2014 Periodic Review Report

Groundwater Monitoring and Sampling Annual Report

Roblin Steel Site

Site Number B00025

City of North Tonawanda

February 2015

2014 PERIODIC REVIEW REPORT
GROUNDWATER MONITORING AND SAMPLING ANNUAL REPORT

ROBLIN STEEL SITE

NORTH TONAWANDA, NEW YORK

Prepared for

CITY OF NORTH TONAWANDA

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SECTION 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, NY. 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 obtained the former Roblin Steel facility. A site location map is presented on Figure 1.

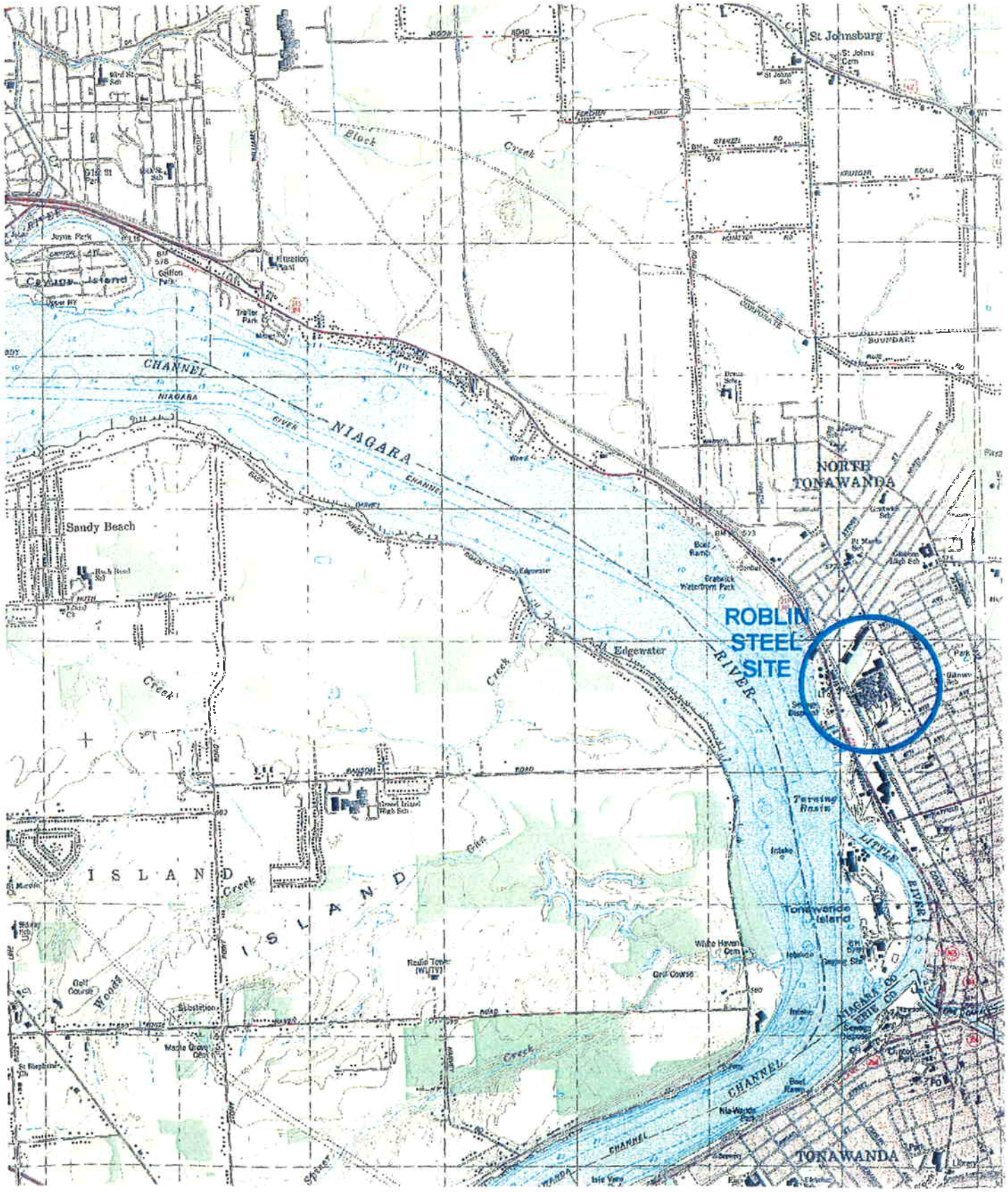
1.2 Site History

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 of North Tonawanda 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 of North Tonawanda 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

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



5/31/01

Figure 1

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 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 of North Tonawanda, New York 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 Remedial Alternatives Report 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 (1) 2,000-gallon and two (2) 5,000-gallon steel storage tanks (USTs) were removed from the site. In addition, one (1) 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 scheduled for 2003 to 2004. Underground storage tank 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 of North Tonawanda 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 Areas of Concern.

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 Remedial Alternatives Report (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.

SECTION 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 will initially be conducted after the remediation has been 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. Annual summary reports will be submitted to the NYSDEC.

2.3 Groundwater Monitoring

The groundwater monitoring system will be maintained and sampled during the post-remediation period. The extent and frequency of the sampling and analysis will be evaluated by NYSDEC periodically on an annual basis to determine if the sampling points or analytes should be changed. 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 Volatile Organic Compounds (VOCs) under EPA Method 8260 TCL.

The groundwater monitoring program was modified as proposed in the City of North Tonawanda'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 will include 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 volatile compounds in groundwater from only monitoring well MW-3S. Volatile concentrations were detected above groundwater standards in groundwater sampled during the Site Investigation dated 1999 and as presented in Appendix A on 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 (8) existing monitoring wells.

2.4 2014 Groundwater Monitoring

The 2014 monitoring program at the Roblin Steel site consisted of one annual sampling event. Groundwater was sampled from monitoring well MW-3S on July 15, 2014. This sampling event represents the 4th 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.

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.

SECTION 3 - GROUNDWATER MONITORING RESULTS

This section includes the analytical test results of the 2014 annual groundwater sampling event and is presented in Table 1. 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.

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

Analytical testing from the 2014 sampling event detected concentrations of trichloroethene at concentrations estimated below detection limits and the groundwater standards. Trend analysis from the comparison of site historical data dated 1999, 2010, 2011, 2012, 2013, and 2014 analytical test results showed concentrations of trichloroethene decreased from 2010 to 2014.

Total VOCs concentrations detected in groundwater decreased from 1999 to 2014 from 158 ug/l to 9.4 ug/l as presented in the following data. Trend analysis comparing site historical data indicates a decreasing trend with a reduced VOCs concentration of every reporting year.

1999	158.0 ug/l
2010	63.7 ug/l
2011	26.6 ug/l
2012	22.7 ug/l
2013	13.1 ug/l
2014	9.4 ug/l

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
1,1,1-Trichloroethane	5	µg/L	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	5	µg/L	U	U	U	U	U	U
1,1,2-Trichlo-1,2,2-trifluoroethane	5	µg/L	-	U	U	U	U	U
1,1,2-Trichloroethane	1	µg/L	U	U	U	U	U	U
1,1-Dichloroethane	5	µg/L	U	U	U	U	U	U
1,1-Dichloroethene	5	µg/L	U	U	U	U	U	U
1,2,3-Trichlorobenzene	5	µg/L	-	U	U	U	U	U
1,2,4-Trichlorobenzene	5	µg/L	-	U	U	U	U	U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	U	U	U	U	U
1,2-Dibromoethane (EDB)	NE	µg/L	-	U	U	U	U	U
1,2-Dichlorobenzene	3	µg/L	-	U	U	U	U	U
1,2-Dichloroethane	0.6	µg/L	U	U	U	U	U	U
1,2-Dichloropropane	5	µg/L	U	U	U	U	U	U
1,3-Dichlorobenzene	3	µg/L	-	U	U	U	U	U
1,4-Dichlorobenzene	3	µg/L	-	U	U	U	U	U
2-Hexanone	50	µg/L	U	U	U	U	U	U
Acetone	50	µg/L	UJ	**29 J**	U	U	U	U
Benzene	1	µg/L	U	U	U	U	U	U
Bromoform	50	µg/L	U	U	U	U	U	U
Bromomethane	5	µg/L	UJ	U	U	U	U	UJ
Bromodichloromethane	50.0	µg/L	U	U	U	U	U	U
Carbon disulfide	60	µg/L	U	U	U	U	U	U
Carbon tetrachloride	5	µg/L	U	U	U	U	U	U
Chlorobenzene	5	µg/L	U	U	U	U	U	U
Chloroethane	5	µg/L	UJ	U	U	U	U	U
Chloroform	7	µg/L	U	U	U	U	U	U
Chloromethane	NE	µg/L	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**
cis-1,3-Dichloropropene	0.40	µg/L	U	U	U	U	U	U
Cyclohexane	NE	µg/L	-	**0.31J**	U	U	U	U
Dibromochloromethane	50	µg/L	U	-	-	-	-	-
Dichlorobromoethane	NE	µg/L	-	U	U	U	U	U
Dichlorodifluoromethane	5	µg/L	-	U	U	U	U	U
Ethylbenzene	5	µg/L	U	U	U	U	U	U
Isopropylbenzene	5	µg/L	-	U	U	U	U	U
Methyl acetate	NE	µg/L	-	U	U	U	U	U
Methyl Ethyl Ketone	50	µg/L	U	U	U	U	U	U
Methylcyclohexane	NE	µg/L	-	U	U	U	U	U
Methylene chloride	5	µg/L	U	U	U	U	U	U
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	**4.9J**	**1.7**	**1.1**	**0.42J**	U
m,p-Xylene	5	µg/L	U	U	U	U	U	U
o-Xylene	5	µg/L	U	U	U	U	U	U
Styrene	5	µg/L	U	UJ	UJ	UJ	UJ	U
Tetrachloroethene	5	µg/L	**40**	U	U	U	**0.91J**	U
Toluene	5	µg/L	U	U	U	U	U	U
Total Xylenes	5	µg/L	U	U	U	U	U	U
trans-1, 2-Dichloroethene	5	µg/L	U	**0.43J**	U	U	U	U
trans-1,3-Dichloropropene	0.4	µg/L	U	U	U	U	U	U
Trichloroethene	5	µg/L	**56**	**0.34J**	**1.5**	**0.64J**	**0.75J**	**0.66J**
Trichlorofluoromethane	5	µg/L	-	U	U	U	U	U
Vinyl Chloride	2	µg/L	U	**0.74J**	**0.42J**	U	U	U
Total VOCs		µg/L	158.0	63.7	26.6	22.7	13.1	9.4
Total VOCs		mg/L	0.158	0.064	0.027	0.023	0.013	0.009

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.

SECTION 4 - SOIL MANAGEMENT PLAN

The objective of this 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. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC).

4.1 Description of Institutional and Engineering Controls

Institutional and engineering controls are required by the NYSDEC Record of Decision (ROD) dated February 2002 and include the environmental easement for future redevelopment and ownership of the site. The approved soils management plan addresses the excavation procedures for the remaining soils during future redevelopment. The soil management plan 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 soils management plan 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 soils management plan.

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

4.2 Nature and Extent of Contamination

During the 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 Record of Decision.

Five impacted soil areas contained semi-volatile chemical compounds 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 was 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 soil management plan. 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 Soil Management Plan 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 can not 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 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 1 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), Target Compound List (TCL), semi volatile organic compounds (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.

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

4.8 Site Usage 2009 - 2014

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 Soil management Plan.

Site redevelopment included the property ownership transfer from the City of North Tonawanda 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 Soil Management Plan guidelines.

2012: Site redevelopment included the property ownership transfer from the City of North Tonawanda 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 of North Tonawanda. Two trailers that were emptied were removed from the Site. The City is in the process of

contracting the sampling and waste disposal of these drums and wastes that have been moved into the only trailer on Site.

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.

SECTION 5 - CONCLUSIONS

Analytical testing from the 2014 sampling event detected cis-1,2-dichloroethene at concentrations that exceeded the groundwater standards. Concentrations of trichloroethene were detected and estimated at concentrations below detection limits and the groundwater standards. Trend analysis of volatile compounds from the comparison of site historical data dated 1999, 2010, 2011, 2012, 2013, and 2014 analytical test results showed decreasing concentrations of cis-1,2-dichloroethene. Concentrations of methyl-t-butyl ether (MTBE) decreased from 2010 to 2013 and were not detected in 2014.

Concentrations of trichloroethene decreased from 1999 to 2014. Concentrations of trichloroethene are reported as estimated values.

Total VOCs concentrations detected in groundwater decreased from 1999 to 2014 from 158 ug/l to 9.4 ug/l. Trend analysis comparing site historical data indicates a decreasing trend with a reduced VOCs concentration of every reporting year.

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

N

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

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

INSTALL 45° BENDS

NEW 8" GATE VALVE

85 LF 12" SICPP

41 LF 8" PVC

384 LF 8" PVC

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

ST-19 ST-13 ST-14 ST-23 ST-7 ST-6 SA-3 SA-4 SA-5 SA-6 SA-7 SA-8

UC15+00 UC14+00 UC13+00 UC12+00 UC11+00 UC10+00

45 LF 12" SICPP

34 LF 12" SICPP

CONTRACTOR TO RELOCATE EXISTING HYDRANT AND VALVE ASSEMBLY

ADJUST EXISTING MANHOLE RIM TO PROPOSED GRADE AS NECESSARY

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

TENTH (66' WIDE) AVENUE

ST-10 ST-9 ST-18

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

LOT 3
AREA = 3.02± ACRES

INTERCONNECTION NO 3
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

184 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

12' WIDE ALLEY

OLIVER (76' WIDE) STREET

ABANDON EXISTING SEWER MANHOLE

306 LF 36" SICPP

ST-21 ST-20 ST-22 SS2+00 SS3+00 SS4+00 SS5+00 SS6+00

SA-24 SA-26 SA-22

86 LF 24" PVC

130 LF 36" SICPP

SS1+00

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.

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

IRONTON (66' WIDE) STREET

ABANDON EXISTING SEWER MANHOLE

NINTH (66' WIDE) AVENUE

SA-11 SA-12 SA-16 SA-17 SA-18 SA-21

SS7+00 SS8+00 SS9+00 SS10+00 SS11+00 SS12+00 SS13+00 SS13+69

197 LF 12" PVC

235 LF 12" PVC

77 LF 12" PVC

94 LF 12" PVC

191 LF 12" PVC

16' WIDE ALLEY

12' WIDE ALLEY

NOTE
WATERLINE INSTALLED ON NORTH SIDE OF ROADWAY

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

PRELIMINARY

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.

NO.	DESCRIPTION	BY	DATE

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. 716.852.8537
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 & ENGINEERING CONTROLS CERTIFICATION FORM

New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway, Albany, New York 12233
Phone: (518) 402-9553 **Fax:** (518) 402-9577
Website: www.dec.ny.gov

Joe Martens
Commissioner

1/22/2015

Mr. Dale W. 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. Marshall:

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, 2015**. 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

ec: w/ enclosures
Brian Sadowski, Project Manager
Greg Sutton, Hazardous Waste Remediation Engineer, Region 9
David Rowlinson, GHD

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 Roblin Steel Site

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

Reporting Period: February 14, 2014 to February 14, 2015

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

Box 2

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

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

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

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

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 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.

181.12-1-14.112	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.

Parcel	Engineering Control
181.12-1-24	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.

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

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 _____ at _____,
print name print business address

am certifying as _____(Owner or Remedial Party)

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

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

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 _____ at _____,
print name print business address

am certifying as a Professional Engineer for the _____
(Owner or Remedial Party)

_____	_____	_____
Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	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

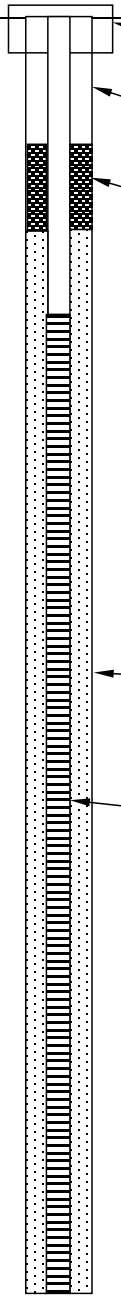
Boring/Well: MW-3S

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)		
1	S-1	88	5	GM	- contains gravel with large cobbles		
			7				
2			7		2.0'		
			4		Reddish Tan Sandy Silt		
3	S-2	75	8		- dry		
			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				
			5				
9	S-5	50	7				
			8				
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: Sediment 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: 7/15/2014

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 INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE: Roblin Steel Site | DATE: 07/15/14

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)....	7.4 ft	EL 569.7
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:	7.6	ft. of water x .16 =	1.22 gallons
Bailer	X >>>	No. of bails		3 in. casing:		ft. of water x .36 =	gallons

Well Volume Calculation

Volume of water removed: 5.00 gals.

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

Field Tests:

Temp:	56.4	C
pH	7.17	
Conductivity	1.1	mS/cm
DO	12.3	mg/L
Turbidity	NA	NTUs
Oxidation Reduction Potential (ORP)	169.0	mV

Sampling: Time: 14:30 PM

Sampling Method:

Peristaltic Pump	
Disposable Bailer	X
Disposable Tubing	

Observations:

Weather/Temperature: Sun, 75 ° F

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

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

APPENDIX D

ANALYTICAL TEST RESULTS

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 101
Amherst, NY 14228

Report Summary

Wednesday July 23, 2014

Report Number: L710742
Samples Received: 07/16/14
Client Project: 8612403

Description: Roblin Steel

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Leslie Newton

Leslie Newton , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

ESC Sample # : L710742-01

Site ID :

Project # : 8612403

Date Received : July 16, 2014
Description : Roblin Steel

Sample ID : GW-1

Collected By :
Collection Date : 07/15/14 14:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.0087	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 07/23/14 11:23 Printed: 07/23/14 11:23

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Mt. Juliet, TN 37122
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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

ESC Sample # : L710742-01

Date Received : July 16, 2014
Description : Roblin Steel

Site ID :

Sample ID : GW-1

Project # : 8612403

Collected By :
Collection Date : 07/15/14 14:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	0.00066	0.00040	0.0010	mg/l	J	8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	07/19/14	1
Dibromofluoromethane	102.			% Rec.		8260B	07/19/14	1
a,a,a-Trifluorotoluene	99.6			% Rec.		8260B	07/19/14	1
4-Bromofluorobenzene	106.			% Rec.		8260B	07/19/14	1

U = ND (Not Detected)
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RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
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REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

ESC Sample # : L710742-02

Site ID :

Project # : 8612403

Date Received : July 16, 2014
Description : Roblin Steel

Sample ID : FIELD DUP

Collected By :
Collection Date : 07/15/14 14:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.011	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1

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MDL = Minimum Detection Limit = LOD = TRRP SDL
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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

ESC Sample # : L710742-02

Site ID :

Project # : 8612403

Date Received : July 16, 2014
Description : Roblin Steel

Sample ID : FIELD DUP

Collected By :
Collection Date : 07/15/14 14:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	0.00094	0.00040	0.0010	mg/l	J	8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	07/19/14	1
Dibromofluoromethane	103.			% Rec.		8260B	07/19/14	1
a,a,a-Trifluorotoluene	99.4			% Rec.		8260B	07/19/14	1
4-Bromofluorobenzene	106.			% Rec.		8260B	07/19/14	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 07/23/14 11:23 Printed: 07/23/14 11:23

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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

Date Received : July 16, 2014
Description : Roblin Steel

Sample ID : TRIP BLANK

Collected By :
Collection Date : 07/15/14 14:30

ESC Sample # : L710742-03

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/23/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/23/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/23/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/23/14	1
Bromomethane	U	0.00087	0.0050	mg/l		8260B	07/23/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/23/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/23/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/23/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/23/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/23/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/23/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/23/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/23/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/23/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/23/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/23/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/23/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/23/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/23/14	1
cis-1,2-Dichloroethene	U	0.00026	0.0010	mg/l		8260B	07/23/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/23/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/23/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/23/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/23/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/23/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/23/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/23/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/23/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/23/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/23/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/23/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/23/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/23/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/23/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/23/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/23/14	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

July 23, 2014

ESC Sample # : L710742-03

Date Received : July 16, 2014
Description : Roblin Steel

Site ID :

Sample ID : TRIP BLANK

Project # : 8612403

Collected By :
Collection Date : 07/15/14 14:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/23/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/23/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/23/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/23/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/23/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/23/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/23/14	1
Surrogate Recovery								
Toluene-d8	98.6			% Rec.		8260B	07/23/14	1
Dibromofluoromethane	95.3			% Rec.		8260B	07/23/14	1
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	07/23/14	1
4-Bromofluorobenzene	101.			% Rec.		8260B	07/23/14	1

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
Note:
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Reported: 07/23/14 11:23 Printed: 07/23/14 11:23

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L710742-01	WG732383	SAMP	Bromomethane	R2967088	J3
	WG732383	SAMP	Trichloroethene	R2967088	J
L710742-02	WG732383	SAMP	Bromomethane	R2967088	J3
	WG732383	SAMP	Trichloroethene	R2967088	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

Summary of Remarks For Samples Printed
07/23/14 at 11:23:28

TSR Signing Reports: 044
R5 - Desired TAT

TERMS AGREEMENT NEEDED

Sample: L710742-01 Account: STEARNSANY Received: 07/16/14 09:00 Due Date: 07/23/14 00:00 RPT Date: 07/23/14 11:23
MS/MSD.;NY Cat B. Deliverables, QC4
Sample: L710742-02 Account: STEARNSANY Received: 07/16/14 09:00 Due Date: 07/23/14 00:00 RPT Date: 07/23/14 11:23

Sample: L710742-03 Account: STEARNSANY Received: 07/16/14 09:00 Due Date: 07/23/14 00:00 RPT Date: 07/23/14 11:23

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GHD
Mr. Dave Rowlinson
200 John James Audubon Pkwy; Ste 101

Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1,1-Trichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2-Trichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1-Dichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
1,2,3-Trichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2,4-Trichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG732383	07/19/14 12:58
1,2-Dibromoethane	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichloropropane	< .001	mg/l			WG732383	07/19/14 12:58
1,3-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,4-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
2-Butanone (MEK)	< .01	mg/l			WG732383	07/19/14 12:58
2-Hexanone	< .01	mg/l			WG732383	07/19/14 12:58
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG732383	07/19/14 12:58
Acetone	< .05	mg/l			WG732383	07/19/14 12:58
Benzene	< .001	mg/l			WG732383	07/19/14 12:58
Bromochloromethane	< .001	mg/l			WG732383	07/19/14 12:58
Bromodichloromethane	< .001	mg/l			WG732383	07/19/14 12:58
Bromoform	< .001	mg/l			WG732383	07/19/14 12:58
Bromomethane	< .005	mg/l			WG732383	07/19/14 12:58
Carbon disulfide	< .001	mg/l			WG732383	07/19/14 12:58
Carbon tetrachloride	< .001	mg/l			WG732383	07/19/14 12:58
Chlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
Chlorodibromomethane	< .001	mg/l			WG732383	07/19/14 12:58
Chloroethane	< .005	mg/l			WG732383	07/19/14 12:58
Chloroform	< .005	mg/l			WG732383	07/19/14 12:58
cis-1,2-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
cis-1,3-Dichloropropene	< .001	mg/l			WG732383	07/19/14 12:58
Cyclohexane	< .001	mg/l			WG732383	07/19/14 12:58
Dichlorodifluoromethane	< .005	mg/l			WG732383	07/19/14 12:58
Ethylbenzene	< .001	mg/l			WG732383	07/19/14 12:58
Isopropylbenzene	< .001	mg/l			WG732383	07/19/14 12:58
Methyl Acetate	< .02	mg/l			WG732383	07/19/14 12:58
Methyl Cyclohexane	< .001	mg/l			WG732383	07/19/14 12:58
Methyl tert-butyl ether	< .001	mg/l			WG732383	07/19/14 12:58
Methylene Chloride	< .005	mg/l			WG732383	07/19/14 12:58
Styrene	< .001	mg/l			WG732383	07/19/14 12:58
Tetrachloroethene	< .001	mg/l			WG732383	07/19/14 12:58
Toluene	< .005	mg/l			WG732383	07/19/14 12:58
trans-1,2-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
trans-1,3-Dichloropropene	< .001	mg/l			WG732383	07/19/14 12:58
Trichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
Trichlorofluoromethane	< .005	mg/l			WG732383	07/19/14 12:58
Vinyl chloride	< .001	mg/l			WG732383	07/19/14 12:58
Xylenes, Total	< .003	mg/l			WG732383	07/19/14 12:58
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG732383	07/19/14 12:58
Dibromofluoromethane		% Rec.	100.0	78.3-121	WG732383	07/19/14 12:58
Toluene-d8		% Rec.	103.0	88.5-111	WG732383	07/19/14 12:58
a,a,a-Trifluorotoluene		% Rec.	99.70	85-114	WG732383	07/19/14 12:58
1,1,1-Trichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2-Trichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG733223	07/22/14 22:33

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Mr. Dave Rowlinson
200 John James Audubon Pkwy; Ste 101

Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
1,2,3-Trichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2,4-Trichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG733223	07/22/14 22:33
1,2-Dibromoethane	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichloropropane	< .001	mg/l			WG733223	07/22/14 22:33
1,3-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,4-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
2-Butanone (MEK)	< .01	mg/l			WG733223	07/22/14 22:33
2-Hexanone	< .01	mg/l			WG733223	07/22/14 22:33
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG733223	07/22/14 22:33
Acetone	< .05	mg/l			WG733223	07/22/14 22:33
Benzene	< .001	mg/l			WG733223	07/22/14 22:33
Bromochloromethane	< .001	mg/l			WG733223	07/22/14 22:33
Bromodichloromethane	< .001	mg/l			WG733223	07/22/14 22:33
Bromoform	< .001	mg/l			WG733223	07/22/14 22:33
Bromomethane	< .005	mg/l			WG733223	07/22/14 22:33
Carbon disulfide	< .001	mg/l			WG733223	07/22/14 22:33
Carbon tetrachloride	< .001	mg/l			WG733223	07/22/14 22:33
Chlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
Chlorodibromomethane	< .001	mg/l			WG733223	07/22/14 22:33
Chloroethane	< .005	mg/l			WG733223	07/22/14 22:33
Chloroform	< .005	mg/l			WG733223	07/22/14 22:33
Chloromethane	< .0025	mg/l			WG733223	07/22/14 22:33
cis-1,2-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
cis-1,3-Dichloropropene	< .001	mg/l			WG733223	07/22/14 22:33
Cyclohexane	< .001	mg/l			WG733223	07/22/14 22:33
Dichlorodifluoromethane	< .005	mg/l			WG733223	07/22/14 22:33
Ethylbenzene	< .001	mg/l			WG733223	07/22/14 22:33
Isopropylbenzene	< .001	mg/l			WG733223	07/22/14 22:33
Methyl Acetate	< .02	mg/l			WG733223	07/22/14 22:33
Methyl Cyclohexane	< .001	mg/l			WG733223	07/22/14 22:33
Methyl tert-butyl ether	< .001	mg/l			WG733223	07/22/14 22:33
Methylene Chloride	< .005	mg/l			WG733223	07/22/14 22:33
Styrene	< .001	mg/l			WG733223	07/22/14 22:33
Tetrachloroethene	< .001	mg/l			WG733223	07/22/14 22:33
Toluene	< .005	mg/l			WG733223	07/22/14 22:33
trans-1,2-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
trans-1,3-Dichloropropene	< .001	mg/l			WG733223	07/22/14 22:33
Trichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
Trichlorofluoromethane	< .005	mg/l			WG733223	07/22/14 22:33
Vinyl chloride	< .001	mg/l			WG733223	07/22/14 22:33
Xylenes, Total	< .003	mg/l			WG733223	07/22/14 22:33
4-Bromofluorobenzene		% Rec.	104.0	71-126	WG733223	07/22/14 22:33
Dibromofluoromethane		% Rec.	92.70	78.3-121	WG733223	07/22/14 22:33
Toluene-d8		% Rec.	100.0	88.5-111	WG733223	07/22/14 22:33
a,a,a-Trifluorotoluene		% Rec.	102.0	85-114	WG733223	07/22/14 22:33

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1,1-Trichloroethane	mg/l	.025	0.0268	107.	73.2-123	WG732383
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0263	105.	70.7-122	WG732383
1,1,2-Trichloroethane	mg/l	.025	0.0253	101.	77.7-118	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0251	100.	67.2-143	WG732383
1,1-Dichloroethane	mg/l	.025	0.0278	111.	70.7-126	WG732383

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Tax I.D. 62-0814289

Est. 1970

GHD
Mr. Dave Rowlinson
200 John James Audubon Pkwy; Ste 101

Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/l	.025	0.0244	97.5	67.8-129	WG732383
1,2,3-Trichlorobenzene	mg/l	.025	0.0221	88.3	64.9-135	WG732383
1,2,4-Trichlorobenzene	mg/l	.025	0.0228	91.1	69.7-136	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0212	84.9	65.4-128	WG732383
1,2-Dibromoethane	mg/l	.025	0.0235	93.9	76.6-121	WG732383
1,2-Dichlorobenzene	mg/l	.025	0.0243	97.3	78.4-117	WG732383
1,2-Dichloroethane	mg/l	.025	0.0254	101.	68.8-124	WG732383
1,2-Dichloropropane	mg/l	.025	0.0264	106.	76.5-119	WG732383
1,3-Dichlorobenzene	mg/l	.025	0.0273	109.	70.8-128	WG732383
1,4-Dichlorobenzene	mg/l	.025	0.0240	96.1	78.8-115	WG732383
2-Butanone (MEK)	mg/l	.125	0.125	100.	55-149	WG732383
2-Hexanone	mg/l	.125	0.120	95.9	65.6-144	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.127	102.	70.5-133	WG732383
Acetone	mg/l	.125	0.125	100.	35.6-163	WG732383
Benzene	mg/l	.025	0.0264	106.	74.8-121	WG732383
Bromochloromethane	mg/l	.025	0.0250	99.9	77.6-119	WG732383
Bromodichloromethane	mg/l	.025	0.0251	100.	75.1-116	WG732383
Bromoform	mg/l	.025	0.0237	94.9	67.5-130	WG732383
Bromomethane	mg/l	.025	0.0288	115.	49.9-162	WG732383
Carbon disulfide	mg/l	.025	0.0232	92.9	64.6-140	WG732383
Carbon tetrachloride	mg/l	.025	0.0253	101.	70.2-123	WG732383
Chlorobenzene	mg/l	.025	0.0254	101.	78.1-119	WG732383
Chlorodibromomethane	mg/l	.025	0.0233	93.3	74-121	WG732383
Chloroethane	mg/l	.025	0.0287	115.	61.7-135	WG732383
Chloroform	mg/l	.025	0.0244	97.7	76-121	WG732383
cis-1,2-Dichloroethene	mg/l	.025	0.0274	110.	76-119	WG732383
cis-1,3-Dichloropropene	mg/l	.025	0.0251	100.	78.2-120	WG732383
Dichlorodifluoromethane	mg/l	.025	0.0278	111.	54.8-135	WG732383
Ethylbenzene	mg/l	.025	0.0255	102.	78.8-122	WG732383
Isopropylbenzene	mg/l	.025	0.0270	108.	78.6-132	WG732383
Methyl tert-butyl ether	mg/l	.025	0.0266	107.	71.2-126	WG732383
Methylene Chloride	mg/l	.025	0.0249	99.5	70.3-120	WG732383
Styrene	mg/l	.025	0.0272	109.	80.4-126	WG732383
Tetrachloroethene	mg/l	.025	0.0241	96.2	72.6-126	WG732383
Toluene	mg/l	.025	0.0254	102.	79.7-116	WG732383
trans-1,2-Dichloroethene	mg/l	.025	0.0267	107.	72.6-121	WG732383
trans-1,3-Dichloropropene	mg/l	.025	0.0247	98.8	74.3-123	WG732383
Trichloroethene	mg/l	.025	0.0258	103.	77.7-118	WG732383
Trichlorofluoromethane	mg/l	.025	0.0243	97.0	63.5-135	WG732383
Vinyl chloride	mg/l	.025	0.0270	108.	65.9-128	WG732383
Xylenes, Total	mg/l	.075	0.0782	104.	78.7-121	WG732383
4-Bromofluorobenzene				111.0	71-126	WG732383
Dibromofluoromethane				101.0	78.3-121	WG732383
Toluene-d8				104.0	88.5-111	WG732383
a,a,a-Trifluorotoluene				105.0	85-114	WG732383
1,1,1-Trichloroethane	mg/l	.025	0.0225	89.8	73.2-123	WG733223
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0237	94.8	70.7-122	WG733223
1,1,2-Trichloroethane	mg/l	.025	0.0245	98.0	77.7-118	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0212	84.9	67.2-143	WG733223
1,1-Dichloroethane	mg/l	.025	0.0241	96.5	70.7-126	WG733223
1,1-Dichloroethene	mg/l	.025	0.0205	82.1	67.8-129	WG733223
1,2,3-Trichlorobenzene	mg/l	.025	0.0208	83.3	64.9-135	WG733223
1,2,4-Trichlorobenzene	mg/l	.025	0.0230	92.1	69.7-136	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0195	77.9	65.4-128	WG733223
1,2-Dibromoethane	mg/l	.025	0.0232	93.0	76.6-121	WG733223
1,2-Dichlorobenzene	mg/l	.025	0.0237	94.7	78.4-117	WG733223
1,2-Dichloroethane	mg/l	.025	0.0227	90.7	68.8-124	WG733223

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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200 John James Audubon Pkwy; Ste 101

Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,2-Dichloropropane	mg/l	.025	0.0252	101.	76.5-119	WG733223
1,3-Dichlorobenzene	mg/l	.025	0.0246	98.4	70.8-128	WG733223
1,4-Dichlorobenzene	mg/l	.025	0.0236	94.4	78.8-115	WG733223
2-Butanone (MEK)	mg/l	.125	0.121	97.0	55-149	WG733223
2-Hexanone	mg/l	.125	0.121	96.4	65.6-144	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.121	97.0	70.5-133	WG733223
Acetone	mg/l	.125	0.113	90.4	35.6-163	WG733223
Benzene	mg/l	.025	0.0243	97.2	74.8-121	WG733223
Bromochloromethane	mg/l	.025	0.0227	90.7	77.6-119	WG733223
Bromodichloromethane	mg/l	.025	0.0225	89.9	75.1-116	WG733223
Bromoform	mg/l	.025	0.0210	84.1	67.5-130	WG733223
Bromomethane	mg/l	.025	0.0219	87.5	49.9-162	WG733223
Carbon disulfide	mg/l	.025	0.0187	74.7	64.6-140	WG733223
Carbon tetrachloride	mg/l	.025	0.0216	86.6	70.2-123	WG733223
Chlorobenzene	mg/l	.025	0.0243	97.1	78.1-119	WG733223
Chlorodibromomethane	mg/l	.025	0.0212	84.8	74-121	WG733223
Chloroethane	mg/l	.025	0.0231	92.2	61.7-135	WG733223
Chloroform	mg/l	.025	0.0216	86.5	76-121	WG733223
Chloromethane	mg/l	.025	0.0254	102.	61.5-129	WG733223
cis-1,2-Dichloroethene	mg/l	.025	0.0248	99.1	76-119	WG733223
cis-1,3-Dichloropropene	mg/l	.025	0.0243	97.2	78.2-120	WG733223
Dichlorodifluoromethane	mg/l	.025	0.0251	100.	54.8-135	WG733223
Ethylbenzene	mg/l	.025	0.0244	97.4	78.8-122	WG733223
Isopropylbenzene	mg/l	.025	0.0249	99.5	78.6-132	WG733223
Methyl tert-butyl ether	mg/l	.025	0.0228	91.4	71.2-126	WG733223
Methylene Chloride	mg/l	.025	0.0217	86.8	70.3-120	WG733223
Styrene	mg/l	.025	0.0252	101.	80.4-126	WG733223
Tetrachloroethene	mg/l	.025	0.0244	97.6	72.6-126	WG733223
Toluene	mg/l	.025	0.0242	96.6	79.7-116	WG733223
trans-1,2-Dichloroethene	mg/l	.025	0.0236	94.6	72.6-121	WG733223
trans-1,3-Dichloropropene	mg/l	.025	0.0240	96.1	74.3-123	WG733223
Trichloroethene	mg/l	.025	0.0249	99.7	77.7-118	WG733223
Trichlorofluoromethane	mg/l	.025	0.0206	82.5	63.5-135	WG733223
Vinyl chloride	mg/l	.025	0.0236	94.3	65.9-128	WG733223
Xylenes, Total	mg/l	.075	0.0733	97.7	78.7-121	WG733223
4-Bromofluorobenzene				102.0	71-126	WG733223
Dibromofluoromethane				93.80	78.3-121	WG733223
Toluene-d8				101.0	88.5-111	WG733223
a,a,a-Trifluorotoluene				103.0	85-114	WG733223

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1,1-Trichloroethane	mg/l	0.0238	0.0268	95.0	73.2-123	12.0	20	WG732383
1,1,2,2-Tetrachloroethane	mg/l	0.0239	0.0263	95.0	70.7-122	9.53	20	WG732383
1,1,2-Trichloroethane	mg/l	0.0255	0.0253	102.	77.7-118	0.810	20	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	0.0232	0.0251	93.0	67.2-143	7.61	20	WG732383
1,1-Dichloroethane	mg/l	0.0262	0.0278	105.	70.7-126	5.85	20	WG732383
1,1-Dichloroethene	mg/l	0.0236	0.0244	94.0	67.8-129	3.18	20	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0228	0.0221	91.0	64.9-135	3.17	20	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0234	0.0228	94.0	69.7-136	2.93	20	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0215	0.0212	86.0	65.4-128	1.15	20	WG732383
1,2-Dibromoethane	mg/l	0.0240	0.0235	96.0	76.6-121	2.05	20	WG732383
1,2-Dichlorobenzene	mg/l	0.0246	0.0243	98.0	78.4-117	1.08	20	WG732383
1,2-Dichloroethane	mg/l	0.0255	0.0254	102.	68.8-124	0.570	20	WG732383
1,2-Dichloropropane	mg/l	0.0267	0.0264	107.	76.5-119	1.25	20	WG732383
1,3-Dichlorobenzene	mg/l	0.0249	0.0273	100.	70.8-128	9.17	20	WG732383
1,4-Dichlorobenzene	mg/l	0.0243	0.0240	97.0	78.8-115	1.05	20	WG732383
2-Butanone (MEK)	mg/l	0.129	0.125	103.	55-149	2.84	20	WG732383

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Quality Assurance Report
Level II

L710742

July 23, 2014

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	Duplicate RPD	Limit	Batch
2-Hexanone	mg/l	0.122	0.120	97.0	65.6-144	1.40	20	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.127	0.127	102.	70.5-133	0.140	20	WG732383
Acetone	mg/l	0.118	0.125	94.0	35.6-163	5.70	23.9	WG732383
Benzene	mg/l	0.0262	0.0264	105.	74.8-121	0.950	20	WG732383
Bromochloromethane	mg/l	0.0241	0.0250	96.0	77.6-119	3.76	20	WG732383
Bromodichloromethane	mg/l	0.0246	0.0251	98.0	75.1-116	1.79	20	WG732383
Bromoform	mg/l	0.0222	0.0237	89.0	67.5-130	6.82	20	WG732383
Bromomethane	mg/l	0.0232	0.0288	93.0	49.9-162	21.5*	20	WG732383
Carbon disulfide	mg/l	0.0214	0.0232	86.0	64.6-140	8.05	20	WG732383
Carbon tetrachloride	mg/l	0.0233	0.0253	93.0	70.2-123	8.18	20	WG732383
Chlorobenzene	mg/l	0.0249	0.0254	100.	78.1-119	1.82	20	WG732383
Chlorodibromomethane	mg/l	0.0230	0.0233	92.0	74-121	1.45	20	WG732383
Chloroethane	mg/l	0.0247	0.0287	99.0	61.7-135	14.8	20	WG732383
Chloroform	mg/l	0.0235	0.0244	94.0	76-121	3.69	20	WG732383
cis-1,2-Dichloroethene	mg/l	0.0262	0.0274	105.	76-119	4.42	20	WG732383
cis-1,3-Dichloropropene	mg/l	0.0261	0.0251	104.	78.2-120	3.97	20	WG732383
Dichlorodifluoromethane	mg/l	0.0248	0.0278	99.0	54.8-135	11.3	20	WG732383
Ethylbenzene	mg/l	0.0248	0.0255	99.0	78.8-122	2.87	20	WG732383
Isopropylbenzene	mg/l	0.0253	0.0270	101.	78.6-132	6.55	20	WG732383
Methyl tert-butyl ether	mg/l	0.0246	0.0266	98.0	71.2-126	8.01	20	WG732383
Methylene Chloride	mg/l	0.0231	0.0249	92.0	70.3-120	7.53	20	WG732383
Styrene	mg/l	0.0258	0.0272	103.	80.4-126	5.52	20	WG732383
Tetrachloroethene	mg/l	0.0242	0.0241	97.0	72.6-126	0.620	20	WG732383
Toluene	mg/l	0.0255	0.0254	102.	79.7-116	0.110	20	WG732383
trans-1,2-Dichloroethene	mg/l	0.0248	0.0267	99.0	72.6-121	7.39	20	WG732383
trans-1,3-Dichloropropene	mg/l	0.0257	0.0247	103.	74.3-123	4.02	20	WG732383
Trichloroethene	mg/l	0.0258	0.0258	103.	77.7-118	0.0600	20	WG732383
Trichlorofluoromethane	mg/l	0.0209	0.0243	84.0	63.5-135	14.7	20	WG732383
Vinyl chloride	mg/l	0.0248	0.0270	99.0	65.9-128	8.73	20	WG732383
Xylenes, Total	mg/l	0.0752	0.0782	100.	78.7-121	3.99	20	WG732383
4-Bromofluorobenzene				101.0	71-126			WG732383
Dibromofluoromethane				96.00	78.3-121			WG732383
Toluene-d8				102.0	88.5-111			WG732383
a,a,a-Trifluorotoluene				99.70	85-114			WG732383
1,1,1-Trichloroethane	mg/l	0.0229	0.0225	91.0	73.2-123	1.82	20	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0234	0.0237	94.0	70.7-122	1.30	20	WG733223
1,1,2-Trichloroethane	mg/l	0.0242	0.0245	97.0	77.7-118	1.21	20	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0216	0.0212	86.0	67.2-143	1.67	20	WG733223
1,1-Dichloroethane	mg/l	0.0239	0.0241	96.0	70.7-126	1.02	20	WG733223
1,1-Dichloroethene	mg/l	0.0207	0.0205	83.0	67.8-129	1.05	20	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0212	0.0208	85.0	64.9-135	2.06	20	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0235	0.0230	94.0	69.7-136	1.88	20	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0199	0.0195	80.0	65.4-128	2.17	20	WG733223
1,2-Dibromoethane	mg/l	0.0231	0.0232	92.0	76.6-121	0.750	20	WG733223
1,2-Dichlorobenzene	mg/l	0.0238	0.0237	95.0	78.4-117	0.680	20	WG733223
1,2-Dichloroethane	mg/l	0.0226	0.0227	90.0	68.8-124	0.470	20	WG733223
1,2-Dichloropropane	mg/l	0.0247	0.0252	99.0	76.5-119	1.87	20	WG733223
1,3-Dichlorobenzene	mg/l	0.0250	0.0246	100.	70.8-128	1.44	20	WG733223
1,4-Dichlorobenzene	mg/l	0.0241	0.0236	96.0	78.8-115	1.94	20	WG733223
2-Butanone (MEK)	mg/l	0.127	0.121	101.	55-149	4.32	20	WG733223
2-Hexanone	mg/l	0.124	0.121	100.	65.6-144	3.14	20	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	0.121	0.121	97.0	70.5-133	0.320	20	WG733223
Acetone	mg/l	0.119	0.113	95.0	35.6-163	5.35	23.9	WG733223
Benzene	mg/l	0.0244	0.0243	97.0	74.8-121	0.250	20	WG733223
Bromochloromethane	mg/l	0.0224	0.0227	90.0	77.6-119	1.20	20	WG733223
Bromodichloromethane	mg/l	0.0224	0.0225	90.0	75.1-116	0.220	20	WG733223
Bromoform	mg/l	0.0209	0.0210	84.0	67.5-130	0.370	20	WG733223

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Quality Assurance Report
Level II

L710742

July 23, 2014

		Laboratory Control Sample Duplicate						
Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Bromomethane	mg/l	0.0228	0.0219	91.0	49.9-162	4.34	20	WG733223
Carbon disulfide	mg/l	0.0196	0.0187	78.0	64.6-140	4.96	20	WG733223
Carbon tetrachloride	mg/l	0.0220	0.0216	88.0	70.2-123	1.64	20	WG733223
Chlorobenzene	mg/l	0.0245	0.0243	98.0	78.1-119	0.880	20	WG733223
Chlorodibromomethane	mg/l	0.0216	0.0212	86.0	74-121	2.00	20	WG733223
Chloroethane	mg/l	0.0233	0.0231	93.0	61.7-135	1.14	20	WG733223
Chloroform	mg/l	0.0213	0.0216	85.0	76-121	1.72	20	WG733223
Chloromethane	mg/l	0.0249	0.0254	99.0	61.5-129	2.34	20	WG733223
cis-1,2-Dichloroethene	mg/l	0.0248	0.0248	99.0	76-119	0.0700	20	WG733223
cis-1,3-Dichloropropene	mg/l	0.0242	0.0243	97.0	78.2-120	0.270	20	WG733223
Dichlorodifluoromethane	mg/l	0.0239	0.0251	96.0	54.8-135	4.92	20	WG733223
Ethylbenzene	mg/l	0.0246	0.0244	98.0	78.8-122	0.830	20	WG733223
Isopropylbenzene	mg/l	0.0249	0.0249	99.0	78.6-132	0.0200	20	WG733223
Methyl tert-butyl ether	mg/l	0.0225	0.0228	90.0	71.2-126	1.41	20	WG733223
Methylene Chloride	mg/l	0.0217	0.0217	87.0	70.3-120	0.100	20	WG733223
Styrene	mg/l	0.0252	0.0252	101.	80.4-126	0.0500	20	WG733223
Tetrachloroethene	mg/l	0.0252	0.0244	101.	72.6-126	3.12	20	WG733223
Toluene	mg/l	0.0242	0.0242	97.0	79.7-116	0.220	20	WG733223
trans-1,2-Dichloroethene	mg/l	0.0240	0.0236	96.0	72.6-121	1.61	20	WG733223
trans-1,3-Dichloropropene	mg/l	0.0244	0.0240	97.0	74.3-123	1.47	20	WG733223
Trichloroethene	mg/l	0.0248	0.0249	99.0	77.7-118	0.540	20	WG733223
Trichlorofluoromethane	mg/l	0.0205	0.0206	82.0	63.5-135	0.450	20	WG733223
Vinyl chloride	mg/l	0.0231	0.0236	92.0	65.9-128	1.83	20	WG733223
Xylenes, Total	mg/l	0.0740	0.0733	99.0	78.7-121	0.970	20	WG733223
4-Bromofluorobenzene				100.0	71-126			WG733223
Dibromofluoromethane				93.10	78.3-121			WG733223
Toluene-d8				101.0	88.5-111			WG733223
a,a,a-Trifluorotoluene				102.0	85-114			WG733223

		Matrix Spike						
Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1,1-Trichloroethane	mg/l	0.0200	0.0	.025	80.0	58.7-134	L710351-04	WG732383
1,1,2,2-Tetrachloroethane	mg/l	0.0261	0.0	.025	100.	56-132	L710351-04	WG732383
1,1,2-Trichloroethane	mg/l	0.0237	0.0	.025	95.0	66.3-125	L710351-04	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	0.0179	0.0	.025	72.0	54.8-154	L710351-04	WG732383
1,1-Dichloroethane	mg/l	0.0224	0.0	.025	90.0	58.5-132	L710351-04	WG732383
1,1-Dichloroethene	mg/l	0.0175	0.0	.025	70.0	51.1-140	L710351-04	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0188	0.0	.025	75.0	59.1-138	L710351-04	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0185	0.0	.025	74.0	63.6-143	L710351-04	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0225	0.0	.025	90.0	57.3-136	L710351-04	WG732383
1,2-Dibromoethane	mg/l	0.0229	0.0	.025	92.0	67.1-125	L710351-04	WG732383
1,2-Dichlorobenzene	mg/l	0.0217	0.0	.025	87.0	68.2-123	L710351-04	WG732383
1,2-Dichloroethane	mg/l	0.0235	0.0	.025	94.0	60-126	L710351-04	WG732383
1,2-Dichloropropane	mg/l	0.0232	0.0	.025	93.0	64.2-123	L710351-04	WG732383
1,3-Dichlorobenzene	mg/l	0.0217	0.0	.025	87.0	63.1-131	L710351-04	WG732383
1,4-Dichlorobenzene	mg/l	0.0203	0.0	.025	81.0	68.6-123	L710351-04	WG732383
2-Butanone (MEK)	mg/l	0.129	0.0	.125	100.	22.4-138	L710351-04	WG732383
2-Hexanone	mg/l	0.125	0.0	.125	100.	43.3-137	L710351-04	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.0	.125	100.	60.8-140	L710351-04	WG732383
Acetone	mg/l	0.122	0.00273	.125	95.0	10-130	L710351-04	WG732383
Benzene	mg/l	0.0215	0.0	.025	86.0	54.3-133	L710351-04	WG732383
Bromochloromethane	mg/l	0.0221	0.0	.025	88.0	66.5-122	L710351-04	WG732383
Bromodichloromethane	mg/l	0.0224	0.0	.025	89.0	63.9-121	L710351-04	WG732383
Bromoform	mg/l	0.0226	0.0	.025	90.0	59.5-134	L710351-04	WG732383
Bromomethane	mg/l	0.0186	0.0	.025	74.0	41.7-155	L710351-04	WG732383
Carbon disulfide	mg/l	0.0139	0.0	.025	56.0	43.3-149	L710351-04	WG732383
Carbon tetrachloride	mg/l	0.0184	0.0	.025	74.0	55.7-134	L710351-04	WG732383
Chlorobenzene	mg/l	0.0215	0.0	.025	86.0	67-125	L710351-04	WG732383

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Quality Assurance Report
Level II

L710742

July 23, 2014

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chlorodibromomethane	mg/l	0.0217	0.0	.025	87.0	64.3-125	L710351-04	WG732383
Chloroethane	mg/l	0.0200	0.0	.025	80.0	51.5-136	L710351-04	WG732383
Chloroform	mg/l	0.0207	0.0	.025	83.0	63-129	L710351-04	WG732383
cis-1,2-Dichloroethene	mg/l	0.0230	0.0	.025	92.0	59.2-129	L710351-04	WG732383
cis-1,3-Dichloropropene	mg/l	0.0223	0.0	.025	89.0	66.4-125	L710351-04	WG732383
Dichlorodifluoromethane	mg/l	0.0188	0.0	.025	75.0	40.6-144	L710351-04	WG732383
Ethylbenzene	mg/l	0.0204	0.0	.025	82.0	61.4-133	L710351-04	WG732383
Isopropylbenzene	mg/l	0.0208	0.0	.025	83.0	66.8-141	L710351-04	WG732383
Methyl tert-butyl ether	mg/l	0.0246	0.0	.025	98.0	57.7-134	L710351-04	WG732383
Methylene Chloride	mg/l	0.0210	0.000311	.025	83.0	58.1-122	L710351-04	WG732383
Styrene	mg/l	0.0226	0.0	.025	90.0	66.8-133	L710351-04	WG732383
Tetrachloroethene	mg/l	0.0179	0.0	.025	72.0	53-139	L710351-04	WG732383
Toluene	mg/l	0.0203	0.0	.025	81.0	61.4-130	L710351-04	WG732383
trans-1,2-Dichloroethene	mg/l	0.0196	0.0	.025	79.0	56.5-129	L710351-04	WG732383
trans-1,3-Dichloropropene	mg/l	0.0229	0.0	.025	92.0	64.1-128	L710351-04	WG732383
Trichloroethene	mg/l	0.0198	0.0	.025	79.0	44.1-149	L710351-04	WG732383
Trichlorofluoromethane	mg/l	0.0165	0.0	.025	66.0	49.6-145	L710351-04	WG732383
Vinyl chloride	mg/l	0.0184	0.0	.025	74.0	47.8-137	L710351-04	WG732383
Xylenes, Total	mg/l	0.0622	0.0	.075	83.0	63.3-131	L710351-04	WG732383
4-Bromofluorobenzene					107.0	71-126		WG732383
Dibromofluoromethane					99.40	78.3-121		WG732383
Toluene-d8					103.0	88.5-111		WG732383
a,a,a-Trifluorotoluene					103.0	85-114		WG732383
1,1,1-Trichloroethane	mg/l	0.0244	0.0	.025	98.0	58.7-134	L711295-02	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0257	0.0	.025	100.	56-132	L711295-02	WG733223
1,1,2-Trichloroethane	mg/l	0.0249	0.0	.025	100.	66.3-125	L711295-02	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0233	0.0	.025	93.0	54.8-154	L711295-02	WG733223
1,1-Dichloroethane	mg/l	0.0247	0.0	.025	99.0	58.5-132	L711295-02	WG733223
1,1-Dichloroethene	mg/l	0.0211	0.0	.025	84.0	51.1-140	L711295-02	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0217	0.0	.025	87.0	59.1-138	L711295-02	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0238	0.0	.025	95.0	63.6-143	L711295-02	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0209	0.0	.025	84.0	57.3-136	L711295-02	WG733223
1,2-Dibromoethane	mg/l	0.0241	0.0	.025	96.0	67.1-125	L711295-02	WG733223
1,2-Dichlorobenzene	mg/l	0.0237	0.0	.025	95.0	68.2-123	L711295-02	WG733223
1,2-Dichloroethane	mg/l	0.0230	0.0	.025	92.0	60-126	L711295-02	WG733223
1,2-Dichloropropane	mg/l	0.0250	0.0	.025	100.	64.2-123	L711295-02	WG733223
1,3-Dichlorobenzene	mg/l	0.0256	0.0	.025	100.	63.1-131	L711295-02	WG733223
1,4-Dichlorobenzene	mg/l	0.0237	0.0	.025	95.0	68.6-123	L711295-02	WG733223
2-Butanone (MEK)	mg/l	0.129	0.000411	.125	100.	22.4-138	L711295-02	WG733223
2-Hexanone	mg/l	0.129	0.0	.125	100.	43.3-137	L711295-02	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	0.131	0.0	.125	100.	60.8-140	L711295-02	WG733223
Acetone	mg/l	0.120	0.00313	.125	94.0	10-130	L711295-02	WG733223
Benzene	mg/l	0.0247	0.0	.025	99.0	54.3-133	L711295-02	WG733223
Bromochloromethane	mg/l	0.0232	0.0	.025	93.0	66.5-122	L711295-02	WG733223
Bromodichloromethane	mg/l	0.0226	0.0	.025	90.0	63.9-121	L711295-02	WG733223
Bromoform	mg/l	0.0226	0.0	.025	90.0	59.5-134	L711295-02	WG733223
Bromomethane	mg/l	0.0242	0.0	.025	97.0	41.7-155	L711295-02	WG733223
Carbon disulfide	mg/l	0.0196	0.0	.025	78.0	43.3-149	L711295-02	WG733223
Carbon tetrachloride	mg/l	0.0232	0.0	.025	93.0	55.7-134	L711295-02	WG733223
Chlorobenzene	mg/l	0.0247	0.0	.025	99.0	67-125	L711295-02	WG733223
Chlorodibromomethane	mg/l	0.0223	0.0	.025	89.0	64.3-125	L711295-02	WG733223
Chloroethane	mg/l	0.0250	0.0	.025	100.	51.5-136	L711295-02	WG733223
Chloroform	mg/l	0.0220	0.0	.025	88.0	63-129	L711295-02	WG733223
Chloromethane	mg/l	0.0264	0.0	.025	100.	42.4-135	L711295-02	WG733223
cis-1,2-Dichloroethene	mg/l	0.0251	0.0	.025	100.	59.2-129	L711295-02	WG733223
cis-1,3-Dichloropropene	mg/l	0.0240	0.0	.025	96.0	66.4-125	L711295-02	WG733223
Dichlorodifluoromethane	mg/l	0.0275	0.0	.025	110.	40.6-144	L711295-02	WG733223

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Level II

L710742

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Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Ethylbenzene	mg/l	0.0250	0.0	.025	100.	61.4-133	L711295-02	WG733223
Isopropylbenzene	mg/l	0.0255	0.0	.025	100.	66.8-141	L711295-02	WG733223
Methyl tert-butyl ether	mg/l	0.0239	0.0	.025	96.0	57.7-134	L711295-02	WG733223
Methylene Chloride	mg/l	0.0223	0.0	.025	89.0	58.1-122	L711295-02	WG733223
Styrene	mg/l	0.0256	0.0	.025	100.	66.8-133	L711295-02	WG733223
Tetrachloroethene	mg/l	0.0248	0.0	.025	99.0	53-139	L711295-02	WG733223
Toluene	mg/l	0.0244	0.0	.025	98.0	61.4-130	L711295-02	WG733223
trans-1,2-Dichloroethene	mg/l	0.0243	0.0	.025	97.0	56.5-129	L711295-02	WG733223
trans-1,3-Dichloropropene	mg/l	0.0248	0.0	.025	99.0	64.1-128	L711295-02	WG733223
Trichloroethene	mg/l	0.0246	0.0	.025	98.0	44.1-149	L711295-02	WG733223
Trichlorofluoromethane	mg/l	0.0229	0.0	.025	92.0	49.6-145	L711295-02	WG733223
Vinyl chloride	mg/l	0.0249	0.0	.025	100.	47.8-137	L711295-02	WG733223
Xylenes, Total	mg/l	0.0754	0.0	.075	100.	63.3-131	L711295-02	WG733223
4-Bromofluorobenzene					104.0	71-126		WG733223
Dibromofluoromethane					95.60	78.3-121		WG733223
Toluene-d8					102.0	88.5-111		WG733223
a,a,a-Trifluorotoluene					104.0	85-114		WG733223

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1,1-Trichloroethane	mg/l	0.0233	0.0200	93.0	58.7-134	15.1	20	L710351-04	WG732383
1,1,2,2-Tetrachloroethane	mg/l	0.0269	0.0261	108.	56-132	3.18	22.2	L710351-04	WG732383
1,1,2-Trichloroethane	mg/l	0.0246	0.0237	98.6	66.3-125	3.79	20	L710351-04	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	0.0221	0.0179	88.3	54.8-154	20.7	22.5	L710351-04	WG732383
1,1-Dichloroethane	mg/l	0.0248	0.0224	99.1	58.5-132	10.2	20	L710351-04	WG732383
1,1-Dichloroethene	mg/l	0.0206	0.0175	82.5	51.1-140	16.5	20.2	L710351-04	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0191	0.0188	76.5	59.1-138	1.83	23.7	L710351-04	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0194	0.0185	77.4	63.6-143	4.75	21.9	L710351-04	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0223	0.0225	89.1	57.3-136	1.15	27	L710351-04	WG732383
1,2-Dibromoethane	mg/l	0.0231	0.0229	92.5	67.1-125	0.930	20	L710351-04	WG732383
1,2-Dichlorobenzene	mg/l	0.0224	0.0217	89.6	68.2-123	3.10	20	L710351-04	WG732383
1,2-Dichloroethane	mg/l	0.0240	0.0235	96.0	60-126	1.90	20	L710351-04	WG732383
1,2-Dichloropropane	mg/l	0.0246	0.0232	98.4	64.2-123	5.71	20	L710351-04	WG732383
1,3-Dichlorobenzene	mg/l	0.0238	0.0217	95.3	63.1-131	9.25	20	L710351-04	WG732383
1,4-Dichlorobenzene	mg/l	0.0215	0.0203	86.0	68.6-123	5.94	20	L710351-04	WG732383
2-Butanone (MEK)	mg/l	0.135	0.129	108.	22.4-138	4.30	27	L710351-04	WG732383
2-Hexanone	mg/l	0.129	0.125	103.	43.3-137	3.34	25.5	L710351-04	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.134	0.129	107.	60.8-140	4.24	25.1	L710351-04	WG732383
Acetone	mg/l	0.131	0.122	103.	10-130	7.16	27.9	L710351-04	WG732383
Benzene	mg/l	0.0235	0.0215	94.0	54.3-133	9.07	20	L710351-04	WG732383
Bromochloromethane	mg/l	0.0233	0.0221	93.4	66.5-122	5.32	20.8	L710351-04	WG732383
Bromodichloromethane	mg/l	0.0234	0.0224	93.4	63.9-121	4.36	20	L710351-04	WG732383
Bromoform	mg/l	0.0232	0.0226	92.8	59.5-134	2.72	20.5	L710351-04	WG732383
Bromomethane	mg/l	0.0207	0.0186	83.0	41.7-155	11.0	21.9	L710351-04	WG732383
Carbon disulfide	mg/l	0.0164	0.0139	65.6	43.3-149	16.6	20.3	L710351-04	WG732383
Carbon tetrachloride	mg/l	0.0220	0.0184	87.9	55.7-134	17.7	20	L710351-04	WG732383
Chlorobenzene	mg/l	0.0229	0.0215	91.7	67-125	6.59	20	L710351-04	WG732383
Chlorodibromomethane	mg/l	0.0221	0.0217	88.2	64.3-125	1.63	20.8	L710351-04	WG732383
Chloroethane	mg/l	0.0232	0.0200	92.9	51.5-136	14.8	40	L710351-04	WG732383
Chloroform	mg/l	0.0222	0.0207	89.0	63-129	7.40	20	L710351-04	WG732383
cis-1,2-Dichloroethene	mg/l	0.0248	0.0230	99.1	59.2-129	7.41	20	L710351-04	WG732383
cis-1,3-Dichloropropene	mg/l	0.0231	0.0223	92.6	66.4-125	3.85	20	L710351-04	WG732383
Dichlorodifluoromethane	mg/l	0.0229	0.0188	91.6	40.6-144	19.8	20.2	L710351-04	WG732383
Ethylbenzene	mg/l	0.0229	0.0204	91.4	61.4-133	11.3	20	L710351-04	WG732383
Isopropylbenzene	mg/l	0.0239	0.0208	95.5	66.8-141	13.6	20	L710351-04	WG732383
Methyl tert-butyl ether	mg/l	0.0253	0.0246	101.	57.7-134	2.92	20	L710351-04	WG732383
Methylene Chloride	mg/l	0.0221	0.0210	87.2	58.1-122	5.16	20	L710351-04	WG732383
Styrene	mg/l	0.0242	0.0226	96.6	66.8-133	6.74	20	L710351-04	WG732383

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Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Tetrachloroethene	mg/l	0.0207	0.0179	82.9	53-139	14.5	20	L710351-04	WG732383
Toluene	mg/l	0.0223	0.0203	89.4	61.4-130	9.58	20	L710351-04	WG732383
trans-1,2-Dichloroethene	mg/l	0.0225	0.0196	89.8	56.5-129	13.4	20	L710351-04	WG732383
trans-1,3-Dichloropropene	mg/l	0.0236	0.0229	94.6	64.1-128	3.35	20	L710351-04	WG732383
Trichloroethene	mg/l	0.0224	0.0198	89.7	44.1-149	12.3	20	L710351-04	WG732383
Trichlorofluoromethane	mg/l	0.0199	0.0165	79.6	49.6-145	18.8	21.2	L710351-04	WG732383
Vinyl chloride	mg/l	0.0220	0.0184	87.8	47.8-137	17.7	20	L710351-04	WG732383
Xylenes, Total	mg/l	0.0685	0.0622	91.3	63.3-131	9.71	20	L710351-04	WG732383
4-Bromofluorobenzene				109.0	71-126				WG732383
Dibromofluoromethane				102.0	78.3-121				WG732383
Toluene-d8				102.0	88.5-111				WG732383
a,a,a-Trifluorotoluene				102.0	85-114				WG732383
1,1,1-Trichloroethane	mg/l	0.0216	0.0244	86.5	58.7-134	12.1	20	L711295-02	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0227	0.0257	90.7	56-132	12.3	22.2	L711295-02	WG733223
1,1,2-Trichloroethane	mg/l	0.0229	0.0249	91.6	66.3-125	8.38	20	L711295-02	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0202	0.0233	80.7	54.8-154	14.3	22.5	L711295-02	WG733223
1,1-Dichloroethane	mg/l	0.0223	0.0247	89.4	58.5-132	9.98	20	L711295-02	WG733223
1,1-Dichloroethene	mg/l	0.0187	0.0211	74.9	51.1-140	11.9	20.2	L711295-02	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0196	0.0217	78.6	59.1-138	10.1	23.7	L711295-02	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0211	0.0238	84.3	63.6-143	12.1	21.9	L711295-02	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0190	0.0209	76.1	57.3-136	9.48	27	L711295-02	WG733223
1,2-Dibromoethane	mg/l	0.0218	0.0241	87.1	67.1-125	10.2	20	L711295-02	WG733223
1,2-Dichlorobenzene	mg/l	0.0216	0.0237	86.5	68.2-123	9.12	20	L711295-02	WG733223
1,2-Dichloroethane	mg/l	0.0209	0.0230	83.4	60-126	9.77	20	L711295-02	WG733223
1,2-Dichloropropane	mg/l	0.0234	0.0250	93.6	64.2-123	6.65	20	L711295-02	WG733223
1,3-Dichlorobenzene	mg/l	0.0229	0.0256	91.8	63.1-131	11.0	20	L711295-02	WG733223
1,4-Dichlorobenzene	mg/l	0.0216	0.0237	86.2	68.6-123	9.41	20	L711295-02	WG733223
2-Butanone (MEK)	mg/l	0.110	0.129	87.6	22.4-138	15.8	27	L711295-02	WG733223
2-Hexanone	mg/l	0.110	0.129	87.7	43.3-137	16.0	25.5	L711295-02	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	0.112	0.131	89.8	60.8-140	15.3	25.1	L711295-02	WG733223
Acetone	mg/l	0.101	0.120	78.6	10-130	16.8	27.9	L711295-02	WG733223
Benzene	mg/l	0.0226	0.0247	90.2	54.3-133	9.15	20	L711295-02	WG733223
Bromochloromethane	mg/l	0.0214	0.0232	85.6	66.5-122	7.98	20.8	L711295-02	WG733223
Bromodichloromethane	mg/l	0.0211	0.0226	84.5	63.9-121	6.92	20	L711295-02	WG733223
Bromoform	mg/l	0.0202	0.0226	80.6	59.5-134	11.3	20.5	L711295-02	WG733223
Bromomethane	mg/l	0.0216	0.0242	86.2	41.7-155	11.5	21.9	L711295-02	WG733223
Carbon disulfide	mg/l	0.0176	0.0196	70.3	43.3-149	10.8	20.3	L711295-02	WG733223
Carbon tetrachloride	mg/l	0.0208	0.0232	83.3	55.7-134	10.7	20	L711295-02	WG733223
Chlorobenzene	mg/l	0.0226	0.0247	90.2	67-125	9.10	20	L711295-02	WG733223
Chlorodibromomethane	mg/l	0.0203	0.0223	81.0	64.3-125	9.58	20.8	L711295-02	WG733223
Chloroethane	mg/l	0.0224	0.0250	89.8	51.5-136	10.9	40	L711295-02	WG733223
Chloroform	mg/l	0.0201	0.0220	80.5	63-129	8.96	20	L711295-02	WG733223
Chloromethane	mg/l	0.0236	0.0264	94.4	42.4-135	11.0	20	L711295-02	WG733223
cis-1,2-Dichloroethene	mg/l	0.0229	0.0251	91.5	59.2-129	9.24	20	L711295-02	WG733223
cis-1,3-Dichloropropene	mg/l	0.0222	0.0240	88.9	66.4-125	7.57	20	L711295-02	WG733223
Dichlorodifluoromethane	mg/l	0.0246	0.0275	98.3	40.6-144	11.1	20.2	L711295-02	WG733223
Ethylbenzene	mg/l	0.0226	0.0250	90.3	61.4-133	10.3	20	L711295-02	WG733223
Isopropylbenzene	mg/l	0.0229	0.0255	91.7	66.8-141	10.8	20	L711295-02	WG733223
Methyl tert-butyl ether	mg/l	0.0211	0.0239	84.5	57.7-134	12.6	20	L711295-02	WG733223
Methylene Chloride	mg/l	0.0203	0.0223	81.3	58.1-122	9.38	20	L711295-02	WG733223
Styrene	mg/l	0.0231	0.0256	92.3	66.8-133	10.6	20	L711295-02	WG733223
Tetrachloroethene	mg/l	0.0222	0.0248	88.8	53-139	11.0	20	L711295-02	WG733223
Toluene	mg/l	0.0225	0.0244	89.8	61.4-130	8.37	20	L711295-02	WG733223
trans-1,2-Dichloroethene	mg/l	0.0221	0.0243	88.4	56.5-129	9.46	20	L711295-02	WG733223
trans-1,3-Dichloropropene	mg/l	0.0230	0.0248	92.0	64.1-128	7.66	20	L711295-02	WG733223
Trichloroethene	mg/l	0.0227	0.0246	90.6	44.1-149	8.35	20	L711295-02	WG733223
Trichlorofluoromethane	mg/l	0.0202	0.0229	81.0	49.6-145	12.4	21.2	L711295-02	WG733223

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

ESC LAB SCIENCES
YOUR LAB OF CHOICE

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

GHD
Mr. Dave Rowlinson
200 John James Audubon Pkwy; Ste 101

Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
Vinyl chloride	mg/l	0.0220	0.0249	87.9	47.8-137	12.3	20	L711295-02	WG733223
Xylenes, Total	mg/l	0.0677	0.0754	90.3	63.3-131	10.7	20	L711295-02	WG733223
4-Bromofluorobenzene				102.0	71-126				WG733223
Dibromofluoromethane				95.10	78.3-121				WG733223
Toluene-d8				101.0	88.5-111				WG733223
a,a,a-Trifluorotoluene				102.0	85-114				WG733223

Batch number /Run number / Sample number cross reference

WG732383: R2967088: L710742-01 02
WG733223: R2967334: L710742-01 02 03

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Amherst, NY 14228

Quality Assurance Report
Level II

L710742

July 23, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

GHD

200 John James Audubon Pkwy; Ste 101
Amherst, NY 14228

Billing Information:
Mr. Dave Rowlinson
200 John James Audubon Pkwy; Ste 101
Amherst, NY 14228

Report to: Mr. Dave Rowlinson

Email To: dave.rowlinson@ghd.com

Project Description: **Roblin Steel**

City/State Collected:

Phone: **716-691-8503**
Fax:

Client Project # **8612403**

Lab Project # **STEARNSANY-ROBLIN**

Collected by (print): D. Rowlinson

Site/Facility ID #

P.O. # 8612403

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

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		7/15/14	2:30	2	X											-01
FIELD DUP	↓	GW		↓	↓	2	X											-02
TRIP BLANK	↓	GW		↓	↓	1		X										-03
		GW				2	X											
		GW				2	X											

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

ESC LAB SCIENCES
YOUR LAB OF CHOICE
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# L710742
A081

Acctnum: **STEARNSANY**
Template: **T80570**
Prelogin: **P475537**
TSR: **044 - Leslie Newton**
PB: 2.7 M 8
Shipped Via: **FedEx Ground**

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

Remarks:Please mark sample that is used for MS and MSD.

6089 7170 2864

pH _____ Temp _____
Flow _____ Other _____

Hold #

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
David Rowlinson	7/15/14	4:30pm	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ _____

Temp: 3.6 °C Bottles Received: 9VP

Date: 7/16/14 Time: 0900

Condition: (lab use only) SWS

COC Seal Intact: ✓ Y ___N ___NA

pH Checked: 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#L710742
October 27, 2014
Sampling date: 07/15/2014

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 Stearns and Wheler, project located at Roblin Steel, project # 8612403, SDG#L710742, submitted to Vali-Data of WNY, LLC on September 22, 2014. 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 8260 (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. Results were not recorded to three significant figures. This does not affect the usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS
All criteria were met.

HOLDING TIMES
All holding times were met.

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.

LABORATORY CONTROL SAMPLES
All criteria were met except the %RPD of Bromomethane between WG732383LCS and WG732383LCSD was outside QC limits. Bromomethane was qualified with a 'J3' in the associated 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 except linear regression was used for Methyl cyclohexane with acceptable results.

CONTINUING CALIBRATION
All criteria were met.

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

Reset Page

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

Reset Page

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 3/17/14

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,

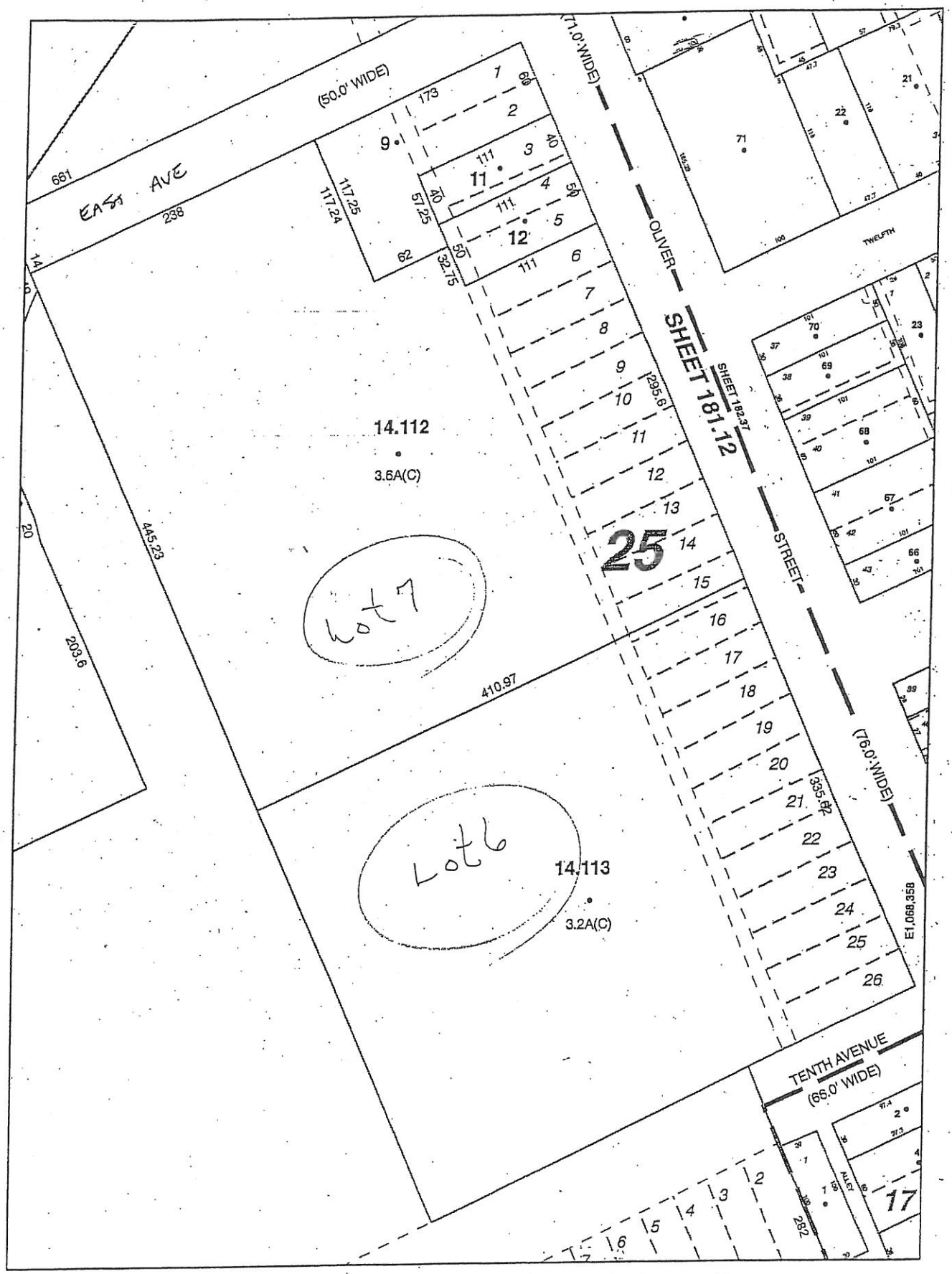
All that tract or parcel of land, situate in the City of North Tonawanda, County of Niagara and State of New York, being part of Lot 74 of the Mile Reservation, bounded and described as follows:

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.

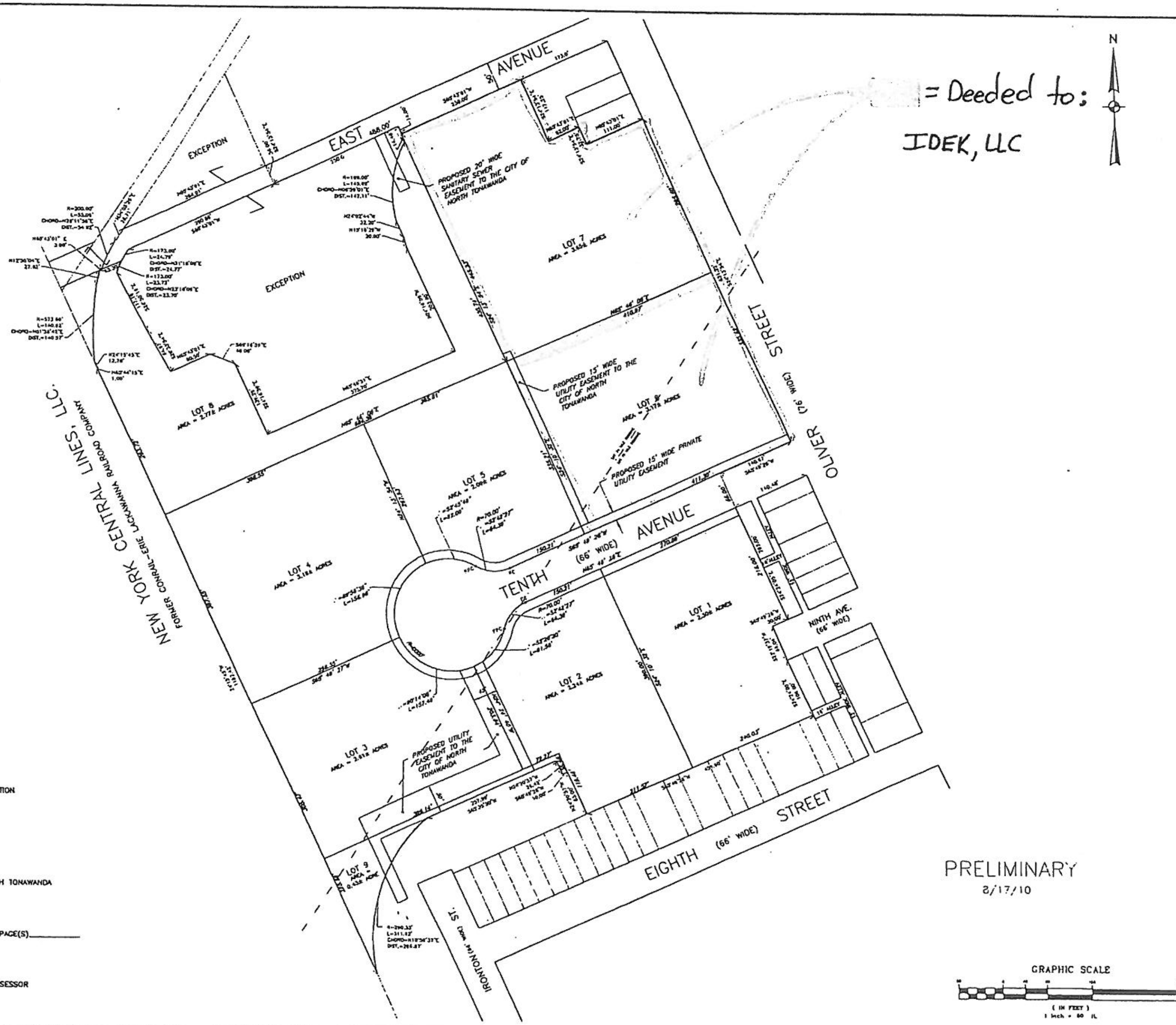
Also, all that tract or parcel of land, situate in the City of North Tonawanda, County of Niagara and State of New York, being part of Lots Nos. 74 and 75 of the Mile Reservation, bounded and described as follows:

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



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 · MAPPING · ENVIRONMENTAL

Designed by:	Date of Survey:
Drawn by: LAD	Job No. 2009.0024.00
Checked by:	Dwg Scale: Horiz: 1" = 80'

SHEET REFERENCE NUMBER:
60159
SHEET 1 OF 1

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.** B 00025

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): 02/21/2012

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 deed 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

Reset Page

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: Taylor Devices, Inc. (Douglas P. Taylor, President)
Address1: 90 Taylor Drive, P.O. Box 748
Address2: North Tonawanda, NY 14120
Phone: (716) 694-0800 E-mail: taylordevi@aol.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

Reset Page

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

2012109916

2012-03835
02/21/2012 01:35:10 PM
5 Pages
DEED

Wayne F. Jagow, Niagara County Clerk Clerk: TH

Taylor
1 Buff. Bolt

This Indenture

Made the 14th day of February, in the year Two Thousand and Twelve,

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

Taylor Devices, Inc., a business corporation, organized under the laws of the State of New York, with offices at 90 Taylor Drive, 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-Seven Thousand Six Hundred Dollars ($37,600.00), 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 Lots 74 and 75 of the Niagara River Reservation, bounded and described as follows:

Beginning at a point in the south line of Buffalo Bolt Way (formerly Tenth Avenue, 66 feet wide), distant 140.48 feet westerly from the intersection of the south line of Buffalo Bolt Way with the west line of Oliver Street; thence South 24°24'05" East, a distance of 216.00 feet; thence South 65°49'28" West, a distance of 30.00 feet; thence South 22°19'37" West, a distance of 66.04 feet; thence South 24°24'05" East, a distance of 100.00 feet; thence South 65°49'28" West, a distance of 451.60 feet; thence North 24°20'57" West, a distance of 75.00 feet; thence South 65°49'28" West, a distance of 10 feet; thence North 24°20'57" West, a distance of 26.42 feet; thence South 65°35'20" West, a distance of 257.99 feet; thence southwesterly on a curve to the left having a radius of 290.33 feet and a chord with a bearing of South 18°59'37" West with a chord distance of 296.87 feet, a distance of 311.62 feet; thence North 24°15'45" East, a distance of 531.15 feet; thence North 65°49'27" East, a distance of 298.35 feet to a point in Buffalo Bolt Way; thence along a curve to the left having a radius of 100.00 feet and along the south line of Buffalo Bolt Way, a distance of 249.07 feet to a point of reverse curvature in the south line of Buffalo Bolt Way; thence northeasterly along a curve to the right having a radius of 70.00 feet and along the south line of Buffalo Bolt Way, a distance of 64.39 feet to a point of tangency thereon; thence N 65°49'28" E along the south line of Buffalo Bolt Way, a distance of 421.10 feet to the principal point or place of beginning.

The party of the first part hereby quit claims to the party of the second part all of its right, title and interest, if any, in and to those lands which lie south, southeast and southwest of the lands above described and north, northeast and northwest of lands

conveyed to the party of the second part by deed recorded in the Niagara County Clerk's Office on December 27, 2011 as instrument no. 2011-23527.

Reserving unto the party of the first part, an easement solely for utility purposes as shown on a Survey prepared by TVGA Consultants on September 19, 2011, Job No. 2009-0036-00 and attached hereto as Schedule "A" and made a part hereof, the terms of which easement are more fully set forth in that certain sewer line easement agreement dated on or about the date hereof between the party of the first part and the party of the second part, ~~a copy of which is attached hereto as Exhibit A and made a part hereof.~~ Recorded simultaneously herwith in ~~Liber~~ ~~of~~ ~~at page~~ Instrument #2012-03834 of Deeds

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 with the party of the second part as follows:

THAT party of the second part shall quietly enjoy the said premises.

THAT party of the first part will forever warrant the title to said premises.

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.

In Presence of

For the City of North Tonawanda

By: _____
Robert G. Ortt, Mayor

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

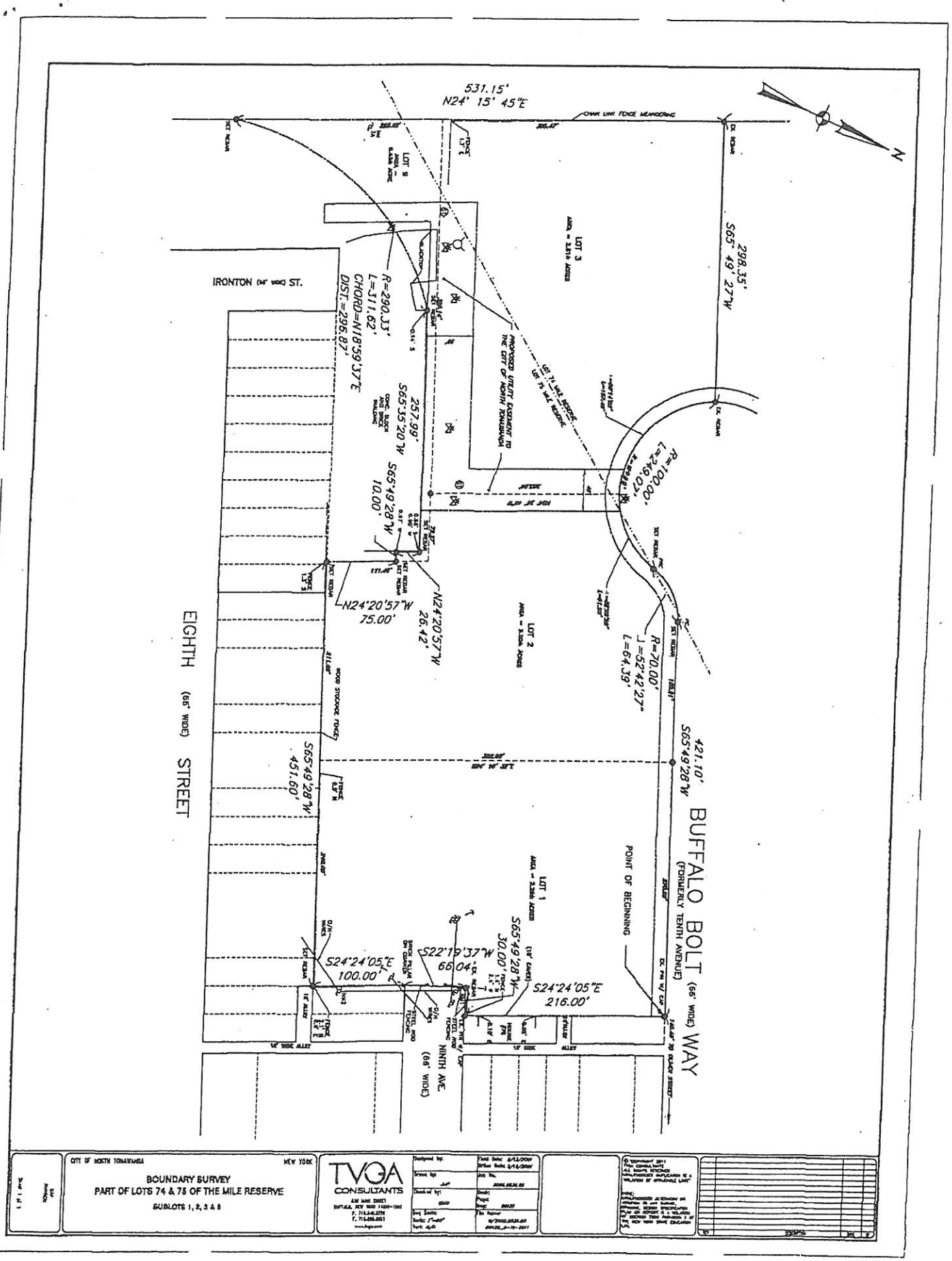
On this 14th day of February, 2012, before me the undersigned, a Notary Public in and for the State of New York, personally appeared Robert G. Ortt, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and 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.

David R. Jakubaszek

DAVID R. JAKUBASZEK Reg. No. 4697131
Notary Public, State of New York
Appointed in Niagara County
Commission Expires August 31, 20 13

SCHEDULE A



CITY OF NORTH TONAWANDA NEW YORK

BOUNDARY SURVEY
PART OF LOTS 74 & 75 OF THE MILE RESERVE
SUBLOTS 1, 2, 3 & 8

TVGA CONSULTANTS

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. : 2012109916

Clerk: TH
Instr #: 2012-03835
Rec Date: 02/21/2012 01:35:10 PM
Doc Grp: DEED
Descrip: DEED
Num Pgs: 5

Party1: CITY OF NORTH TONAWANDA
Party2: TAYLOR DEVICES INC
Town: NORTH TONAWANDA

Recording:

Cover Page	8.00
Recording Fee	17.00
Cultural Ed	14.25
Records Management - Coun	1.00
Records Management - Stat	4.75
TP584	5.00
RP5217 - County	9.00
RP5217 All others - State	241.00
Sub Total:	300.00
Transfer Tax	
Transfer Tax	152.00
Sub Total:	152.00
Total:	452.00

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

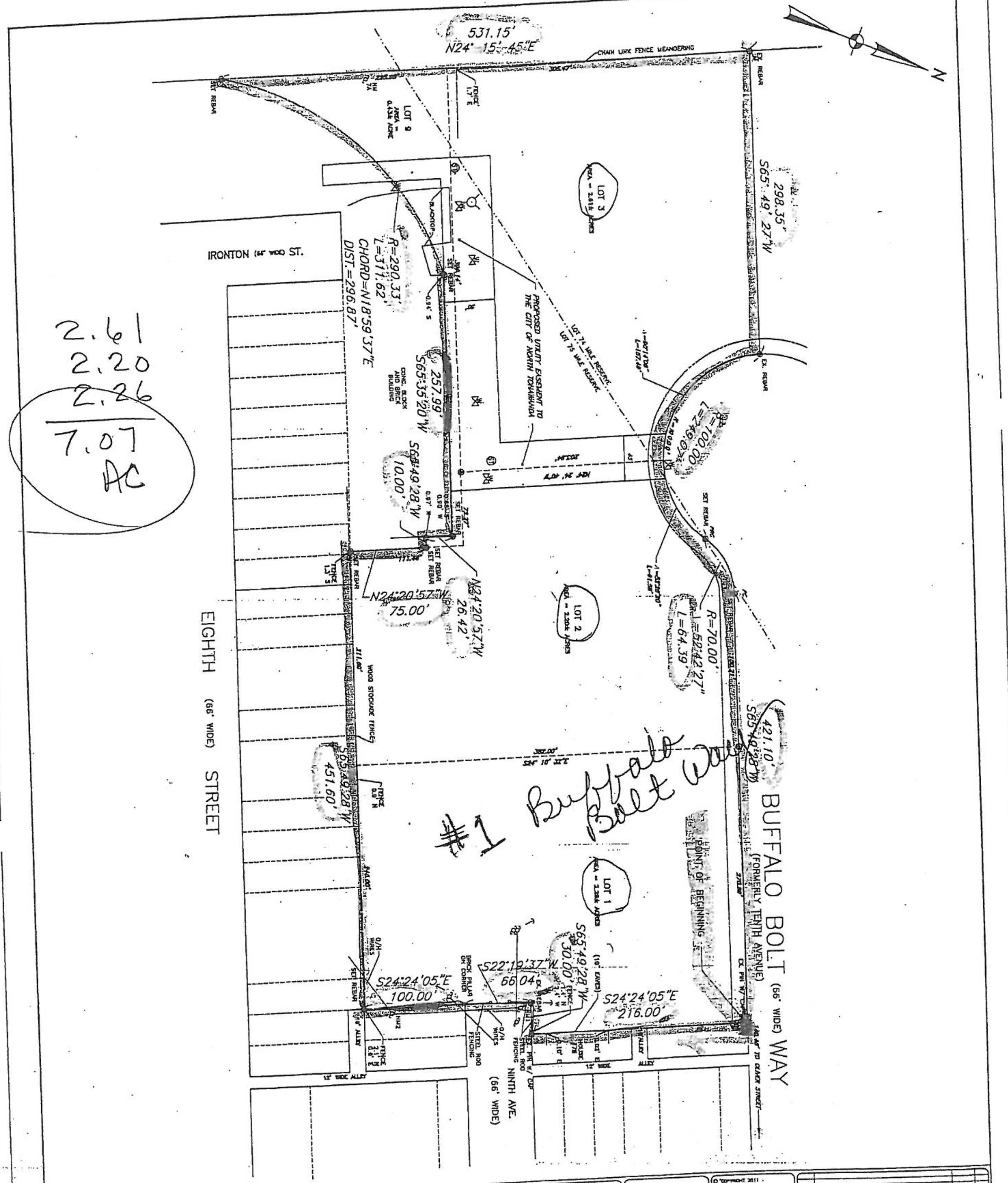
***** Transfer Tax *****

Transfer Tax# : 2743

Consideration: 37600.00
Transfer Tax: 152.00

Record and Return To:

HISCOCK & BARCLAY
1100 M&T CENTER
3 FOUNTAIN PLAZA
BUFFALO, NY 14203-9859



CITY OF NORTH TONAWANDA — NEW YORK

BOUNDARY SURVEY
PART OF LOTS 74 & 75 OF THE MILE RESERVE
SUBLOTS 1, 2, 3 & 9

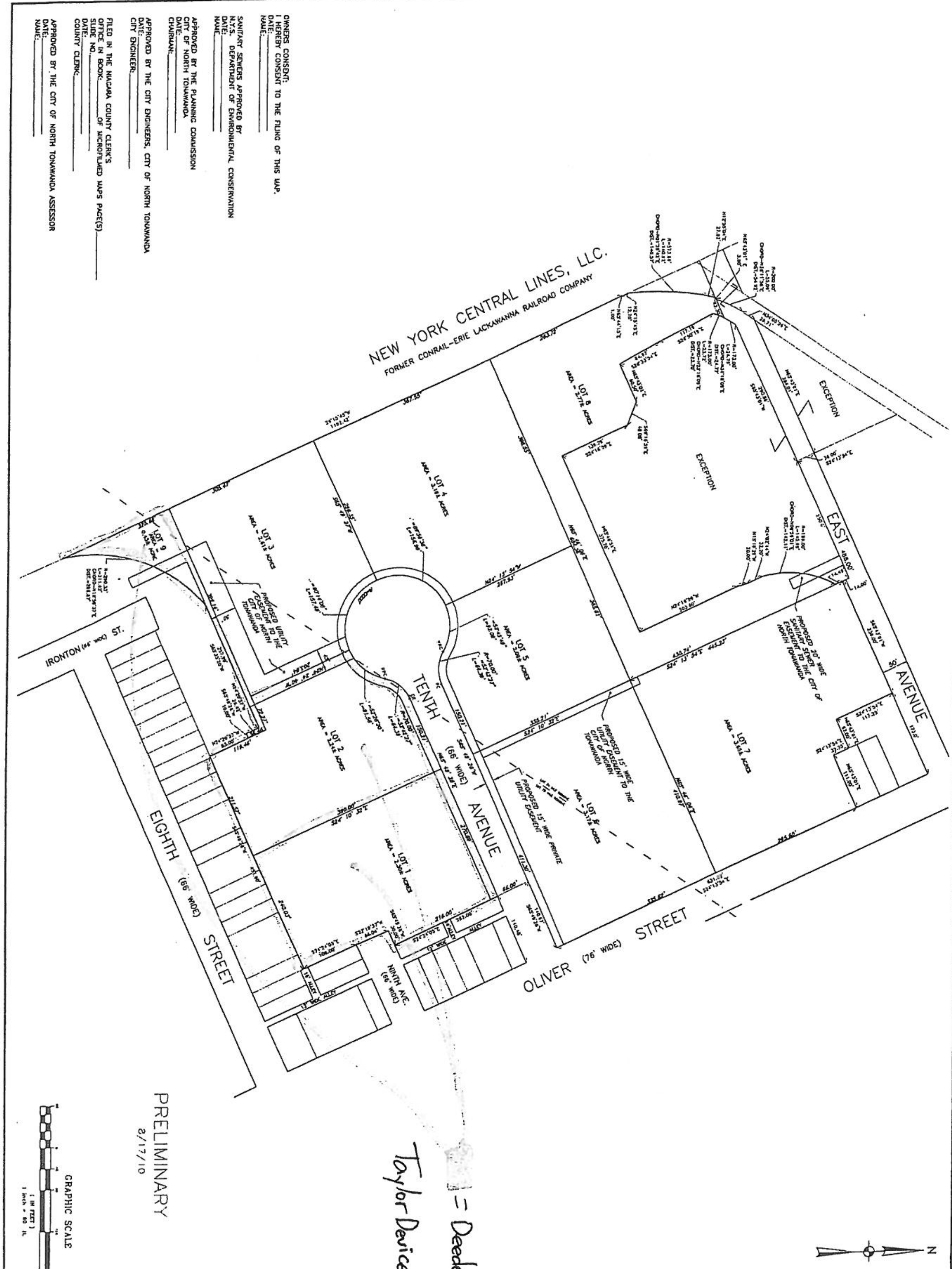
MAP NUMBER
Sheet 1 of 1

TVGA CONSULTANTS
620 MAIN STREET
BUFFALO, NEW YORK 14202-1906
P. 716.846.8736
F. 716.856.0981
www.tvga.com

Designed by:	Field Date: 8/11/2001
	Office Date: 8/18/2001
Drawn by:	Job No. 2001.0036.00
Checked by:	Book: Page: Image: 80158
Dwg Scale: Horiz: 1"=80' Vert: N/A	File Name: N/2001.0036.00 80158_3-19-2011

NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, DRAWING, DESIGN SPECIFICATION, PLAN OR REPORT IS A VIOLATION OF SECTION 7209 PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

NO.	DESCRIPTION	DATE	BY



SHEET REFERENCE NUMBER: 60159 SHEET 1 OF 1	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 · MAPPING · ENVIRONMENTAL One Thousand Maple Road, Elma, New York 14059-9530 P. 716.655.8842 F. 716.655.0937 www.tvga.com	Designed by: RJT Drawn by: LRD Checked by: WWW	Date of Survey: 04/15/09 Job No. 2009.0034.00 Dwg Scale: Horiz: 1" = 80' Vert: none	© COPYRIGHT 2010 TVGA CONSULTANTS ALL RIGHTS RESERVED UNAUTHORIZED DUPLICATION IS A VIOLATION OF APPLICABLE LAWS NOTE: UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY, DRAWING, DESIGN SPECIFICATION PLAN OR REPORT IS A VIOLATION OF SECTION 7209 PROVISION 2 OF THE NEW YORK STATE EDUCATION LAW.