36	WG920488
Bromomethane	U		0.866	5.00	1	10/25/2016 19:36	WG920488
Carbon disulfide	U		0.275	1.00	1	10/25/2016 19:36	WG920488
Carbon tetrachloride	U		0.379	1.00	1	10/25/2016 19:36	WG920488
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cis-1,2-Dichloroethene	16.1		0.260	1.00	1	10/25/2016 19:36	WG920488
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2016 19:36	WG920488
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1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	10/25/2016 19:36	WG920488
Vinyl chloride	0.276	J	0.259	1.00	1	10/25/2016 19:36	WG920488
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Carbon tetrachloride	U		0.379	1.00	1	10/25/2016 18:14	WG920488
Chlorobenzene	U		0.348	1.00	1	10/25/2016 18:14	WG920488
Chlorodibromomethane	U		0.327	1.00	1	10/25/2016 18:14	WG920488
Chloroethane	U		0.453	5.00	1	10/25/2016 18:14	WG920488
Chloroform	U		0.324	5.00	1	10/25/2016 18:14	WG920488
Chloromethane	U		0.276	2.50	1	10/25/2016 18:14	WG920488
Cyclohexane	U		0.390	1.00	1	10/25/2016 18:14	WG920488
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	10/25/2016 18:14	WG920488
1,2-Dibromoethane	U		0.381	1.00	1	10/25/2016 18:14	WG920488
1,2-Dichlorobenzene	U		0.349	1.00	1	10/25/2016 18:14	WG920488
1,3-Dichlorobenzene	U		0.220	1.00	1	10/25/2016 18:14	WG920488
1,4-Dichlorobenzene	U		0.274	1.00	1	10/25/2016 18:14	WG920488
Dichlorodifluoromethane	U		0.551	5.00	1	10/25/2016 18:14	WG920488
1,1-Dichloroethane	U		0.259	1.00	1	10/25/2016 18:14	WG920488
1,2-Dichloroethane	U		0.361	1.00	1	10/25/2016 18:14	WG920488
1,1-Dichloroethene	U		0.398	1.00	1	10/25/2016 18:14	WG920488
cis-1,2-Dichloroethene	U		0.260	1.00	1	10/25/2016 18:14	WG920488
trans-1,2-Dichloroethene	U		0.396	1.00	1	10/25/2016 18:14	WG920488
1,2-Dichloropropane	U		0.306	1.00	1	10/25/2016 18:14	WG920488
cis-1,3-Dichloropropene	U		0.418	1.00	1	10/25/2016 18:14	WG920488
trans-1,3-Dichloropropene	U		0.419	1.00	1	10/25/2016 18:14	WG920488
Ethylbenzene	U		0.384	1.00	1	10/25/2016 18:14	WG920488
2-Hexanone	U	J3	3.82	10.0	1	10/25/2016 18:14	WG920488
Isopropylbenzene	U		0.326	1.00	1	10/25/2016 18:14	WG920488
2-Butanone (MEK)	U	J3	3.93	10.0	1	10/25/2016 18:14	WG920488
Methyl Acetate	U		4.30	20.0	1	10/25/2016 18:14	WG920488
Methyl Cyclohexane	U		0.380	1.00	1	10/25/2016 18:14	WG920488
Methylene Chloride	U		1.00	5.00	1	10/25/2016 18:14	WG920488
4-Methyl-2-pentanone (MIBK)	U	J3	2.14	10.0	1	10/25/2016 18:14	WG920488
Methyl tert-butyl ether	U		0.367	1.00	1	10/25/2016 18:14	WG920488
Styrene	U		0.307	1.00	1	10/25/2016 18:14	WG920488
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	10/25/2016 18:14	WG920488
Tetrachloroethene	U		0.372	1.00	1	10/25/2016 18:14	WG920488
Toluene	U		0.780	5.00	1	10/25/2016 18:14	WG920488
1,2,3-Trichlorobenzene	U		0.230	1.00	1	10/25/2016 18:14	WG920488
1,2,4-Trichlorobenzene	U		0.355	1.00	1	10/25/2016 18:14	WG920488
1,1,1-Trichloroethane	U		0.319	1.00	1	10/25/2016 18:14	WG920488
1,1,2-Trichloroethane	U		0.383	1.00	1	10/25/2016 18:14	WG920488
Trichloroethene	U	J3	0.398	1.00	1	10/25/2016 18:14	WG920488
Trichlorofluoromethane	U		1.20	5.00	1	10/25/2016 18:14	WG920488
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	10/25/2016 18:14	WG920488
Vinyl chloride	U		0.259	1.00	1	10/25/2016 18:14	WG920488
Xylenes, Total	U		1.06	3.00	1	10/25/2016 18:14	WG920488
(S) Toluene-d8	*97.9*			*90.0-115*		*10/25/2016 18:14*	WG920488
(S) Dibromofluoromethane	*96.0*			*79.0-121*		*10/25/2016 18:14*	WG920488
(S) a,a,a-Trifluorotoluene	*102*			*90.4-116*		*10/25/2016 18:14*	WG920488
(S) 4-Bromofluorobenzene	*104*			*80.1-120*		*10/25/2016 18:14*	WG920488

Method Blank (MB)

(MB) R3173154-2 10/25/16 07:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Benzene	U		0.331	1.00
Bromodichloromethane	U		0.380	1.00
Bromochloromethane	U		0.520	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
Carbon disulfide	U		0.275	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
Cyclohexane	U		0.390	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
Ethylbenzene	U		0.384	1.00
2-Hexanone	U		3.82	10.0
Isopropylbenzene	U		0.326	1.00
2-Butanone (MEK)	U		3.93	10.0
Methyl Acetate	U		4.30	20.0
Methyl Cyclohexane	U		0.380	1.00
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Styrene	U		0.307	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00

Method Blank (MB)

(MB) R3173154-2 10/25/16 07:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Toluene	U		0.780	5.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	*98.3*			*90.0-115*
(S) Dibromofluoromethane	*94.9*			*79.0-121*
(S) a,a,a-Trifluorotoluene	*102*			*90.4-116*
(S) 4-Bromofluorobenzene	*105*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3173154-1 10/25/16 05:35 • (LCSD) R3173154-3 10/25/16 09:01

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	146	104	117	83.1	28.7-175		J3	33.8	20.9
Benzene	25.0	24.8	21.7	99.2	86.7	73.0-122			13.5	20
Bromodichloromethane	25.0	26.7	23.1	107	92.5	75.5-121			14.3	20
Bromochloromethane	25.0	21.9	20.8	87.7	83.2	78.9-123			5.27	20
Bromoform	25.0	27.8	23.5	111	93.9	71.5-131			16.8	20
Bromomethane	25.0	17.8	14.9	71.1	59.5	22.4-187			17.9	20
Carbon disulfide	25.0	25.3	22.9	101	91.7	53.0-134			9.75	20
Carbon tetrachloride	25.0	27.9	24.4	112	97.5	70.9-129			13.5	20
Chlorobenzene	25.0	26.5	23.1	106	92.5	79.7-122			13.4	20
Chlorodibromomethane	25.0	27.0	23.9	108	95.5	78.2-124			12.4	20
Chloroethane	25.0	26.2	24.4	105	97.8	41.2-153			6.92	20
Chloroform	25.0	25.4	22.5	101	89.9	73.2-125			12.0	20
Chloromethane	25.0	23.8	24.0	95.2	95.9	55.8-134			0.660	20
1,2-Dibromo-3-Chloropropane	25.0	24.6	20.4	98.6	81.7	64.8-131			18.7	20
1,2-Dibromoethane	25.0	27.4	22.9	110	91.6	79.8-122			17.9	20
1,2-Dichlorobenzene	25.0	25.0	22.0	99.9	87.8	84.7-118			12.9	20
1,3-Dichlorobenzene	25.0	26.0	23.0	104	92.0	77.6-127			12.3	20
1,4-Dichlorobenzene	25.0	24.8	21.3	99.0	85.3	82.2-114			14.9	20
Dichlorodifluoromethane	25.0	29.2	27.9	117	112	56.0-134			4.56	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3173154-1 10/25/16 05:35 • (LCSD) R3173154-3 10/25/16 09:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethane	25.0	24.6	21.5	98.3	86.1	71.7-127			13.2	20
1,2-Dichloroethane	25.0	24.0	21.2	96.2	84.6	79.8-122			12.8	20
1,1-Dichloroethene	25.0	27.4	25.2	109	101	59.9-137			8.38	20
cis-1,2-Dichloroethene	25.0	25.5	23.0	102	92.1	77.3-122			10.4	20
trans-1,2-Dichloroethene	25.0	25.3	23.0	101	91.8	72.6-125			9.56	20
1,2-Dichloropropane	25.0	25.9	21.7	104	86.8	77.4-125			17.8	20
cis-1,3-Dichloropropene	25.0	25.1	23.3	101	93.1	77.7-124			7.74	20
trans-1,3-Dichloropropene	25.0	25.2	22.3	101	89.4	73.5-127			12.2	20
Ethylbenzene	25.0	26.9	23.1	108	92.3	80.9-121			15.3	20
2-Hexanone	125	152	113	122	90.4	59.4-151		J3	29.5	20
Isopropylbenzene	25.0	26.2	22.5	105	90.0	81.6-124			15.3	20
2-Butanone (MEK)	125	140	106	112	84.5	46.4-155		J3	28.3	20
Methylene Chloride	25.0	24.4	21.6	97.6	86.3	69.5-120			12.3	20
4-Methyl-2-pentanone (MIBK)	125	134	105	107	83.8	63.3-138		J3	24.7	20
Methyl tert-butyl ether	25.0	24.4	20.1	97.7	80.3	70.1-125			19.6	20
Styrene	25.0	26.8	25.0	107	100	79.9-124			6.83	20
1,1,2,2-Tetrachloroethane	25.0	24.0	21.7	96.0	86.9	79.3-123			10.0	20
Tetrachloroethene	25.0	28.3	23.6	113	94.4	73.5-130			18.1	20
Toluene	25.0	26.1	22.5	104	90.2	77.9-116			14.6	20
1,1,2-Trichlorotrifluoroethane	25.0	30.3	26.9	121	108	62.0-141			12.0	20
1,2,3-Trichlorobenzene	25.0	23.0	19.9	91.8	79.7	75.7-134			14.2	20
1,2,4-Trichlorobenzene	25.0	24.1	21.4	96.5	85.5	76.1-136			12.1	20
1,1,1-Trichloroethane	25.0	25.8	22.2	103	88.6	71.1-129			15.2	20
1,1,2-Trichloroethane	25.0	26.0	22.0	104	87.9	81.6-120			16.8	20
Trichloroethene	25.0	28.7	22.8	115	91.2	79.5-121		J3	22.8	20
Trichlorofluoromethane	25.0	28.6	26.1	115	105	49.1-157			9.15	20
Vinyl chloride	25.0	26.0	24.4	104	97.5	61.5-134			6.31	20
Xylenes, Total	75.0	78.5	68.9	105	91.9	79.2-122			13.0	20
(S) Toluene-d8				*99.5*	*98.6*	*90.0-115*				
(S) Dibromofluoromethane				*96.4*	*98.9*	*79.0-121*				
(S) α,α,α-Trifluorotoluene				*104*	*103*	*90.4-116*				
(S) 4-Bromofluorobenzene				*104*	*103*	*80.1-120*				

L867027-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L867027-15 10/25/16 11:52 • (MS) R3173154-4 10/25/16 10:12 • (MSD) R3173154-5 10/25/16 10:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	4040	4670	64.6	74.7	50	25.0-156			14.5	21.5
Benzene	25.0	7670	8420	9470	60.4	144	50	58.6-133		V	11.7	20
Bromodichloromethane	25.0	ND	1480	1640	118	131	50	69.2-127		J5	10.6	20
Bromochloromethane	25.0	ND	1260	1370	101	109	50	74.4-128			7.86	20
Bromoform	25.0	ND	1440	1690	115	135	50	66.3-140			16.2	20
Bromomethane	25.0	ND	1050	1180	84.2	94.1	50	16.6-183			11.1	20.5
Carbon disulfide	25.0	ND	1580	1740	126	139	50	34.9-138		J5	9.58	20
Carbon tetrachloride	25.0	ND	1660	1850	133	148	50	60.6-139		J5	10.3	20
Chlorobenzene	25.0	ND	1420	1610	114	129	50	70.1-130			12.7	20
Chlorodibromomethane	25.0	ND	1470	1700	117	136	50	71.6-132		J5	15.0	20
Chloroethane	25.0	ND	1670	1840	134	147	50	33.3-155			9.43	20
Chloroform	25.0	ND	1470	1630	118	130	50	66.1-133			10.1	20
Chloromethane	25.0	ND	1650	1860	132	149	50	40.7-139		J5	11.5	20
1,2-Dibromo-3-Chloropropane	25.0	ND	1200	1520	95.9	121	50	63.9-142		J3	23.4	20.2
1,2-Dibromoethane	25.0	ND	1430	1650	114	132	50	73.8-131		J5	14.2	20
1,2-Dichlorobenzene	25.0	ND	1360	1550	109	124	50	77.4-127			12.7	20
1,3-Dichlorobenzene	25.0	ND	1440	1630	115	131	50	67.9-136			12.4	20
1,4-Dichlorobenzene	25.0	ND	1330	1510	107	121	50	74.4-123			12.4	20
Dichlorodifluoromethane	25.0	ND	1890	2070	151	166	50	42.2-146	J5	J5	9.38	20
1,1-Dichloroethane	25.0	ND	1400	1560	112	125	50	64.0-134			10.9	20
1,2-Dichloroethane	25.0	ND	1370	1510	110	121	50	60.7-132			9.68	20
1,1-Dichloroethene	25.0	ND	1690	1870	135	150	50	48.8-144		J5	10.5	20
cis-1,2-Dichloroethene	25.0	ND	1520	1650	122	132	50	60.6-136			7.92	20
trans-1,2-Dichloroethene	25.0	ND	1510	1670	121	134	50	61.0-132		J5	10.2	20
1,2-Dichloropropane	25.0	ND	1420	1550	114	124	50	69.7-130			8.93	20
cis-1,3-Dichloropropene	25.0	ND	1450	1620	116	130	50	71.1-129		J5	11.5	20
trans-1,3-Dichloropropene	25.0	ND	1410	1560	110	122	50	66.3-136			10.2	20
Ethylbenzene	25.0	2980	4040	4670	85.2	135	50	62.7-136			14.3	20
2-Hexanone	125	ND	5780	7180	92.5	115	50	59.4-154		J3	21.6	20.1
Isopropylbenzene	25.0	125	1550	1780	114	132	50	67.4-136			14.1	20
2-Butanone (MEK)	125	ND	5290	6350	84.6	102	50	45.0-156			18.3	20.8
Methylene Chloride	25.0	ND	1440	1550	115	124	50	61.5-125			7.16	20
4-Methyl-2-pentanone (MIBK)	125	ND	6230	7430	99.7	119	50	60.7-150			17.5	20
Methyl tert-butyl ether	25.0	13800	14100	16000	17.2	173	50	61.4-136	E V	E V	13.0	20
Styrene	25.0	ND	1510	1710	121	137	50	68.2-133		J5	12.4	20
1,1,2,2-Tetrachloroethane	25.0	ND	1290	1550	103	124	50	64.9-145			18.6	20
Tetrachloroethene	25.0	ND	1550	1780	124	143	50	57.4-141		J5	14.2	20
Toluene	25.0	2590	3780	4300	95.0	137	50	67.8-124		J5	12.9	20
1,1,2-Trichlorotrifluoroethane	25.0	ND	1860	2070	149	166	50	53.7-150		J5	10.9	20
1,2,3-Trichlorobenzene	25.0	ND	1230	1420	98.1	113	50	65.7-143			14.4	20

L867027-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L867027-15 10/25/16 11:52 • (MS) R3173154-4 10/25/16 10:12 • (MSD) R3173154-5 10/25/16 10:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	25.0	ND	1320	1520	106	122	50	67.0-146			14.1	20
1,1,1-Trichloroethane	25.0	ND	1480	1650	119	132	50	62.8-138			11.0	20
1,1,2-Trichloroethane	25.0	ND	1340	1560	107	125	50	74.1-130			15.2	20
Trichloroethene	25.0	ND	1490	1640	120	131	50	48.9-148			9.04	20
Trichlorofluoromethane	25.0	ND	1800	2020	144	162	50	39.9-165			11.6	20
Vinyl chloride	25.0	ND	1700	1890	136	151	50	44.3-143		J5	10.6	20
Xylenes, Total	75.0	ND	12600	14600	336	389	50	65.6-133	J5	J5	14.6	20
(S) Toluene-d8					*99.7*	*99.6*		*90.0-115*				
(S) Dibromofluoromethane					*102*	*100*		*79.0-121*				
(S) a,a,a-Trifluorotoluene					*104*	*104*		*90.4-116*				
(S) 4-Bromofluorobenzene					*104*	*104*		*80.1-120*				

L867820-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L867820-02 10/25/16 16:32 • (MS) R3173154-6 10/25/16 16:52 • (MSD) R3173154-7 10/25/16 17:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	U	339	326	54.2	52.1	5	25.0-156			3.91	21.5
Benzene	25.0	280	366	352	69.2	58.1	5	58.6-133		J6	3.86	20
Bromodichloromethane	25.0	U	94.3	77.0	75.4	61.6	5	69.2-127		J3 J6	20.3	20
Bromochloromethane	25.0	U	74.7	62.5	59.8	50.0	5	74.4-128	J6	J6	17.9	20
Bromoform	25.0	U	84.1	73.2	67.3	58.5	5	66.3-140		J6	13.9	20
Bromomethane	25.0	U	68.8	55.5	55.0	44.4	5	16.6-183		J3	21.3	20.5
Carbon disulfide	25.0	U	77.3	65.8	61.8	52.7	5	34.9-138			16.0	20
Carbon tetrachloride	25.0	U	100	84.4	80.0	67.5	5	60.6-139			16.9	20
Chlorobenzene	25.0	U	81.5	71.0	65.2	56.8	5	70.1-130	J6	J6	13.8	20
Chlorodibromomethane	25.0	U	86.2	73.0	68.9	58.4	5	71.6-132	J6	J6	16.5	20
Chloroethane	25.0	U	94.0	80.9	75.2	64.7	5	33.3-155			15.0	20
Chloroform	25.0	U	97.0	84.1	77.6	67.3	5	66.1-133			14.3	20
Chloromethane	25.0	U	87.7	79.8	70.1	63.8	5	40.7-139			9.43	20
1,2-Dibromo-3-Chloropropane	25.0	U	76.9	66.6	61.5	53.2	5	63.9-142	J6	J6	14.4	20.2
1,2-Dibromoethane	25.0	U	85.1	74.3	68.1	59.4	5	73.8-131	J6	J6	13.5	20
1,2-Dichlorobenzene	25.0	U	83.4	72.2	66.7	57.8	5	77.4-127	J6	J6	14.3	20
1,3-Dichlorobenzene	25.0	U	85.8	75.4	68.7	60.3	5	67.9-136		J6	12.9	20
1,4-Dichlorobenzene	25.0	U	ND	71.6	0.000	57.3	5	74.4-123	J6	J3 J6	200	20
Dichlorodifluoromethane	25.0	U	100	84.7	80.3	67.8	5	42.2-146			16.9	20
1,1-Dichloroethane	25.0	U	86.4	73.1	69.1	58.5	5	64.0-134		J6	16.7	20
1,2-Dichloroethane	25.0	U	80.3	68.2	64.2	54.6	5	60.7-132		J6	16.2	20
1,1-Dichloroethene	25.0	U	98.2	81.7	78.6	65.4	5	48.8-144			18.3	20

L867820-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L867820-02 10/25/16 16:32 • (MS) R3173154-6 10/25/16 16:52 • (MSD) R3173154-7 10/25/16 17:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	U	90.8	73.4	72.7	58.7	5	60.6-136		J3 J6	21.3	20
trans-1,2-Dichloroethene	25.0	U	88.8	74.8	71.1	59.8	5	61.0-132		J6	17.1	20
1,2-Dichloropropane	25.0	U	90.5	78.4	72.4	62.7	5	69.7-130		J6	14.4	20
cis-1,3-Dichloropropene	25.0	U	84.5	71.9	67.6	57.6	5	71.1-129	J6	J6	16.0	20
trans-1,3-Dichloropropene	25.0	U	83.3	70.2	66.6	56.1	5	66.3-136		J6	17.1	20
Ethylbenzene	25.0	1790	1850	1890	48.5	79.7	5	62.7-136	E V	E	2.08	20
2-Hexanone	125	U	384	331	61.4	53.0	5	59.4-154		J6	14.7	20.1
Isopropylbenzene	25.0	277	361	357	67.2	63.9	5	67.4-136	J6	J6	1.17	20
2-Butanone (MEK)	125	U	399	346	63.8	55.3	5	45.0-156			14.3	20.8
Methylene Chloride	25.0	U	82.3	68.1	65.8	54.5	5	61.5-125		J6	18.9	20
4-Methyl-2-pentanone (MIBK)	125	U	422	362	67.6	58.0	5	60.7-150		J6	15.2	20
Methyl tert-butyl ether	25.0	U	78.7	67.6	63.0	54.0	5	61.4-136		J6	15.3	20
Styrene	25.0	U	89.7	76.0	71.8	60.8	5	68.2-133		J6	16.6	20
1,1,2,2-Tetrachloroethane	25.0	U	84.2	73.1	67.4	58.5	5	64.9-145		J6	14.2	20
Tetrachloroethene	25.0	U	94.8	81.5	75.9	65.2	5	57.4-141			15.1	20
Toluene	25.0	39.4	130	118	72.5	62.9	5	67.8-124		J6	9.63	20
1,1,2-Trichlorotrifluoroethane	25.0	U	106	92.7	85.0	74.2	5	53.7-150			13.6	20
1,2,3-Trichlorobenzene	25.0	U	74.5	64.7	59.6	51.7	5	65.7-143	J6	J6	14.1	20
1,2,4-Trichlorobenzene	25.0	U	77.7	69.8	62.2	55.8	5	67.0-146	J6	J6	10.8	20
1,1,1-Trichloroethane	25.0	U	95.4	79.2	76.3	63.4	5	62.8-138			18.5	20
1,1,2-Trichloroethane	25.0	U	87.6	76.0	70.1	60.8	5	74.1-130	J6	J6	14.1	20
Trichloroethene	25.0	U	93.2	79.3	74.6	63.4	5	48.9-148			16.1	20
Trichlorofluoromethane	25.0	U	104	89.9	82.9	71.9	5	39.9-165			14.2	20
Vinyl chloride	25.0	U	92.3	78.7	73.8	63.0	5	44.3-143			15.9	20
Xylenes, Total	75.0	620	867	850	65.8	61.3	5	65.6-133	J6	J6	1.94	20
(S) Toluene-d8					*99.1*	*99.8*		*90.0-115*				
(S) Dibromofluoromethane					*95.9*	*96.4*		*79.0-121*				
(S) a,a,a-Trifluorotoluene					*104*	*104*		*90.4-116*				
(S) 4-Bromofluorobenzene					*99.7*	*101*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

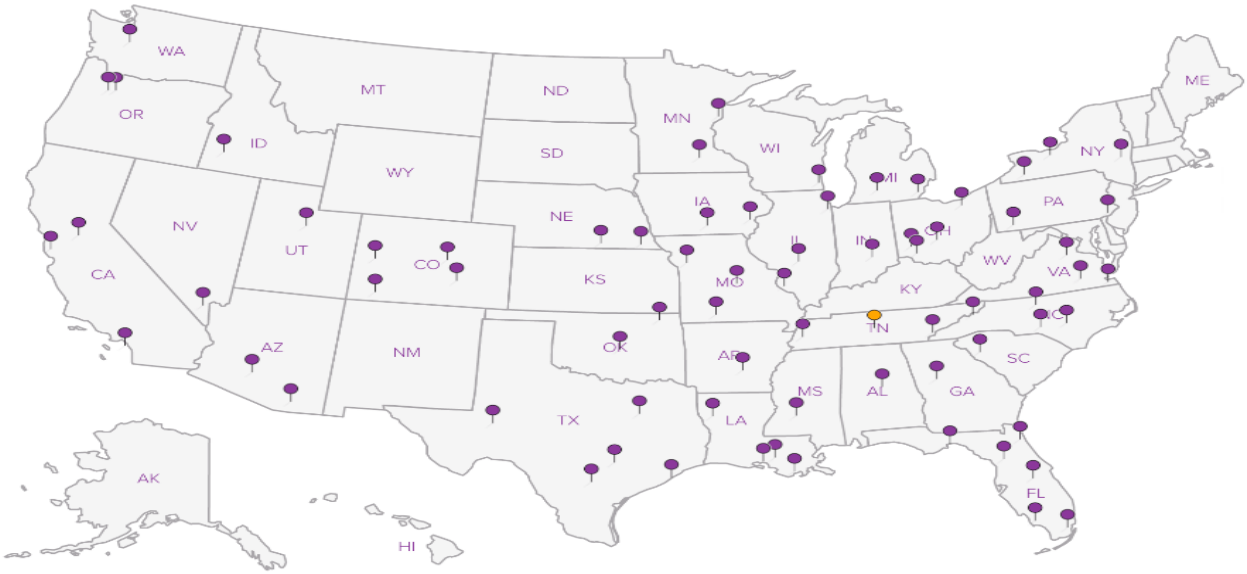
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



GHD 285 Delaware Ave. Suite 500 Buffalo, NY 14202	Billing Information & Quote Number: **Mr. Dave Rowlinson** **285 Delaware Ave.** **Suite 500** **Buffalo, NY 14202**	Chain of Custody Page ___ of ___ ESC LABS SCIENCES YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859
Report to: **Mr. Dave Rowlinson**	Email To: **dave.rowlinson@ghd.com**	
Project Description: **Roblin Steel**	City/State Collected: **No Tonawanda, NY**	L# **L4667853** **G099**
Phone: **716-748-6624** Fax:	Client Project # **230**	Lab Project # **STEARNSANY-ROBLIN**
Collected by (print): Dave Rowlinson	Site/Facility ID # 861403	P.O. # Acctnum: **STEARNSANY**
Collected by (signature): D. Rowlinson Immediately Packed on Ice N ___ Y X	***Rush?*** (Lab MUST Be Notified) ___ Same Day ..... 200% ___ Next Day ..... 100% ___ Two Day ..... 50% ___ Three Day 25%	Date Results Needed Email? ___No X_Yes FAX? ___No ___Yes Template: **T65569** Prelogin: **P572842** TSR: **364 - T. Alan Harvill** PB: 10-14-16 MS Shipped Via: **FedEx Ground**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	V8260TCL 40mlAmb-HCl	V8260TCL 40mlAmb-HCl-Blk	Rem./Contaminant	Sample # (lab only)
GW-1	G	GW		10/21/16	1:50 pm	2	X			-01
Field Dup	G	GW		10/21/16	1:50 pm	2	X			-02
Trip Blank	—	GW		10/21/16	—	2	X			-03
		GW				2	X			
		GW				2	X			
		GW				1		X		

* Matrix: **SS** - Soil **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

Remarks:ESC Quote: STEARNSANY051509S2

pH _____ Temp _____

Flow _____ Other _____

Hold #

Relinquished by : (Signature) David Rowlinson	Date: 10-21-16	Time: 4:00pm	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.7 °C Bottles Received: 4+TB
Relinquished by : (Signature)	Date:	Time:	Received for lab by. (Signature)	Date: 10-22-16 Time: 9:00

Condition: ok (lab use only)

COC Seal Intact: ___Y ___N ___NA

pH Checked: NCF:

ESC
L·A·B S·C·I·E·N·C·E·S
YOUR LAB OF CHOICE

Cooler Receipt Form

Client: STEARNSANY	SDG#	L81763
Cooler Received/Opened On: 10/21/16 Receipt:	Temperature Upon	2.7 °c
Received By: **Rickey Mosley**		
Signature:		

Receipt Check List	Yes	No	N/A
Were custody seals on outside of cooler and intact?	✓		
Were custody papers properly filled out?	✓		
Did all bottles arrive in good condition?	✓		
Were correct bottles used for the analyses requested?	✓		
Was sufficient amount of sample sent in each bottle?	✓		
Were all applicable sample containers correctly preserved and checked for preservation? (Any not in accepted range noted on COC)			✓
If applicable, was an observable VOA headspace present?		✓	
Non Conformance Generated. (If yes see attached NCF)			

Appendix E
Data Usability Reporting

Data Usability Summary Report

Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

Roblin Steel
Project # 8612403
ESC Lab Sciences SDG#L867853
December 1, 2016
Sampling date: 10/21/2016

Prepared by:
Jodi Zimmerman
Vali-Data of WNY, LLC
1514 Davis Rd.
West Falls, NY 14170

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for GHD, project located at Roblin Steel, project # 8612403, SDG#L867853, submitted to Vali-Data of WNY, LLC on November 28, 2016. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol and USEPA National Functional Guidelines. The laboratory performed the analysis using USEPA method 8260C (Volatile Organics).

VOLATILE ORGANIC COMPOUNDS

The following items/criteria were reviewed for this analytical suite:

- Data Completeness
-Narrative and Data Reporting Forms
-Chain of Custody and Traffic Reports
-Holding Times
-Internal Standard (IS) Area Performance
-Surrogate Spike Recoveries
-Method Blank
-Field Duplicate Sample Precision
-Laboratory Control Samples
-MS/MSD
-Compound Quantitation
-Initial Calibration
-Continuing Calibration
-GC/MS Performance Check

The items listed above were technically in compliance with the method and SOP criteria with the exceptions discussed in the text below. The data have been reviewed according to the procedures outlined above and qualified accordingly.

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES
The data are acceptable for use except where qualified below in Laboratory Control Samples.

DATA COMPLETENESS
All criteria were met.

NARRATIVE AND DATA REPORTING FORMS
All criteria were met except no MDL study was included. Method Detection limits were recorded on the Form 1's.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met. The pH of the samples was not recorded but the samples were run within 7 days, so no further action is required.

INTERNAL STANDARD (IS)
All criteria were met.

SURROGATE SPIKE RECOVERIES
All criteria were met.

METHOD BLANK
All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION
All criteria were met except Tetrachloroethene was detected above the MDL, below the reporting limit in GW-1 but was not detected in FIELD DUP. Vinyl Chloride and Methyl tert-butyl ether were detected above the MDL, below the reporting limit in FIELD DUP but were not detected in GW-1. Cis-1,2-Dichloroethene was detected in FIELD DUP almost 4 times greater than in GW-1.

LABORATORY CONTROL SAMPLES
All criteria were met except the %RPD of Acetone, 2-Hexanone, 2-Butanone, 4-Methyl-2-pentanone and Trichloroethene was outside QC limits, between WG920488LCS and WG920488LSD. These target analytes should be qualified as estimated in the samples and the laboratory control samples.

MS/MSD
The MS/MSD were not performed on samples within this SDG.

COMPOUND QUANTITATION
All criteria were met.

INITIAL CALIBRATION
All criteria were met.
Alternate forms of regression were used on target analytes in which the %RSD >20%, with acceptable results.

CONTINUING CALIBRATION
All criteria were met except the %D of Bromoform was outside QC limits in the continuing calibration file #1025_01.D and #1025_14.D. ASP allows for up to two target analytes to be outside QC limits without further action.

GC/MS PERFORMANCE CHECK
All criteria were met.

Appendix F
Site Development

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

60-Day Advance Notification of Site Change of Use, Transfer of Certificate of Completion, and/or Ownership

(to be submitted to: Chief, Site Control Section, New York State Department of Environmental Conservation, Division of Environmental Remediation, 625 Broadway, Albany NY 12233-7020; at least 60 days prior to any change of use, transfer of a Certificate of Completion, or change in ownership of a site as required by 6NYCRR Part 375-1.11(d) and 375-1.9(f))

I. **Site Name:** Former Roblin Steel Site **DEC Site ID No.** B00025

II. **Contact Information of Person Submitting Notification:**

Name: Dale W. Marshall, P.E. City Engineer

Address1: 216 Payne Avenue

Address2: North Tonawanda, NY 14120

Phone: (716) 695-8565 E-mail: dalemar@northtonawanda.org

III. **Type of Change and Date:** Indicate the Type of Change(s) (check all that apply):

☒ Change in Ownership or Change in Remedial Party(ies)

☐ Transfer of Certificate of Completion (CoC)

☐ Other (e.g., any physical alteration or other change of use)

Proposed Date of Change (mm/dd/yyyy): 10/25/2010

IV. **Description:** Describe proposed change(s) indicated above. Provide maps, drawings, and/or parcel information as applicable. If "Other," explain how such change may affect the site's proposed, ongoing, or completed remedial program (attach additional sheets if needed).

See attachments including recorded deeds and diagram of parcels sold.

V. **Certification Statement:** Where the change of use results in a change in ownership or in responsibility for the proposed, ongoing, or completed remedial program for the site, the following certification must be completed (by owner or designated representative; see §375-1.11(d)(3)(i)):

I hereby certify that the prospective purchaser and/or remedial party has been provided a copy of any order, agreement, Site Management Plan, or State Assistance Contract regarding the Site's remedial program as well as a copy of all approved remedial work plans and reports.

Name: Dale W. Marshall (Signature) 2/11/13 (Date)

Dale W. Marshall (Print Name)

Address1: 216 Payne Avenue

Address2: North Tonawanda, NY 14120

Phone: (716) 695-8565 E-mail: dalemar@northtonawanda.org

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VI. **Contact Information for New Owner, Remedial Party, or CoC Holder:** If the site will be sold or there will be a new remedial party, identify the prospective owner(s) or party(ies) along with contact information. If the site is subject to an Environmental Easement, Deed Restriction, or Site Management Plan requiring periodic certification of institutional controls/engineering controls (IC/ECs), indicate who will be the certifying party (attach additional sheets if needed).

☒ Prospective Owner ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: Idek, LLC (Mike Hacikyan, President of Aquasol Corporation)
Address1: 80 Thompson Street
Address2: North Tonawanda, NY 14120
Phone: (716) 564-8888 E-mail: mhacikyan@aquasolcorporation.com

Certifying Party Name: City of North Tonawanda
Address1: Dale W. Marshall, P.E., City Engineer
Address2: 216 Payne Avenue, North Tonawanda, NY 14120
Phone: (716) 695-8565 E-mail: dalemar@northtonawanda.org

VII. **Agreement to Notify DEC after Property Transfer/Sale:** If Section VI applies and all or part of the site will be sold, a letter to notify the DEC of the completion of the transfer must be provided. If the current owner is also the holder of a CoC for the site, the CoC should be transferred to the new owner using DEC's form found at http://www.dec.ny.gov/chemical/54736.html. This form has its own filing/recording requirements (see Part 375-1.9(f)).

Signing below indicates that a post transfer letter of notification for the sale of the property will be provided to the DEC within the specified timeframe. If the sale of the site also includes the transfer of a CoC, the DEC agrees to accept the notice given in VII.3 below in satisfaction of the post transfer notice required by VII.1 (to be submitted within 15 days of the sale of the site).

Within 30 days of the sale of the site, I agree to submit to the DEC:

1. the name and contact information for the new owner(s) (see §375-1.11(d)(3)(ii));
2. the name and contact information for any owner representative; and
3. a notice of transfer using the DEC's form found at http://www.dec.ny.gov/chemical/54736.html (see §375-1.9(f)).

Name: Dale W. Marshall (Signature) 2/11/13 (Date mm/dd/yyyy)

Dale W. Marshall, P.E. (Print Name)

Address1: City of North Tonawanda
Address2: 216 Payne Avenue, North Tonawanda, NY 14120
Phone: (716) 695-8565 E-mail: dalemar@northtonawanda.org

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Continuation Sheet

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

☐ Prospective Owner/Holder ☐ Prospective Remedial Party ☐ Prospective Owner Representative

Name: ______________________________

Address1: ______________________________

Address2: ______________________________

Phone: ______________ E-mail: ______________

Reset Page

west line of Oliver Street; thence S24°13'54"E along the west line of Oliver Street, 335.62 feet to the point or place of beginning, containing 3.17 acres of land, more or less.

Subject to the condition that the existing iron fence located along the west line of Oliver Street and in part along the north line of Tenth Avenue be maintained in good condition without modification or removal unless authorized in writing by the City of North Tonawanda.

Subject to easements, covenants and restrictions of record affecting the premises.

TOGETHER with the appurtenances, and all the estate and rights of the said party of the first part in and to said premises.

TO HAVE AND TO HOLD the premises herein granted unto the party of the second part, its successors and assigns forever.

AND the party of the first part covenants that the party of the first part has not done or suffered anything whereby the said premises have been encumbered in any way whatsoever, except as aforesaid.

THE party of the first part, in compliance with Section 13 of the Lien Law, will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvement, and that the grantor will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

For the City of North Tonawanda

By: _____
Robert G. Ortt

STATE OF NEW YORK)
COUNTY OF NIAGARA) ss.:

On this 22nd day of October, 2010, before me the undersigned, a Notary Public in and for the State of New York, personally appeared Robert G. Ortt, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____

ROBERT SONDEL
NOTARY PUBLIC, State of New York
Qualified in Niagara County
My Commission Expires 3/7/14

NIAGARA COUNTY - STATE OF NEW YORK
WAYNE F. JAGOW - NIAGARA COUNTY CLERK
P.O. BOX 461, LOCKPORT, NEW YORK 14095-0461

COUNTY CLERK'S RECORDING PAGE
THIS PAGE IS PART OF THE DOCUMENT - DO NOT DETACH

RECEIPT NO. : 201060844

Clerk: BH
Instr #: 2010-17604
Rec Date: 10/25/2010 10:14:01 AM
Doc Grp: DEED
Descrip: DEED
Num Pgs: 3

Party1: CITY OF NORTH TONAWANDA
Party2: IDEK LLC
Town: NORTH TONAWANDA

Recording:

Cover Page	8.00
Recording Fee	11.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
RP5217 - County	9.00
RP5217 All others - State	241.00
Sub Total:	289.00
Transfer Tax	
Transfer Tax	138.00
Sub Total:	138.00
Total:	427.00

**** NOTICE: THIS IS NOT A BILL ****

***** Transfer Tax *****

Transfer Tax# : 1286

Consideration: 34100.00
Transfer Tax: 138.00

Record and Return To:

MCGEE & GELMAN
ATTORNEYS AT LAW
200 SUMMER STREET
BUFFALO NY 14222

201060844

2010-17604
10/25/2010 10:14:01 AM
3 Pages
DEED

Bargain & Sale Deed

Wayne F. Jagow, Niagara County Clerk

Clerk: BH

This Indenture

Made the 22nd day of October, in the year Two Thousand and Ten,

Between City of North Tonawanda, a municipal corporation organized under the Laws of the State of New York, and having its place of business at 216 Payne Avenue, City of North Tonawanda, New York 14120, party of the first part, and

IDEK, LLC, a New York limited liability company with offices at 80 Thompson Street, North Tonawanda, New York 14120, party of the second part,

Witnesseth, That the said party of the first part, in consideration of the sum of Thirty-four Thousand One Hundred Dollars ($34,100.00), lawful money of the United States, paid by the
said party of the second part, does hereby grant and release unto the said party of the second part, its successors and assigns forever,

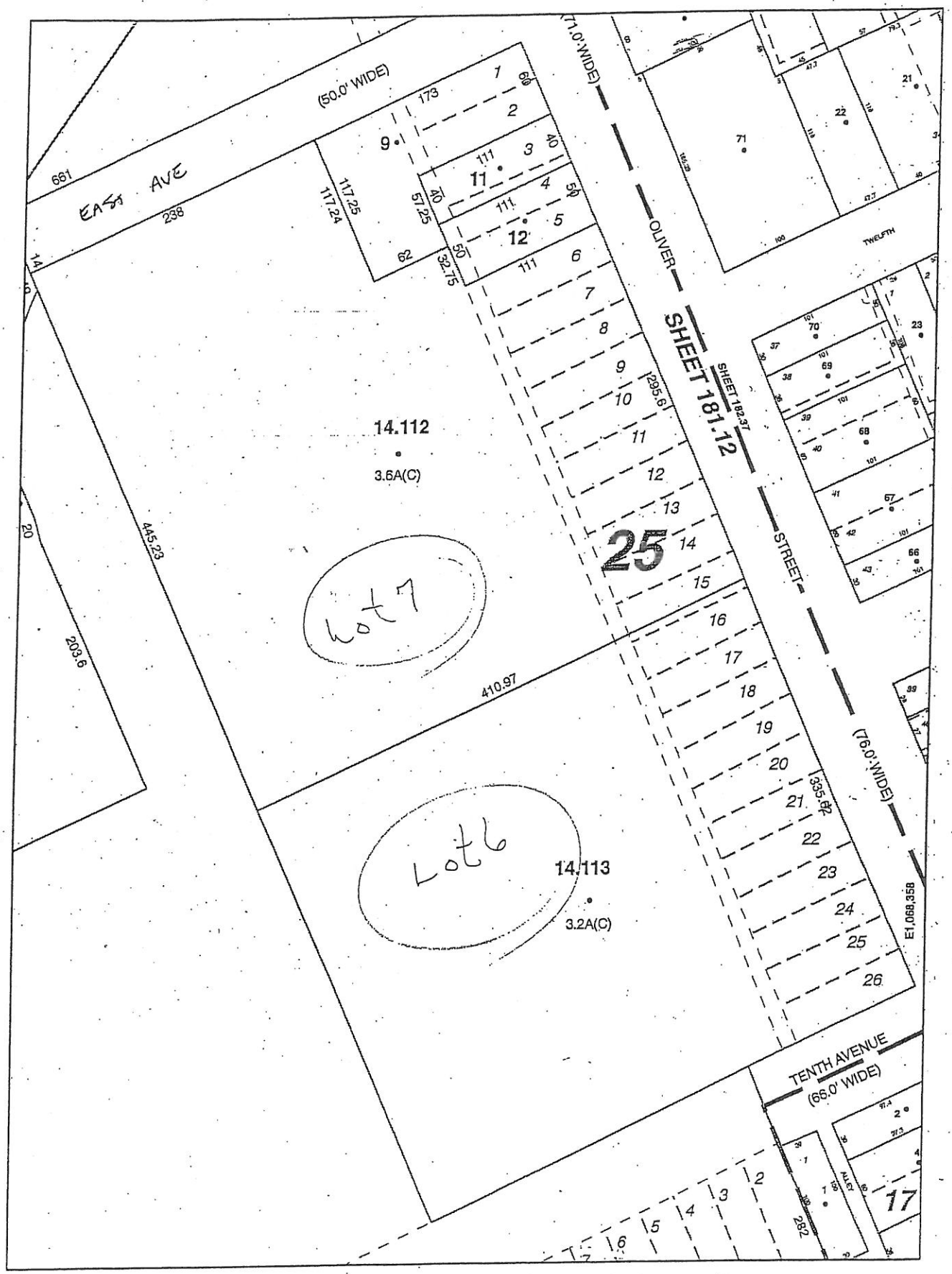
All that tract or parcel of land, situate in the City of North Tonawanda, County of Niagara and State of New York, being part of Lot 74 of the Mile Reservation, bounded and described as follows:

Beginning at a point in the west line of Oliver Street as a 76 foot wide street distant 150.00 feet southerly from the south line of East Avenue as a 50 foot wide street; thence S24°13'54"E along the west line of Oliver Street, 295.60 feet to a point; thence S65°46'06"W, 410.97 feet to a point; thence N24°13'54"W, 445.23 feet to a point in the south line of East Avenue; thence N65°43'01"E along the south line of East Avenue, 238.00 feet to a point; thence S24°13'54"E, 117.24 feet to a point; thence N65°43'01"E, 62.00 feet to a point; thence S24°13'54"E, 32.75 feet to a point; thence N65°43'01"E, 111.00 feet to the point or place of beginning, containing 3.65 acres of land, more or less.

Subject to the condition that the existing iron fence located along the west line of Oliver Street and in part along the last two courses of the above described land be maintained in good condition without modification or removal unless authorized in writing by the City of North Tonawanda.

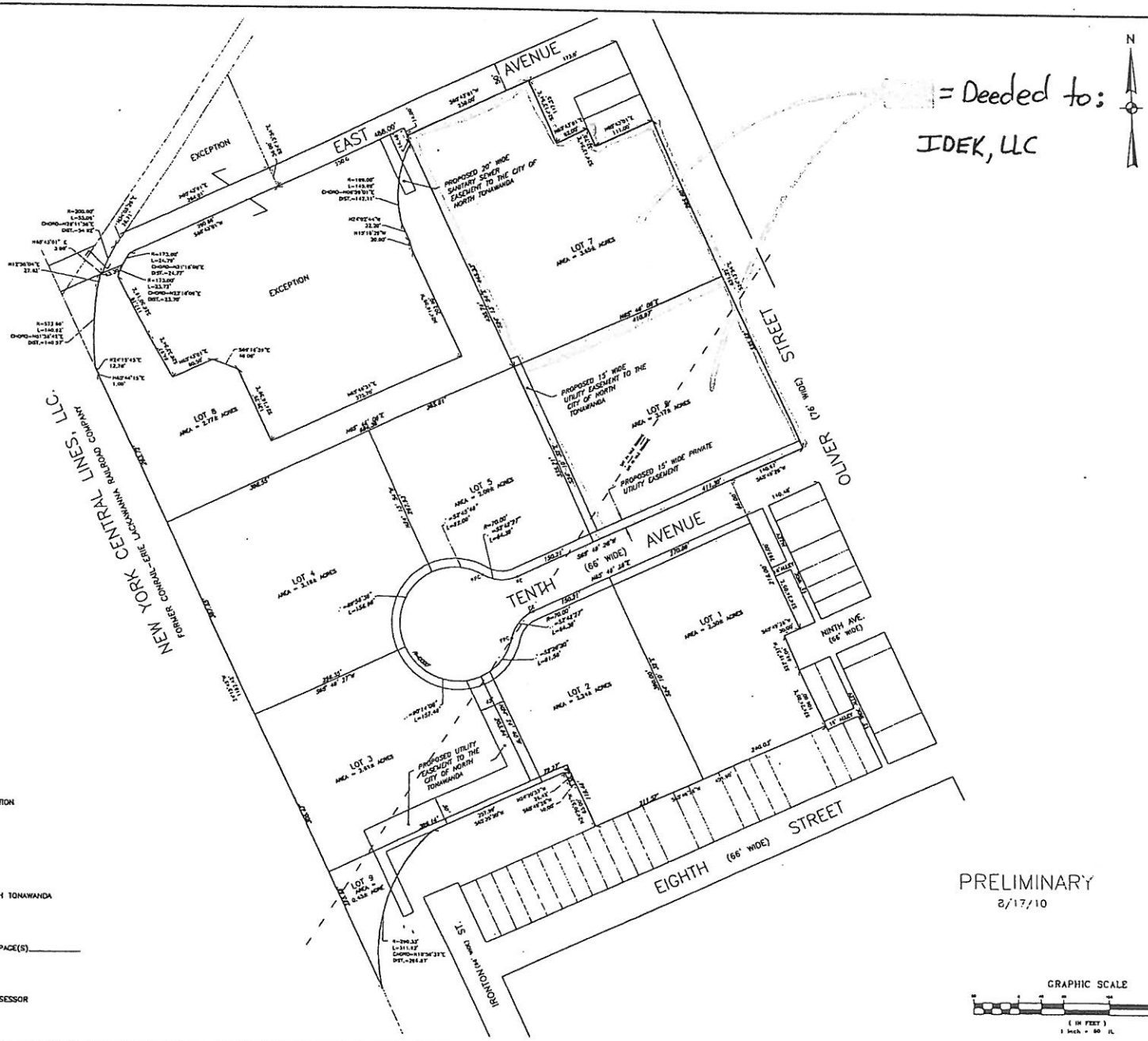
Also, all that tract or parcel of land, situate in the City of North Tonawanda, County of Niagara and State of New York, being part of Lots Nos. 74 and 75 of the Mile Reservation, bounded and described as follows:

Beginning at the point of intersect of the west line of Oliver Street as a 76 foot wide street with the north line of Tenth Avenue as a 66 foot wide street; thence S65°49'28"W along the north line of Tenth Avenue, 411.30 feet to a point; thence N24°10'32"W, 335.21 feet to a point; thence N65°46'06"E, 410.97 feet to a point in the



CNT
181.12-1-14.112, 14.113
2010-17604 10-25-10

CL 14.111 = 1067758-1108768
14.112 = 1067944-1109413
14.113 = 1068098-1109075



= Deeded to:
IDEK, LLC

N

PRELIMINARY
2/17/10

GRAPHIC SCALE
(IN FEET)
1 inch = 80 ft.

OWNERS CONSENT:
I HEREBY CONSENT TO THE FILING OF THIS MAP.
DATE:_____
NAME:_____

SANITARY SEWERS APPROVED BY
N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DATE:_____
NAME:_____

APPROVED BY THE PLANNING COMMISSION
CITY OF NORTH TONAWANDA
DATE:_____
CHAIRMAN:_____

APPROVED BY THE CITY ENGINEERS, CITY OF NORTH TONAWANDA
DATE:_____
CITY ENGINEER:_____

FILED IN THE NIAGARA COUNTY CLERK'S
OFFICE IN BOOK:_____OF MICROFILMED MAPS PAGE(S)_____
SLIDE NO._____
DATE:_____
COUNTY CLERK:_____

APPROVED BY THE CITY OF NORTH TONAWANDA ASSESSOR
DATE:_____
NAME:_____

CITY OF NORTH TONAWANDA NIAGARA COUNTY STATE OF NEW YORK

BUFFALO BOLT BUSINESS PARK
SUBDIVISION

PART OF LOT NUMBERS 74 AND 75 OF THE MILE RESERVE

TVGA CONSULTANTS
ENGINEERING • LAND SURVEY
ARCHITECTURE • PLANNING

Designed by: KJF
Drawn by: LMD
Checked by: MWW
Date of Survey: 01/11/09
Job No. 2009.0034.00
Dwg Scale: Hor. 1" = 80' Vert. N/A

SHEET REFERENCE NUMBER:
60159
SHEET 1 OF 1

www.ghd.com