



**2012 PERIODIC REVIEW REPORT**  
**Groundwater Monitoring and**  
**Sampling Annual Report**

Roblin Steel Site  
Site Number B00025  
City of North Tonawanda

**March 2013**

**2012 PERIODIC REVIEW REPORT**

**GROUNDWATER MONITORING AND SAMPLING  
ANNUAL REPORT**

**ROBLIN STEEL SITE  
SITE NUMBER B00025**

**CITY OF NORTH TONAWANDA  
NEW YORK**

**Prepared by:**

**GHD CONSULTING ENGINEERS, INC**  
200 John James Audubon Parkway  
Amherst, New York 14228

**March 2013**

**Project No. 8612403**

## TABLE OF CONTENTS

	<u>Page</u>
SECTION 1 - SITE BACKGROUND .....	1
1.1 Site Location .....	1
1.2 Site History .....	1
1.3 Regulatory History .....	2
1.4 Remediation Activities .....	3
SECTION 2 - GROUNDWATER MONITORING ACTIVITIES .....	5
2.1 Site Hydrology .....	5
2.2 Monitoring Requirements .....	5
2.3 Groundwater Monitoring .....	5
2.4 2011 Groundwater Monitoring .....	6
SECTION 3 - GROUNDWATER MONITORING RESULTS .....	8
SECTION 4 - SOIL MANAGEMENT PLAN .....	9
4.1 Description of Institutional and Engineering Controls .....	9
4.2 Nature and Extent of Contamination .....	9
4.3 Contemplated Use .....	10
4.4 Purpose and Description of Surface Cover System .....	10
4.5 Management of Soils/Fill and Long Term Maintenance .....	10
4.6 Excavated and Stockpiled Soil/Fill Disposal .....	12
4.7 Subgrade Materials.....	13
4.8 Site Usage 2009 - 2011 .....	14
SECTION 5 - CONCLUSIONS .....	15

## LIST OF FIGURES

### Figure No.

- 1 Site Location Map

## LIST OF TABLES

### Table No.

- 1 Volatile Organic Compounds
- 2 Semi Volatile Organic Compounds
- 3 PCBs
- 4 Metals

## **TABLE OF CONTENTS (Continued)**

### **LIST OF APPENDICES**

#### **Appendix**

- A Groundwater Monitoring Program Revision
- B Institutional & Engineering Controls Certification Form
- C Sampling and Well Logs
- D Analytical Test Results
- E Data Usability Reporting
- F Site Development

## **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.

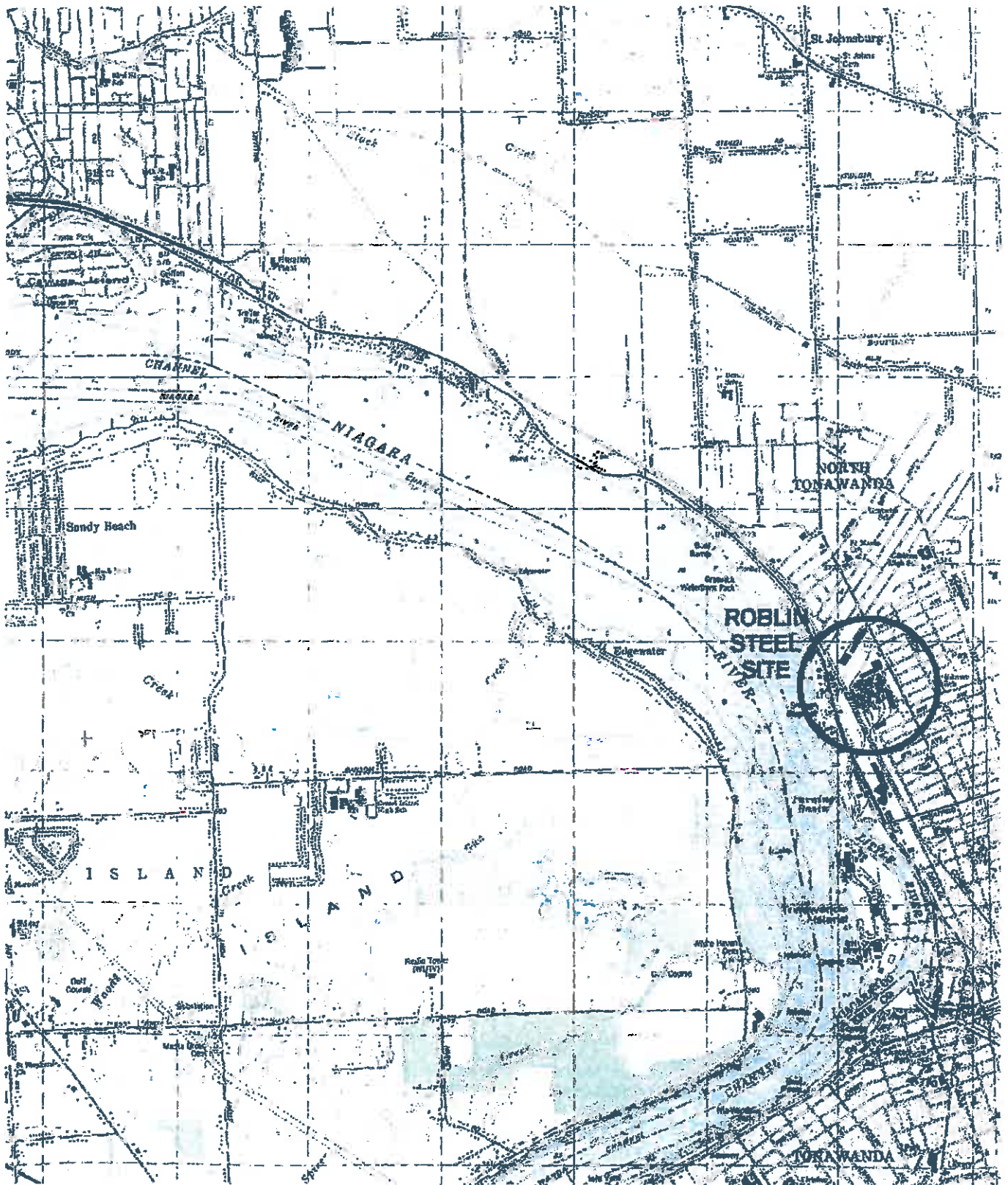
### **1.2 Site History**

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.



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



5/31/01

Figure 1.

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

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

Waste piles, some from the previous operations at the site (identified as slag and scale during previous site investigations), and some containing building rubble/materials, were present on the western and southern sides of the site. Drums of various materials were present outside, near the 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 a 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 has 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 will require drilling and installation of a new monitoring well. The NYSDEC has 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.

## **2.4 2012 Groundwater Monitoring**

The 2012 monitoring program at the Roblin Steel site will consist of one annual sampling event. Groundwater was sampled from monitoring well MW-3S on July 25, 2012. This



sampling event represents the second 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.

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.



### SECTION 3 - GROUNDWATER MONITORING RESULTS

This section includes the analytical test results of the 2012 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 2012 sampling event detected cis-1,2-dichloroethene at concentrations that exceeded the groundwater standards. Concentrations of methyl-t-butyl ether (MTBE) were detected at concentrations below 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, and 2012 analytical test results showed decreasing concentrations of cis-1,2-dichloroethene. Concentrations of methyl-t-butyl ether (MTBE) decreased from 2010 to 2012.

Concentrations of trichloroethene decreased from 1999 to 2012. Concentrations of trichloroethene increased between 2010 to 2011, however, showed decreased concentrations in 2012.

Total VOCs detected in groundwater decreased from 1999 to 2012.



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

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	09/29/99	07/01/10	07/21/11	07/25/12
1,1,1-Trichloroethane	5	µg/L	U	U	U	U
1,1,2,2-Tetrachloroethane	5	µg/L	U	U	U	U
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	-	U	U	U
1,1,2-Trichloroethane	1	µg/L	U	U	U	U
1,1-Dichloroethane	5	µg/L	U	U	U	U
1,1-Dichloroethene	5	µg/L	U	U	U	U
1,2,3-Trichlorobenzene	5	µg/L	-	U	U	U
1,2,4-Trichlorobenzene	5	µg/L	-	U	U	U
1,2-Dibromo-3-Chloropropane DBCP	0.04	µg/L	-	U	U	U
1,2-Dibromoethane (EDB)	NE	µg/L	-	U	U	U
1,2-Dichlorobenzene	3	µg/L	-	U	U	U
1,2-Dichloroethane	0.6	µg/L	U	U	U	U
1,2-Dichloropropane	5	µg/L	U	U	U	U
1,3-Dichlorobenzene	3	µg/L	-	U	U	U
1,4-Dichlorobenzene	3	µg/L	-	U	U	U
2-Hexanone	50	µg/L	U	U	U	U
Acetone	50	µg/L	UJ	<b>29 J</b>	U	U
Benzene	1	µg/L	U	U	U	U
Bromoform	50	µg/L	U	U	U	U
Bromomethane	5	µg/L	UJ	U	U	U
Bromodichloromethane	50.0	µg/L	U	U	U	U
Carbon disulfide	60	µg/L	U	U	U	U
Carbon tetrachloride	5	µg/L	U	U	U	U
Chlorobenzene	5	µg/L	U	U	U	U
Chloroethane	5	µg/L	UJ	U	U	U
Chloroform	7	µg/L	U	U	U	U
Chloromethane	NE	µg/L	U	U	U	U
cis-1,2-Dichloroethene	5	µg/L	<b>62</b>	<b>28</b>	<b>23</b>	<b>21</b>
cis-1,3-Dichloropropene	0.40	µg/L	U	U	U	U
Cyclohexane	NE	µg/L	-	<b>0.31J</b>	U	U
Dibromochloromethane	50	µg/L	U	-	-	-
Dichlorobromoethane	NE	µg/L	-	U	U	U
Dichlorodifluoromethane	5	µg/L	-	U	U	U
Ethylbenzene	5	µg/L	U	U	U	U
Isopropylbenzene	5	µg/L	-	U	U	U
Methyl acetate	NE	µg/L	-	U	U	U
Methyl Ethyl Ketone	50	µg/L	U	U	U	U
Methylcyclohexane	NE	µg/L	-	U	U	U
Methylene chloride	5	µg/L	U	U	U	U
Methyl-t-Butyl Ether (MTBE)	10	µg/L	U	<b>4.9J</b>	<b>1.7</b>	<b>1.1</b>
m,p-Xylene	5	µg/L	U	U	U	U
o-Xylene	5	µg/L	U	U	U	U
Styrene	5	µg/L	U	UJ	UJ	UJ
Tetrachloroethene	5	µg/L	<b>40</b>	U	U	U
Toluene	5	µg/L	U	U	U	U
Total Xylenes	5	µg/L	U	U	U	U
trans-1, 2-Dichloroethene	5	µg/L	U	<b>0.43J</b>	U	U
trans-1,3-Dichloropropene	0.4	µg/L	U	U	U	U
Trichloroethene	5	µg/L	<b>56</b>	<b>0.34J</b>	<b>1.5</b>	<b>0.64J</b>
Trichlorofluoromethane	5	µg/L	-	U	U	U
Vinyl Chloride	2	µg/L	U	<b>0.74J</b>	<b>0.42J</b>	U
Total VOCs		µg/L	158	64	27	23
Total VOCs		mg/L	0.158	0.064	0.027	0.023

**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 but 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 only.

- = 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 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 ( $\text{mcg}/\text{m}^3$ ) 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  $150 \text{ mcg}/\text{m}^3$  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  $150 \text{ mcg}/\text{m}^3$  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  $150 \text{ mcg}/\text{m}^3$  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



**Table 2**  
**SEMI-VOLATILE ORGANIC COMPOUNDS**

<b>Compound</b>	<b>Soil Standard (mg/kg)</b>
Naphthalene	500
Acenaphthylene	500
Acenaphthene	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**

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

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

---

**Table 4**  
**METALS**

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

*Note: Standards based on Determination of Soil Cleanup  
(NYSDEC, effective December 14, 2006)*

*\*Background levels for lead vary widely*

*SB = Site Background*

---

the 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.

#### **4.8 Site Usage 2009 - 2012**

**2009 - 2010:** No excavation took place on-site in 2009. Construction for the 10<sup>th</sup> 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 occurred that 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 10<sup>th</sup> 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 occurred that 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 10<sup>th</sup> 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 now 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.



## SECTION 5 - CONCLUSIONS

Analytical testing from the 2012 sampling event detected cis-1,2-dichloroethene at concentrations that exceeded the groundwater standards. Concentrations of methyl-t-butyl ether (MTBE) were detected at concentrations below 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, and 2012 analytical test results showed decreasing concentrations of cis-1,2-dichloroethene. Concentrations of methyl-t-butyl ether (MTBE) decreased from 2010 to 2012.

Concentrations of trichloroethene decreased from 1999 to 2012. Concentrations of trichloroethene increased between 2010 to 2011, however, showed decreased concentrations in 2012.

Total VOCs detected in groundwater decreased from 1999 to 2012.



## 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](http://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.

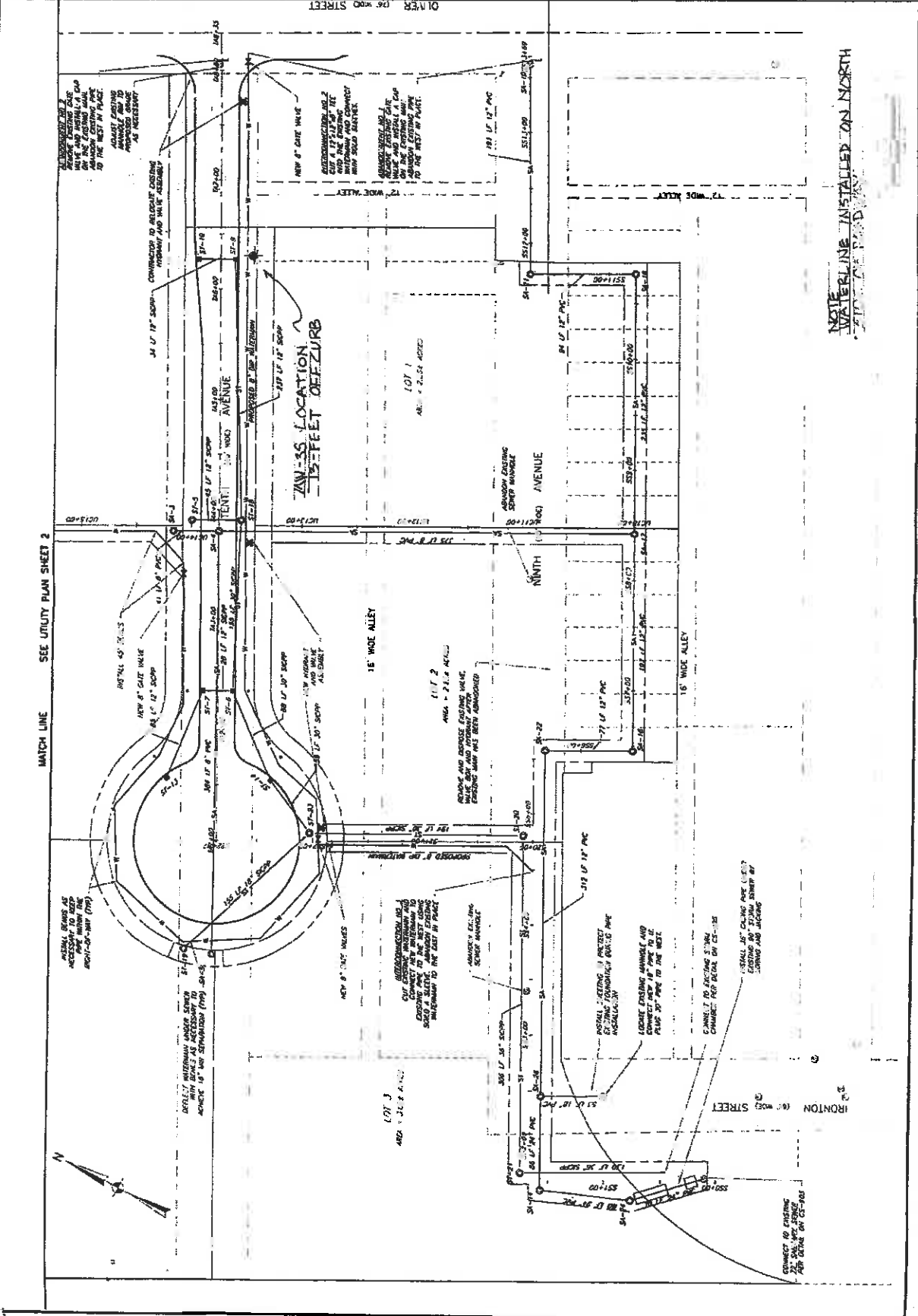
Since the Site Management Plan has been finalized, some changes have occurred to the site. All monitoring wells as listed in the Site Management Plan except for MW-11S have been reported from a recent site inspection as either damaged or missing. The City has begun site development which includes a roadway 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



NOTE: WATERLINE INSTALLED ON NORTH AVENUE

MATCH LINE SEE UTILITY PLAN SHEET 2

# **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](http://www.dec.ny.gov)



2/01/2013

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

**Re: Reminder Notice: Site Management Periodic Review Report and IC/EC Certification Submittal**

**Site Name:** Former Roblin Steel Site  
**Site No.:** B00025  
**Site Address:** 101 East Avenue  
North Tonawanda, NY 14120

Dear Mr. Dale Marshall:

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, 2013**. 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: [bpsadows@gw.dec.state.ny.us](mailto:bpsadows@gw.dec.state.ny.us)

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  
Krista Anders, DOH  
David Rowlinson, Stearns and Wheler

## 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 No.	Site Details	Box 1
<b>B00025</b>		
<b>Site Name Former Roblin Steel Site</b>		
Site Address: 101 East Avenue      Zip Code: 14120		
City/Town: North Tonawanda		
County: Niagara		
Site Acreage: 23.7		
Reporting Period: February 14, 2012 to February 14, 2013		
		YES    NO
1. Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Box 2	
	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**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

**Description of Institutional Controls**ParcelOwnerInstitutional Control

181.12-1-14.11

City of North Tonawanda

Ground Water Use Restriction  
Landuse Restriction  
Soil Management Plan

**Description of Engineering Controls**

Box 4

ParcelEngineering Control

181.12-1-14.11

Cover System

**Control Description for Site No. B00025****Parcel: 181.12-1-14.11**

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.

### Periodic Review Report (PRR) Certification Statements

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

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

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

YES NO



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

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

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

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

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

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

YES NO



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

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

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. B00025

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

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

I Dale W. Marshall at 2100 Payne Ave NT/NY 14120  
print name print business address

am certifying as North Tonawanda City Engineer (Owner or Remedial Party)

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

Dale W. Marshall, P.E.  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

2/28/13  
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 Howard B. LaFever at 200 John James Audubon Pkwy., Suite 101,  
print name print business address Amherst, NY 14228

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

Howard B. LaFever

Signature of Professional Engineer, for the Owner or  
Remedial Party, Rendering Certification



Stamp  
(Required for PE)

Date 3/15/13

## **APPENDIX C**

---

### **SAMPLING AND WELL LOGS**



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

Inspector (Print): Brain Doyle

Inspector (Signature): \_\_\_\_\_

Date of Inspection: 7/25/2012

**1. Fencing, Gates, and Access**

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

**2. Waterways and Ditches**

Signs of Erosion	<u>None</u>
Blockage of Drainage Pathway	<u>None</u>
Culverts Clear of Obstructions	<u>Yes</u>
Ponded Water Areas	<u>None</u>

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

New monitoring well MW-3S was installed flush mount near the original well location.

Remaining original monitoring wells were abandoned and filled with grout

**4. Evidence of Vandalism/Site Usage by Others**

None

Comments/Action Required:

---

---

---

---

---

---

---

---

---

---

**GHD INC.**  
**GROUNDWATER FIELD SAMPLING RECORD**

SITE Roblin Steel Site

DATE 07/25/12

Sampler: Brian Doyle

SAMPLE ID GW-3S

Depth of well (from top of casing).....	<u>15 ft</u>	<u>EL 562.04</u>
Initial static water level (from top of casing)....	<u>8.1 ft</u>	<u>EL 568.9</u>
Top of PVC Casing Elevation	<u>577.04</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u>                    </u>	Centrifugal	<u>                    </u>	1 in. casing:	<u>                    </u> ft. of water x .09 =	<u>                    </u> gallons
Airlift	<u>                    </u>	Pos. Displ.	<u>                    </u>	2 in. casing:	<u>6.9</u> ft. of water x .16 =	<u>1.10</u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>                    </u>	3 in. casing:	<u>                    </u> ft. of water x .36 =	<u>                    </u> gallons

Volume of water removed 3.31 gals.

> 3 volumes: ☐ yes ☐ no

dry: ☐ yes ☐ no

Field Tests:

Temp:	<u>19.76 C</u>
pH	<u>7.45</u>
Conductivity	<u>0.787 mS/cm</u>
DO	<u>6.18 mg/L</u>
Turbidity	<u>NA NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-39.0 mV</u>

Sampling: Time: 2:00 PM

Sampling Method: Peristaltic Pump                     

Disposable Bailer X

Disposable Tubing                     

Observations:

Weather/Temperature: Clear, 85° 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.

Field equipment unable to record a turbidity reading due to very murky water.



# Stearns & Wheler, LLC

Environmental Engineers and Scientists

Boring/Well: MW-3S

Page 1 of 1

Project No. 8612403

Date: 06/25/10

Weather: Partly Clear 70°

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	ML	- dry		
			10		- 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	ML			
			8				
8			10				
			5				
9	S-5	50	7		10.0'		
			8				
10			8				
			7		Reddish Gray Clay		
11	S-6	88	8		- dry		
			5		- some sand		
12			9				
			6				
13	S-7	88	6	CH			
			6				
14			8				
			8				
			2		14.5'		
15	S-8	100	2	OH	Reddish Gray Clay		
			2		- wet		
			2		15.5'		
16			2		Augered to 16.0'		



## **APPENDIX D**

---

### **ANALYTICAL TEST RESULTS**



**Quality Control Summary**  
**SDG: L586947**

**For: Stearns and Wheler**  
**Roblin Steel**

**L586947**

---

Lab SampleID.

L586947-01

L586947-02

L586947-03

Client ID

GW-35

FIELD DUP

TRIP BLANK

## Quality Control Summary SDG: L586947

For: Stearns and Wheler  
Project: Roblin Steel  
September 10, 2012

### Sample Receiving and Handling

All sample aliquots were received at the correct temperature, in the proper containers, and with the appropriate preservatives. All method specified holding times were met.

### Volatile Organic Compounds by Method 8260B

#### **Laboratory Control Sample**

Samples L586947-01, -02, and -03 were analyzed in analytical batch WG604714. The laboratory control sample associated with these samples was within the laboratory control limits for all compounds.

#### **Matrix Spike/Matrix Spike Duplicate**

For analytical batch WG604714 matrix spike/matrix spike duplicate analysis was performed on sample L586740-02. The matrix spike recoveries and relative percent differences were within laboratory control limits for all target analytes.

#### **Blank Analysis**

The method blank, the initial, and all continuing calibration blanks contained no analytes at concentrations above the method reporting limit.

#### **Calibration Summary**

Instrument VOCMS20 was calibrated on 7/27/2012. The initial calibration and continuing calibration verification standards were within method limits.

#### **Surrogate Summary**

The surrogate recoveries were within method limits for all other samples.

#### **Internal Standards**

The internal standard responses and retention times were within method limits for all samples and quality control samples.



Nancy F. Winters  
ESC Representative  
ESC Lab Sciences





12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 750-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 02-0814289

Est. 1970

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

### Report Summary

Sunday July 29, 2012

Report Number: L586947

Samples Received: 07/26/12

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:

  
Terrie Fudge, 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

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

Note: The use of the preparatory EPA Method 3511 is not approved or endorsed by the CA ELAP.

This report may not be reproduced, except in full, without written approval from ESC Lab Sciences. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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

# REPORT OF ANALYSIS

July 29, 2012

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

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : GW-35  
Collected By : Brian Doyle  
Collection Date : 07/25/12 14:00

ESC Sample # : L586947-01

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.011	0.050	mg/l		8260B	07/27/12	1
Benzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
Bromochloromethane	U	0.00042	0.0010	mg/l		8260B	07/27/12	1
Bromodichloromethane	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
Bromoform	U	0.00046	0.0010	mg/l		8260B	07/27/12	1
Bromomethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
Carbon disulfide	U	0.00022	0.0010	mg/l		8260B	07/27/12	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Chlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
Chlorodibromomethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Chloroethane	U	0.0014	0.0050	mg/l		8260B	07/27/12	1
Chloroform	U	0.00022	0.0050	mg/l		8260B	07/27/12	1
Chloromethane	U	0.00046	0.0025	mg/l		8260B	07/27/12	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
1,2-Dibromo-3-Chloropropane	U	0.0011	0.0050	mg/l		8260B	07/27/12	1
1,2-Dibromoethane	U	0.00044	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichlorobenzene	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,3-Dichlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
1,4-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	07/27/12	1
Dichlorodifluoromethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
1,1-Dichloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/27/12	1
cis-1,2-Dichloroethene	0.021	0.00027	0.0010	mg/l		8260B	07/27/12	1
trans-1,2-Dichloroethene	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloropropane	U	0.00047	0.0010	mg/l		8260B	07/27/12	1
cis-1,3-Dichloropropene	U	0.00023	0.0010	mg/l		8260B	07/27/12	1
trans-1,3-Dichloropropene	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
Ethylbenzene	U	0.00027	0.0010	mg/l		8260B	07/27/12	1
2-Hexanone	U	0.0024	0.010	mg/l		8260B	07/27/12	1
Isopropylbenzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
2-Butanone (MEK)	U	0.0030	0.010	mg/l		8260B	07/27/12	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/27/12	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Methylene Chloride	U	0.00079	0.0050	mg/l		8260B	07/27/12	1
4-Methyl-2-pentanone (MIBK)	U	0.00080	0.010	mg/l		8260B	07/27/12	1
Methyl tert-butyl ether	0.0011	0.00027	0.0010	mg/l		8260B	07/27/12	1
Styrene	U	0.00030	0.0010	mg/l		8260B	07/27/12	1
1,1,2,2-Tetrachloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Tetrachloroethene	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
Toluene	U	0.00016	0.0050	mg/l		8260B	07/27/12	1
1,2,3-Trichlorobenzene	U	0.00030	0.0010	mg/l		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18



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

REPORT OF ANALYSIS

July 29, 2012

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

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : GW-35  
Collected By : Brian Doyle  
Collection Date : 07/25/12 14:00

ESC Sample # : L586947-01

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
1,1,1-Trichloroethane	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Trichloroethene	0.00064	0.00029	0.0010	mg/l	J	8260B	07/27/12	1
Trichlorofluoromethane	U	0.00049	0.0050	mg/l		8260B	07/27/12	1
1,1,2-Trichlorotrifluoroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Vinyl chloride	U	0.00028	0.0010	mg/l		8260B	07/27/12	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	07/27/12	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	07/27/12	1
Dibromofluoromethane	110.			% Rec.		8260B	07/27/12	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260B	07/27/12	1
4-Bromofluorobenzene	102.			% Rec.		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18



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

Tab: I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

July 29, 2012

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

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : FIELD DUP  
Collected By : Brian Doyle  
Collection Date : 07/25/12 14:00

ESC Sample # : L586947-02

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.011	0.050	mg/l		8260B	07/27/12	1
Benzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
Bromochloromethane	U	0.00042	0.0010	mg/l		8260B	07/27/12	1
Bromodichloromethane	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
Bromoform	U	0.00046	0.0010	mg/l		8260B	07/27/12	1
Bromomethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
Carbon disulfide	U	0.00022	0.0010	mg/l		8260B	07/27/12	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Chlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
Chlorodibromomethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Chloroethane	U	0.0014	0.0050	mg/l		8260B	07/27/12	1
Chloroform	U	0.00022	0.0050	mg/l		8260B	07/27/12	1
Chloromethane	U	0.00046	0.0025	mg/l		8260B	07/27/12	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
1,2-Dibromo-3-Chloropropane	U	0.0011	0.0050	mg/l		8260B	07/27/12	1
1,2-Dibromoethane	U	0.00044	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichlorobenzene	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,3-Dichlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
1,4-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	07/27/12	1
Dichlorodifluoromethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
1,1-Dichloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/27/12	1
cis-1,2-Dichloroethene	0.020	0.00027	0.0010	mg/l		8260B	07/27/12	1
trans-1,2-Dichloroethene	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloropropane	U	0.00047	0.0010	mg/l		8260B	07/27/12	1
cis-1,3-Dichloropropene	U	0.00023	0.0010	mg/l		8260B	07/27/12	1
trans-1,3-Dichloropropene	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
Ethylbenzene	U	0.00027	0.0010	mg/l		8260B	07/27/12	1
2-Hexanone	U	0.0024	0.010	mg/l		8260B	07/27/12	1
Isopropylbenzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
2-Butanone (MEK)	U	0.0030	0.010	mg/l		8260B	07/27/12	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/27/12	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Methylene Chloride	U	0.00079	0.0050	mg/l		8260B	07/27/12	1
4-Methyl-2-pentanone (MIBK)	U	0.00080	0.010	mg/l		8260B	07/27/12	1
Methyl tert-butyl ether	0.0010	0.00027	0.0010	mg/l		8260B	07/27/12	1
Styrene	U	0.00030	0.0010	mg/l		8260B	07/27/12	1
1,1,2,2-Tetrachloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Tetrachloroethene	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
Toluene	U	0.00016	0.0050	mg/l		8260B	07/27/12	1
1,2,3-Trichlorobenzene	U	0.00030	0.0010	mg/l		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18



12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 752-5858  
1-800-767-5859  
Fax: (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

July 29, 2012

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

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : FIELD DUP  
Collected By : Brian Doyle  
Collection Date : 07/25/12 14:00

ESC Sample # : L586947-02

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
1,1,1-Trichloroethane	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Trichloroethene	0.00057	0.00029	0.0010	mg/l	J	8260B	07/27/12	1
Trichlorofluoromethane	U	0.00049	0.0050	mg/l		8260B	07/27/12	1
1,1,2-Trichlorotrifluoroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Vinyl chloride	U	0.00028	0.0010	mg/l		8260B	07/27/12	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	07/27/12	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	07/27/12	1
Dibromofluoromethane	105.			% Rec.		8260B	07/27/12	1
a,a,a-Trifluorotoluene	99.0			% Rec.		8260B	07/27/12	1
4-Bromofluorobenzene	99.6			% Rec.		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18



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

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

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

July 29, 2012

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : TRIP BLANK  
Collected By : Brian Doyle  
Collection Date : 07/25/12 00:00

ESC Sample # : L586947-03

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.011	0.050	mg/l		8260B	07/27/12	1
Benzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
Bromochloromethane	U	0.00042	0.0010	mg/l		8260B	07/27/12	1
Bromodichloromethane	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
Bromoform	U	0.00046	0.0010	mg/l		8260B	07/27/12	1
Bromomethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
Carbon disulfide	U	0.00022	0.0010	mg/l		8260B	07/27/12	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Chlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
Chlorodibromomethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Chloroethane	U	0.0014	0.0050	mg/l		8260B	07/27/12	1
Chloroform	U	0.00022	0.0050	mg/l		8260B	07/27/12	1
Chloromethane	U	0.00046	0.0025	mg/l		8260B	07/27/12	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
1,2-Dibromo-3-Chloropropane	U	0.0011	0.0050	mg/l		8260B	07/27/12	1
1,2-Dibromoethane	U	0.00044	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichlorobenzene	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,3-Dichlorobenzene	U	0.00025	0.0010	mg/l		8260B	07/27/12	1
1,4-Dichlorobenzene	U	0.00019	0.0010	mg/l		8260B	07/27/12	1
Dichlorodifluoromethane	U	0.00057	0.0050	mg/l		8260B	07/27/12	1
1,1-Dichloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/27/12	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/27/12	1
cis-1,2-Dichloroethene	U	0.00027	0.0010	mg/l		8260B	07/27/12	1
trans-1,2-Dichloroethene	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
1,2-Dichloropropane	U	0.00047	0.0010	mg/l		8260B	07/27/12	1
cis-1,3-Dichloropropene	U	0.00023	0.0010	mg/l		8260B	07/27/12	1
trans-1,3-Dichloropropene	U	0.00039	0.0010	mg/l		8260B	07/27/12	1
Ethylbenzene	U	0.00027	0.0010	mg/l		8260B	07/27/12	1
2-Hexanone	U	0.0024	0.010	mg/l		8260B	07/27/12	1
Isopropylbenzene	U	0.00018	0.0010	mg/l		8260B	07/27/12	1
2-Butanone (MEK)	U	0.0030	0.010	mg/l		8260B	07/27/12	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/27/12	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Methylene Chloride	U	0.00079	0.0050	mg/l		8260B	07/27/12	1
4-Methyl-2-pentanone (MIBK)	U	0.00080	0.010	mg/l		8260B	07/27/12	1
Methyl tert-butyl ether	U	0.00027	0.0010	mg/l		8260B	07/27/12	1
Styrene	U	0.00030	0.0010	mg/l		8260B	07/27/12	1
1,1,2,2-Tetrachloroethane	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Tetrachloroethene	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
Toluene	U	0.00016	0.0050	mg/l		8260B	07/27/12	1
1,2,3-Trichlorobenzene	U	0.00030	0.0010	mg/l		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18



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

Tax I.D. 62-0814289

Est. 1970

# REPORT OF ANALYSIS

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

July 29, 2012

Date Received : July 26, 2012  
Description : Roblin Steel  
Sample ID : TRIP BLANK  
Collected By : Brian Doyle  
Collection Date : 07/25/12 00:00

ESC Sample # : L586947-03

Site ID :

Project # : 8612403

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/27/12	1
1,1,1-Trichloroethane	U	0.00024	0.0010	mg/l		8260B	07/27/12	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Trichloroethene	U	0.00029	0.0010	mg/l		8260B	07/27/12	1
Trichlorofluoromethane	U	0.00049	0.0050	mg/l		8260B	07/27/12	1
1,1,2-Trichlorotrifluoroethane	U	0.00038	0.0010	mg/l		8260B	07/27/12	1
Vinyl chloride	U	0.00028	0.0010	mg/l		8260B	07/27/12	1
Xylenes, Total	U	0.00086	0.0030	mg/l		8260B	07/27/12	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	07/27/12	1
Dibromofluoromethane	104.			% Rec.		8260B	07/27/12	1
a,a,a-Trifluorotoluene	101.			% Rec.		8260B	07/27/12	1
4-Bromofluorobenzene	101.			% Rec.		8260B	07/27/12	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.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 07/29/12 16:17 Printed: 07/29/12 16:18

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L586947-01	WG604714	SAMP	Trichloroethene	R2276873	J
L586947-02	WG604714	SAMP	Trichloroethene	R2276873	J



Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

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 Difference.
- Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromatography 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  
07/29/12 at 16:18:19

TSR Signing Reports: 044  
R5 - Desired TAT

Sample: L586947-01 Account: STEARNSANY Received: 07/26/12 09:00 Due Date: 08/02/12 00:00 RPT Date: 07/29/12 16:17  
Sample: L586947-02 Account: STEARNSANY Received: 07/26/12 09:00 Due Date: 08/02/12 00:00 RPT Date: 07/29/12 16:17  
Sample: L586947-03 Account: STEARNSANY Received: 07/26/12 09:00 Due Date: 08/02/12 00:00 RPT Date: 07/29/12 16:17

## ESC Qualifier Definitions

ESC assigns data qualifiers to sample results to provide additional information on the analysis. Most qualifier definitions assigned to the samples are provided in Attachment B of the sample report. In the sample reports for dual column analyses, qualifier information is for results from the reported column.

J7 or D - The required sample dilution diluted out the sample surrogate. A sample dilution of greater than 20 reduces the sample surrogate concentration to a level that measurement of the surrogate recovery is not an accurate indicator of sample extraction efficiency.

E - The reported concentration exceeds the instrument calibration range. The estimated value was determined by mathematical extrapolation of the calibration curve.

J1 - Applied to surrogates where the surrogate recovery was above the upper laboratory control limit.

J2 - Applied to surrogates where the surrogate recovery was below the lower laboratory control limit.

J3 - Applied to the analytes where the relative percent difference calculated on duplicate analysis exceeded the laboratory control limit. For sample duplicate analysis and matrix spike/matrix spike duplicate analysis, the qualifier is applied to that sample. For laboratory control sample and laboratory control sample duplicate analysis, the qualifier is applied to all samples in the analytic batch.

J4 - Applied to analytes where the laboratory control sample or laboratory control sample duplicate exceeded the laboratory control limits for that compound.

J5 - Applied to the analytes in the parent sample of the matrix spike/matrix spike duplicate analysis where either the matrix spike recovery or the matrix spike duplicate recovery exceeded the upper laboratory control limit.

J6 - Applied to the analytes in the parent sample of the matrix spike/matrix spike duplicate analysis where either the matrix spike recovery or the matrix spike duplicate recoveries were below the lower laboratory control limit.

V - The high concentration of target analyte in the parent sample interfered with the ability to make an accurate spike determination.

## Volatile Organic Compounds by Method 8260B

**Quality Control Summary**  
**SDG: L586947**

**Volatile Organic Compounds by Method 8260B**  
**Stearns and Wheler**

*Project:* Roblin Steel  
*Project No.* 8612403

*Login No:* L586947

---

Lab SampleID.

L586947-01

L586947-02

L586947-03

Client ID

GW-35

FIELD DUP

TRIP BLANK

I certify that this data package accurately represents the information in the raw data found herein, both technically and for completeness. Release of the data contained in this data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Name: ESC Lab Sciences \_\_\_\_\_

Title: Quality Control \_\_\_\_\_

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

#### Method Blank

Analyte	CAS	PQL	Qualifiers
Dichlorodifluoromethane	75-71-8	<0.0050	
Chloromethane	74-87-3	<0.0025	
Vinyl chloride	75-01-4	<0.0010	
Bromomethane	74-83-9	<0.0050	
Chloroethane	75-00-3	<0.0050	
Trichlorofluoromethane	75-69-4	<0.0050	
1,1-Dichloroethene	75-35-4	<0.0010	
1,1,2-Trichlorotrifluoroethane	76-13-1	<0.0010	
Acetone	67-64-1	<0.0500	
Carbon disulfide	75-15-0	<0.0010	
Methylene Chloride	75-09-2	<0.0050	
trans-1,2-Dichloroethene	156-60-5	<0.0010	
Methyl tert-butyl ether	1634-04-4	<0.0010	
1,1-Dichloroethane	75-34-3	<0.0010	
cis-1,2-Dichloroethene	156-59-2	<0.0010	
2-Butanone (MEK)	78-93-3	<0.0100	
Bromochloromethane	74-97-5	<0.0010	
Chloroform	67-66-3	<0.0050	
1,1,1-Trichloroethane	71-55-6	<0.0010	
Carbon tetrachloride	56-23-5	<0.0010	
Benzene	71-43-2	<0.0010	
1,2-Dichloroethane	107-06-2	<0.0010	
Trichloroethene	79-01-6	<0.0010	
1,2-Dichloropropane	78-87-5	<0.0010	
Bromodichloromethane	75-27-4	<0.0010	
cis-1,3-Dichloropropene	10061-01-5	<0.0010	
4-Methyl-2-pentanone (MIBK)	108-10-1	<0.0100	
Toluene	108-88-3	<0.0050	
trans-1,3-Dichloropropene	10061-02-6	<0.0010	
1,1,2-Trichloroethane	79-00-5	<0.0010	
Tetrachloroethene	127-18-4	<0.0010	
2-Hexanone	591-78-6	<0.0100	
Chlorodibromomethane	124-48-1	<0.0010	
1,2-Dibromoethane	106-93-4	<0.0010	
Chlorobenzene	108-90-7	<0.0010	

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

#### Method Blank

Analyte	CAS	PQL	Qualifiers
Ethylbenzene	100-41-4	<0.0010	
m&p-Xylene	1330-20-7	<0.0030	
o-Xylene	1330-20-7	<0.0030	
Styrene	100-42-5	<0.0010	
Bromoform	75-25-2	<0.0010	
Isopropylbenzene	98-82-8	<0.0010	
1,1,2,2-Tetrachloroethane	79-34-5	<0.0010	
1,3-Dichlorobenzene	541-73-1	<0.0010	
1,4-Dichlorobenzene	106-46-7	<0.0010	
1,2-Dichlorobenzene	95-50-1	<0.0010	
1,2-Dibromo-3-Chloropropane	96-12-8	<0.0050	
1,2,4-Trichlorobenzene	120-82-1	<0.0010	
1,2,3-Trichlorobenzene	87-61-6	<0.0010	
Methyl Acetate	79-20-9	<0.0200	
Cyclohexane	110-82-7	<0.0010	
Methyl Cyclohexane	108-87-2	<0.0010	

## Quality Control Summary

**SDG: L586947**

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dichlorodifluoromethane	0.0250	0.0252	101	33 - 173	
Chloromethane	0.0250	0.0250	100.0	50 - 141	
Vinyl chloride	0.0250	0.0251	100	55 - 142	
Bromomethane	0.0250	0.0296	119	42 - 172	
Chloroethane	0.0250	0.0268	107	52 - 164	
Trichlorofluoromethane	0.0250	0.0255	102	53 - 161	
1,1-Dichloroethene	0.0250	0.0265	106	54 - 134	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0263	105	53 - 143	
Acetone	0.125	0.113	90.8	49 - 153	
Carbon disulfide	0.0250	0.0258	103	19 - 150	
Methylene Chloride	0.0250	0.0248	99.2	67 - 122	
trans-1,2-Dichloroethene	0.0250	0.0232	92.7	63 - 127	
Methyl tert-butyl ether	0.0250	0.0253	101	67 - 127	
1,1-Dichloroethane	0.0250	0.0251	100	73 - 123	
cis-1,2-Dichloroethene	0.0250	0.0234	93.5	75 - 121	
2-Butanone (MEK)	0.125	0.130	104	58 - 144	
Bromochloromethane	0.0250	0.0231	92.3	79 - 124	
Chloroform	0.0250	0.0244	97.6	76 - 122	
1,1,1-Trichloroethane	0.0250	0.0231	92.6	71 - 126	
Carbon tetrachloride	0.0250	0.0236	94.2	63 - 129	
Benzene	0.0250	0.0243	97.1	72 - 119	
1,2-Dichloroethane	0.0250	0.0239	95.7	69 - 128	
Trichloroethene	0.0250	0.0224	89.7	69 - 131	
1,2-Dichloropropane	0.0250	0.0226	90.4	77 - 121	
Bromodichloromethane	0.0250	0.0213	85.3	75 - 127	
cis-1,3-Dichloropropene	0.0250	0.0222	88.7	74 - 124	
4-Methyl-2-pentanone (MIBK)	0.125	0.118	94.2	58 - 147	
Toluene	0.0250	0.0219	87.5	75 - 114	
trans-1,3-Dichloropropene	0.0250	0.0217	86.7	69 - 124	
1,1,2-Trichloroethane	0.0250	0.0211	84.5	81 - 121	
Tetrachloroethene	0.0250	0.0223	89.3	69 - 131	
2-Hexanone	0.125	0.116	92.6	62 - 144	
Chlorodibromomethane	0.0250	0.0220	88.1	73 - 128	
1,2-Dibromoethane	0.0250	0.0223	89.3	78 - 124	
Chlorobenzene	0.0250	0.0220	88.1	78 - 123	



## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Laboratory Control Sample (LCS)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Ethylbenzene	0.0250	0.0224	89.5	77 - 124	
m&p-Xylene	0.0500	0.0452	90.4	76 - 123	
o-Xylene	0.0250	0.0223	89.1	77 - 125	
Styrene	0.0250	0.0225	90.1	69 - 145	
Bromoform	0.0250	0.0228	91.2	61 - 136	
Isopropylbenzene	0.0250	0.0238	95.4	74 - 126	
1,1,2,2-Tetrachloroethane	0.0250	0.0216	86.5	78 - 130	
1,3-Dichlorobenzene	0.0250	0.0225	90.1	77 - 127	
1,4-Dichlorobenzene	0.0250	0.0230	91.8	79 - 117	
1,2-Dichlorobenzene	0.0250	0.0226	90.6	82 - 121	
1,2-Dibromo-3-Chloropropane	0.0250	0.0210	83.9	55 - 142	
1,2,4-Trichlorobenzene	0.0250	0.0238	95.3	76 - 127	
1,2,3-Trichlorobenzene	0.0250	0.0230	92.1	77 - 130	

## Quality Control Summary

**SDG: L586947**

**Stearns and Wheler**

Test: Volatile Organic Compounds by Method 8260B

Project No: 8612403

Project: Roblin Steel

Collection Date: 7/25/2012

Analysis Date: 7/27/2012

Instrument ID: VOCMS20

Sample Numbers: L586947-01, -02, -03

Matrix: Water - mg/L

EPA ID: TN00003

Analytic Batch: WG604714

Analyst: 559

### Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Dichlorodifluoromethane	0.0250	0.0258	103	33 - 173	
Chloromethane	0.0250	0.0254	102	50 - 141	
Vinyl chloride	0.0250	0.0259	104	55 - 142	
Bromomethane	0.0250	0.0301	120	42 - 172	
Chloroethane	0.0250	0.0274	110	52 - 164	
Trichlorofluoromethane	0.0250	0.0270	108	53 - 161	
1,1-Dichloroethene	0.0250	0.0274	110	54 - 134	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0267	107	53 - 143	
Acetone	0.125	0.121	96.9	49 - 153	
Carbon disulfide	0.0250	0.0271	108	19 - 150	
Methylene Chloride	0.0250	0.0249	99.8	67 - 122	
trans-1,2-Dichloroethene	0.0250	0.0239	95.8	63 - 127	
Methyl tert-butyl ether	0.0250	0.0256	103	67 - 127	
1,1-Dichloroethane	0.0250	0.0256	103	73 - 123	
cis-1,2-Dichloroethene	0.0250	0.0242	96.8	75 - 121	
2-Butanone (MEK)	0.125	0.135	108	58 - 144	
Bromochloromethane	0.0250	0.0243	97.3	79 - 124	
Chloroform	0.0250	0.0252	101	76 - 122	
1,1,1-Trichloroethane	0.0250	0.0247	98.9	71 - 126	
Carbon tetrachloride	0.0250	0.0246	98.2	63 - 129	
Benzene	0.0250	0.0252	101	72 - 119	
1,2-Dichloroethane	0.0250	0.0249	99.6	69 - 128	
Trichloroethene	0.0250	0.0236	94.6	69 - 131	
1,2-Dichloropropane	0.0250	0.0238	95.3	77 - 121	
Bromodichloromethane	0.0250	0.0222	88.8	75 - 127	
cis-1,3-Dichloropropene	0.0250	0.0233	93.2	74 - 124	
4-Methyl-2-pentanone (MIBK)	0.125	0.122	97.8	58 - 147	
Toluene	0.0250	0.0229	91.6	75 - 114	
trans-1,3-Dichloropropene	0.0250	0.0230	92.0	69 - 124	
1,1,2-Trichloroethane	0.0250	0.0224	89.6	81 - 121	
Tetrachloroethene	0.0250	0.0238	95.1	69 - 131	
2-Hexanone	0.125	0.124	99.0	62 - 144	
Chlorodibromomethane	0.0250	0.0231	92.4	73 - 128	
1,2-Dibromoethane	0.0250	0.0234	93.4	78 - 124	
Chlorobenzene	0.0250	0.0233	93.0	78 - 123	

## Quality Control Summary

**SDG: L586947**

**Stearns and Wheler**

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	<b>Analytic Batch:</b>	<b>WG604714</b>
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Laboratory Control Sample Duplicate (LCSD)

Analyte	True Value	Found	Recovery %	Control Limits	Qualifiers
Ethylbenzene	0.0250	0.0238	95.3	77 - 124	
m&p-Xylene	0.0500	0.0477	95.5	76 - 123	
o-Xylene	0.0250	0.0240	96.2	77 - 125	
Styrene	0.0250	0.0236	94.6	69 - 145	
Bromoform	0.0250	0.0236	94.3	61 - 136	
Isopropylbenzene	0.0250	0.0253	101	74 - 126	
1,1,2,2-Tetrachloroethane	0.0250	0.0224	89.5	78 - 130	
1,3-Dichlorobenzene	0.0250	0.0243	97.1	77 - 127	
1,4-Dichlorobenzene	0.0250	0.0243	97.3	79 - 117	
1,2-Dichlorobenzene	0.0250	0.0238	95.3	82 - 121	
1,2-Dibromo-3-Chloropropane	0.0250	0.0226	90.5	55 - 142	
1,2,4-Trichlorobenzene	0.0250	0.0255	102	76 - 127	
1,2,3-Trichlorobenzene	0.0250	0.0236	94.3	77 - 130	

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	<b>Analytic Batch:</b>	<b>WG604714</b>
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Surrogate Summary

Laboratory Sample ID	Dibromofluoromethane		Toluene-d8		4-Bromofluorobenzene		Alternate Surrogate a,a,a-Trifluorotoluene	
	ppb	% Rec	ppb	% Rec	ppb	% Rec	ppb	% Rec
LCS WG604714	42.0	105	39.8	99.6	38.9	97.3	39.8	99.6
LCSD WG604714	41.8	104	40.3	101	39.6	98.9	40.4	101
MS WG604714	40.7	102	41.2	103	39.4	98.5	40.6	102
MSD WG604714	40.4	101	40.2	100	39.8	99.4	40.3	101
Blank WG604714	41.3	103	39.9	99.8	40.8	102	40.6	101
L586947-03	41.5	104	40.4	101	40.5	101	40.5	101
L586947-01	44.0	110	40.5	101	40.8	102	41.0	102
L586947-02	42.1	105	40.3	101	39.8	99.6	39.6	99.0

Dibromofluoromethane	40 ppb	82 - 126
Toluene - d8	40 ppb	92 - 112
4-Bromofluorobenzene	40 ppb	82 - 120
<b>Alternate Surrogate</b>		
a,a,a-Trifluorotoluene	40 ppb	90 - 116

## Quality Control Summary

**SDG: L586947**

**Stearns and Wheeler**

Test: Volatile Organic Compounds by Method 8260B

Project No: 8612403

Project: Roblin Steel

Collection Date: 7/25/2012

Analysis Date: 7/27/2012

Instrument ID: VOCMS20

Sample Numbers: L586947-01, -02, -03

Matrix: Water - mg/L

EPA ID: TN00003

Analytic Batch: WG604714

Analyst: 559

### Matrix Spike/Matrix Spike Duplicate

L586740-02

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
Dichlorodifluoromethane	0.0250	0.0000	0.0227	90.6	0.0247	98.9	16-188		8.7	22	
Chloromethane	0.0250	0.0000	0.0226	90.4	0.0248	99.0	27-155		9.1	20	
Vinyl chloride	0.0250	0.0000	0.0234	93.6	0.0246	98.6	32-159		5.2	21	
Bromomethane	0.0250	0.0000	0.0265	106	0.0268	107	23-177		1.2	21	
Chloroethane	0.0250	0.0000	0.0246	98.5	0.0256	102	32-177		3.9	21	
Trichlorofluoromethane	0.0250	0.0000	0.0233	93.0	0.0249	99.6	35-177		6.8	23	
1,1-Dichloroethene	0.0250	0.0000	0.0240	96.0	0.0275	110	32-152		14	20	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0000	0.0237	94.7	0.0253	101	36-159		6.5	21	
Acetone	0.125	0.0000	0.100	80.0	0.110	88.4	34-146		10.0	22	
Carbon disulfide	0.0250	0.0000	0.0252	101	0.0282	113	10-165		11	22	
Methylene Chloride	0.0250	0.0000	0.0215	86.2	0.0235	94.0	52-130		8.7	20	
trans-1,2-Dichloroethene	0.0250	0.0000	0.0211	84.2	0.0232	93.0	45-137		9.9	20	
Methyl tert-butyl ether	0.0250	0.0305	0.0506	80.1	0.0539	93.5	55-136		6.4	20	
1,1-Dichloroethane	0.0250	0.0000	0.0221	88.5	0.0244	97.4	58-133		9.6	20	
cis-1,2-Dichloroethene	0.0250	0.0000	0.0207	82.8	0.0235	94.1	54-137		13	20	
2-Butanone (MEK)	0.125	0.0000	0.107	85.5	0.119	95.2	51-149		11	22	
Bromochloromethane	0.0250	0.0000	0.0205	81.8	0.0225	90.1	67-131		9.7	20	
Chloroform	0.0250	0.0007	0.0215	83.3	0.0236	91.9	64-130		9.6	20	
1,1,1-Trichloroethane	0.0250	0.0000	0.0207	83.0	0.0228	91.3	58-137		9.6	20	
Carbon tetrachloride	0.0250	0.0000	0.0215	85.9	0.0230	92.1	49-140		7.0	20	
Benzene	0.0250	0.0027	0.0244	87.1	0.0265	95.3	51-134		8.1	20	
1,2-Dichloroethane	0.0250	0.0008	0.0225	86.7	0.0245	94.7	59-135		8.6	20	
Trichloroethene	0.0250	0.0000	0.0209	83.6	0.0231	92.3	40-155		9.8	20	
1,2-Dichloropropane	0.0250	0.0000	0.0209	83.7	0.0231	92.5	68-126		10	20	
Bromodichloromethane	0.0250	0.0000	0.0196	78.4	0.0214	85.5	67-132		8.6	20	
cis-1,3-Dichloropropene	0.0250	0.0000	0.0210	84.0	0.0226	90.5	63-127		7.4	20	
4-Methyl-2-pentanone (MIBK)	0.125	0.0000	0.115	92.2	0.127	102	53-154		10.0	21	
Toluene	0.0250	0.0005	0.0212	83.0	0.0226	88.3	61-126		6.1	20	
trans-1,3-Dichloropropene	0.0250	0.0000	0.0210	84.1	0.0226	90.5	59-130		7.4	20	
1,1,2-Trichloroethane	0.0250	0.0000	0.0199	79.4	0.0223	89.3	73-128		12	20	
Tetrachloroethene	0.0250	0.0000	0.0207	82.6	0.0234	93.6	56-139		13	20	
2-Hexanone	0.125	0.0000	0.112	89.8	0.124	99.2	58-148		9.9	24	
Chlorodibromomethane	0.0250	0.0000	0.0202	80.9	0.0227	90.8	68-130		12	20	
1,2-Dibromoethane	0.0250	0.0000	0.0210	83.9	0.0241	96.3	71-129		14	20	
Chlorobenzene	0.0250	0.0000	0.0206	82.3	0.0228	91.1	69-126		10	20	
Ethylbenzene	0.0250	0.0006	0.0211	82.0	0.0236	91.9	64-135		11	20	
m&p-Xylene	0.0500	0.0036	0.0458	84.3	0.0508	94.3	62-135		10	20	

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test: Volatile Organic Compounds by Method 8260B

Project No: 8612403

Project: Roblin Steel

Collection Date: 7/25/2012

Analysis Date: 7/27/2012

Instrument ID: VOCMS20

Sample Numbers: L586947-01, -02, -03

Matrix: Water - mg/L

EPA ID: TN00003

Analytic Batch: WG604714

Analyst: 559

### Matrix Spike/Matrix Spike Duplicate

L586740-02

Analyte	Spike Value	Sample	MS	% Rec	MSD	% Rec	Control Limits	% Rec Qualifier	% RPD	Control Limits	RPD Qual
o-Xylene	0.0250	0.0013	0.0217	81.5	0.0244	92.4	63-135		12	20	
Styrene	0.0250	0.0000	0.0205	82.2	0.0228	91.4	58-152		11	20	
Bromoform	0.0250	0.0000	0.0204	81.6	0.0233	93.1	59-137		13	20	
Isopropylbenzene	0.0250	0.0000	0.0221	88.5	0.0246	98.6	62-134		11	20	
1,1,2,2-Tetrachloroethane	0.0250	0.0000	0.0198	79.3	0.0227	90.9	64-149		14	20	
1,3-Dichlorobenzene	0.0250	0.0000	0.0206	82.5	0.0236	94.3	69-131		13	20	
1,4-Dichlorobenzene	0.0250	0.0000	0.0220	87.9	0.0241	96.6	70-123		9.5	20	
1,2-Dichlorobenzene	0.0250	0.0000	0.0209	83.7	0.0234	93.4	75-125		11	20	
1,2-Dibromo-3-Chloropropane	0.0250	0.0000	0.0204	81.5	0.0249	99.6	55-148		20	22	
1,2,4-Trichlorobenzene	0.0250	0.0000	0.0225	90.1	0.0253	101	67-133		12	20	
1,2,3-Trichlorobenzene	0.0250	0.0000	0.0205	81.9	0.0236	94.6	68-135		14	20	

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

#### Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Dichlorodifluoromethane	0.0250	0.0252	101	0.0258	103	33-173		2.2	20	
Chloromethane	0.0250	0.0250	100.0	0.0254	102	50-141		1.8	20	
Vinyl chloride	0.0250	0.0251	100	0.0259	104	55-142		3.2	20	
Bromomethane	0.0250	0.0296	119	0.0301	120	42-172		1.5	20	
Chloroethane	0.0250	0.0268	107	0.0274	110	52-164		2.1	20	
Trichlorofluoromethane	0.0250	0.0255	102	0.0270	108	53-161		5.7	20	
1,1-Dichloroethene	0.0250	0.0265	106	0.0274	110	54-134		3.3	20	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0263	105	0.0267	107	53-143		1.6	20	
Acetone	0.125	0.113	90.8	0.121	96.9	49-153		6.5	21	
Carbon disulfide	0.0250	0.0258	103	0.0271	108	19-150		4.8	20	
Methylene Chloride	0.0250	0.0248	99.2	0.0249	99.8	67-122		0.6	20	
trans-1,2-Dichloroethene	0.0250	0.0232	92.7	0.0239	95.8	63-127		3.3	20	
Methyl tert-butyl ether	0.0250	0.0253	101	0.0256	103	67-127		1.3	20	
1,1-Dichloroethane	0.0250	0.0251	100	0.0256	103	73-123		2.3	20	
cis-1,2-Dichloroethene	0.0250	0.0234	93.5	0.0242	96.8	75-121		3.5	20	
2-Butanone (MEK)	0.125	0.130	104	0.135	108	58-144		4.1	20	
Bromochloromethane	0.0250	0.0231	92.3	0.0243	97.3	79-124		5.2	20	
Chloroform	0.0250	0.0244	97.6	0.0252	101	76-122		3.4	20	
1,1,1-Trichloroethane	0.0250	0.0231	92.6	0.0247	98.9	71-126		6.6	20	
Carbon tetrachloride	0.0250	0.0236	94.2	0.0246	98.2	63-129		4.1	20	
Benzene	0.0250	0.0243	97.1	0.0252	101	72-119		3.7	20	
1,2-Dichloroethane	0.0250	0.0239	95.7	0.0249	99.6	69-128		3.9	20	
Trichloroethene	0.0250	0.0224	89.7	0.0236	94.6	69-131		5.3	20	
1,2-Dichloropropane	0.0250	0.0226	90.4	0.0238	95.3	77-121		5.3	20	
Bromodichloromethane	0.0250	0.0213	85.3	0.0222	88.8	75-127		4.0	20	
cis-1,3-Dichloropropene	0.0250	0.0222	88.7	0.0233	93.2	74-124		4.9	20	
4-Methyl-2-pentanone (MIBK)	0.125	0.118	94.2	0.122	97.8	58-147		3.7	20	
Toluene	0.0250	0.0219	87.5	0.0229	91.6	75-114		4.6	20	
trans-1,3-Dichloropropene	0.0250	0.0217	86.7	0.0230	92.0	69-124		5.9	20	
1,1,2-Trichloroethane	0.0250	0.0211	84.5	0.0224	89.6	81-121		5.9	20	
Tetrachloroethene	0.0250	0.0223	89.3	0.0238	95.1	69-131		6.3	20	
2-Hexanone	0.125	0.116	92.6	0.124	99.0	62-144		6.7	20	
Chlorodibromomethane	0.0250	0.0220	88.1	0.0231	92.4	73-128		4.7	20	
1,2-Dibromoethane	0.0250	0.0223	89.3	0.0234	93.4	78-124		4.5	20	
Chlorobenzene	0.0250	0.0220	88.1	0.0233	93.0	78-123		5.4	20	

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	Analytic Batch:	WG604714
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

#### Laboratory Control Sample/ Laboratory Control Sample Duplicate

Analyte	Spike	LCS	% Rec	% LCSD	% Rec	Control Limits	Qualifier	% RPD	Control Limits	Qualifier
Ethylbenzene	0.0250	0.0224	89.5	0.0238	95.3	77-124		6.3	20	
m&p-Xylene	0.0500	0.0452	90.4	0.0477	95.5	76-123		5.5	20	
o-Xylene	0.0250	0.0223	89.1	0.0240	96.2	77-125		7.6	20	
Styrene	0.0250	0.0225	90.1	0.0236	94.6	69-145		4.8	20	
Bromoform	0.0250	0.0228	91.2	0.0236	94.3	61-136		3.3	20	
Isopropylbenzene	0.0250	0.0238	95.4	0.0253	101	74-126		6.0	20	
1,1,2,2-Tetrachloroethane	0.0250	0.0216	86.5	0.0224	89.5	78-130		3.4	20	
1,3-Dichlorobenzene	0.0250	0.0225	90.1	0.0243	97.1	77-127		7.4	20	
1,4-Dichlorobenzene	0.0250	0.0230	91.8	0.0243	97.3	79-117		5.8	20	
1,2-Dichlorobenzene	0.0250	0.0226	90.6	0.0238	95.3	82-121		5.1	20	
1,2-Dibromo-3-Chloropropane	0.0250	0.0210	83.9	0.0226	90.5	55-142		7.5	20	
1,2,4-Trichlorobenzene	0.0250	0.0238	95.3	0.0255	102	76-127		6.7	20	
1,2,3-Trichlorobenzene	0.0250	0.0230	92.1	0.0236	94.3	77-130		2.4	20	



## Quality Control Summary

**SDG: L586947**

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	<b>Analytic Batch:</b>	<b>WG604714</b>
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Method Blank Summary

Client Sample ID	Laboratory Sample ID	Lab Filename	Instrument	Date Analyzed	Time Analyzed
LCS WG604714	LCS WG604714	0727_29.D	VOCMS20	7/27/2012	11:49 AM
LCSD WG604714	LCSD WG604714	0727_30.D	VOCMS20	7/27/2012	12:07 PM
MS WG604714	MS WG604714	0727_31.D	VOCMS20	7/27/2012	1:08 PM
MSD WG604714	MSD WG604714	0727_32.D	VOCMS20	7/27/2012	1:26 PM
Blank WG604714	Blank WG604714	0727_37.D	VOCMS20	7/27/2012	4:50 PM
TRIP BLANK	L586947-03	0727_41.D	VOCMS20	7/27/2012	6:00 PM
GW-35	L586947-01	0727_53.D	VOCMS20	7/27/2012	9:31 PM
FIELD DUP	L586947-02	0727_54.D	VOCMS20	7/27/2012	9:48 PM

## Quality Control Summary

**SDG: L586947**  
**Stearns and Wheler**

Test: Volatile Organic Compounds by Method 8260B  
Project No: 8612403  
Project: Roblin Steel EPA ID: TN00003  
Collection Date: 7/25/2012  
Instrument ID: VOCMS20

### Instrument Performance Summary

FileID: 0727\_28.D

Date: 7/27/2012

Time: 11:04 AM

m/e	Ion Abundance Criteria	% Relative Abundance
50	15 - 40% of mass 95	22
75	30 - 60% of mass 95	44
95	100 - 100% of mass 95	100
96	5 - 9% of mass 95	6.9
173	0 - 2% of mass 174	1.4
174	50 - 150% of mass 95	80.5
175	5 - 9% of mass 174	8.1
176	95 - 101% of mass 174	95.1
177	5 - 9% of mass 176	7.1

This Check applies to the following samples and quality control samples

Client Sample ID	Laboratory Sample ID	Lab Filename	Date Analyzed	Time Analyzed
LCS WG604714	LCS WG604714	0727_29.D	7/27/2012	11:49 AM
LCSD WG604714	LCSD WG604714	0727_30.D	7/27/2012	12:07 PM
MS WG604714	MS WG604714	0727_31.D	7/27/2012	1:08 PM
MSD WG604714	MSD WG604714	0727_32.D	7/27/2012	1:26 PM

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test: Volatile Organic Compounds by Method 8260B  
 Project No: 8612403  
 Project: Roblin Steel EPA ID: TN00003  
 Collection Date: 7/25/2012  
 Instrument ID: VOCMS20

### Instrument Performance Summary

FileID: 0727\_35.D

Date: 7/27/2012

Time: 4:14 PM

m/e	Ion Abundance Criteria	% Relative Abundance
50	15 - 40% of mass 95	26.8
75	30 - 60% of mass 95	49.1
95	100 - 100% of mass 95	100
96	5 - 9% of mass 95	6.5
173	0 - 2% of mass 174	0.8
174	50 - 150% of mass 95	69.9
175	5 - 9% of mass 174	7.6
176	95 - 101% of mass 174	96.9
177	5 - 9% of mass 176	7.2

This Check applies to the following samples and quality control samples

Client Sample ID	Laboratory Sample ID	Lab Filename	Date Analyzed	Time Analyzed
Blank WG604714	Blank WG604714	0727_37.D	7/27/2012	4:50 PM
TRIP BLANK	L586947-03	0727_41.D	7/27/2012	6:00 PM
GW-35	L586947-01	0727_53.D	7/27/2012	9:31 PM
FIELD DUP	L586947-02	0727_54.D	7/27/2012	9:48 PM



# Quality Control Summary

SDG: L586947

Stearns and Wheeler

Test: Volatile Organic Compounds by Method 8260B

Project: Roblin Steel

Instrument ID: VOCMS20

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
(800) 767-5859  
Fax (615) 758-5859  
Tax I.D 62-0814289  
Est. 1970

Method Name : V820G27L.M

## Relative Response Factor Summary

Compound Name	Level .50	Level 1	Level 2	Level 5.0	Level 10	Level 25	Level 40	Level 75	Level 100	Average RRF	%RSD
PROPENE	0.386	0.301	0.395	0.290	0.266	0.237	0.214	0.229	0.214	0.273	25.91
DICHLORODIFLUOROMETHANE		0.794	0.644	0.606	0.630	0.556	0.522	0.555	0.530	0.593	15.24
CHLOROMETHANE	1.426	1.412	1.289	1.240	1.262	1.188	1.108	1.192	1.156	1.235	9.42
VINYL CHLORIDE	0.968	1.093	1.024	0.940	0.955	0.912	0.838	0.891	0.855	0.927	9.68
1,3-BUTADIENE		1.184	1.025	0.917	0.956	0.864	0.810	0.867	0.842	0.915	13.85
BROMOMETHANE				0.373	0.359	0.338	0.303	0.305	0.286	0.316	13.55
CHLOROETHANE			0.471	0.457	0.467	0.418	0.405	0.418	0.403	0.424	9.51
TRICHLOROFLUOROMETHANE	1.082	1.050	0.991	0.953	0.978	0.894	0.831	0.873	0.850	0.929	10.40
DICHLOROFLUOROMETHANE		0.468	0.406	0.378	0.352	0.346	0.310	0.334	0.317	0.356	15.15
ETHYL ETHER	0.748	0.798	0.724	0.666	0.631	0.633	0.590	0.616	0.598	0.658	11.39
ACROLEIN	0.154	0.170	0.170	0.131	0.136	0.133	0.123	0.132	0.122	0.139	13.34
1,1-DICHLOROETHENE		0.768	0.662	0.576	0.562	0.519	0.495	0.503	0.488	0.559	17.73
1,1,2-TRICHLOROTRIFLUOROETHANE	1.556	0.720	0.661	0.597	0.625	0.568	0.542	0.545	0.520	0.593	12.15
ACETONE	0.258	0.288	0.257	0.223	0.216	0.210	0.200	0.202	0.194	0.224	14.67
IODOMETHANE	1.106	1.274	1.183	1.181	1.153	1.114	1.047	1.086	1.055	1.122	6.80
CARBON DISULFIDE	1.890	1.882	1.734	1.741	1.723	1.642	1.582	1.576	1.537	1.677	8.53
METHYLENE CHLORIDE			0.787	0.724	0.688	0.663	0.615	0.641	0.620	0.667	9.56
ACRYLONITRILE	0.194	0.284	0.254	0.269	0.271	0.271	0.250	0.268	0.257	0.257	9.51
n-HEXANE			1.085	0.925	0.842	0.818	0.749	0.796	0.768	0.837	14.24
TRANS-1,2-DICHLOROETHENE	0.859	0.836	0.745	0.722	0.721	0.663	0.619	0.649	0.635	0.705	12.55
METHYL TERT-BUTYL ETHER	1.759	1.957	1.879	1.830	1.817	1.783	1.662	1.752	1.693	1.780	5.34
1,1-DICHLOROETHANE	1.542	1.742	1.618	1.501	1.518	1.474	1.386	1.451	1.418	1.498	7.87
VINYL ACETATE	1.652	1.940	1.795	1.814	1.682	1.771	1.699	1.715	1.607	1.722	6.55
DI-ISOPROPYL ETHER	3.377	3.830	3.661	3.438	3.437	3.315	3.112	3.276	3.204	3.370	7.11
2,2-DICHLOROPROPANE		1.107	1.038	0.959	0.962	0.856	0.774	0.805	0.778	0.910	13.77
CIS-1,2-DICHLOROETHENE	0.848	0.940	0.844	0.778	0.778	0.748	0.703	0.727	0.707	0.775	10.54
2-BUTANONE (MEK)	0.261	0.345	0.352	0.334	0.342	0.346	0.314	0.346	0.325	0.329	8.13



# Quality Control Summary

SDG: L586947

Stearns and Wheler

Test: Volatile Organic Compounds by Method 8260B

Project: Roblin Steel

Instrument ID: VOCMS20

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
(800) 767-5859  
Fax (615) 758-5859  
Tax I.D 62-0814289  
Est. 1970

Method Name : V820G27L.M

## Relative Response Factor Summary

Compound Name	Level .50	Level 1	Level 2	Level 5.0	Level 10	Level 25	Level 40	Level 75	Level 100	Average RRF	%RSD
BROMOCHLOROMETHANE	0.473	0.577	0.511	0.495	0.482	0.468	0.442	0.466	0.453	0.481	8.28
TETRAHYDROFURAN			0.205	0.184	0.219	0.218	0.192	0.209	0.200	0.203	5.96
CHLOROFORM	1.293	1.454	1.421	1.315	1.220	1.169	1.119	1.169	1.134	1.237	10.40
DIBROMOFLUOROMETHANE	0.467	0.465	0.480	0.465	0.488	0.487	0.471	0.489	0.487	0.477	2.16
1,1,1-TRICHLOROETHANE	1.273	1.256	1.170	1.095	1.061	0.990	0.918	0.980	0.951	1.058	12.97
CARBON TETRACHLORIDE		1.506	1.303	1.165	1.167	1.096	1.023	1.086	1.057	1.156	13.85
1,1-DICHLOROPROPENE	1.013	1.166	1.137	0.960	0.986	0.938	0.878	0.924	0.907	0.976	10.64
2,2,4-TRIMETHYLPENTANE	5.188	5.111	4.788	4.393	4.459	4.153	3.741	4.154	4.009	4.376	11.78
BENZENE	2.794	3.248	2.988	2.800	2.784	2.696	2.575	2.679	2.617	2.768	7.85
1,2-DICHLOROETHANE	0.947	1.217	1.130	1.065	1.075	1.050	1.008	1.050	1.016	1.055	7.21
TRICHLOROETHENE	0.465	0.521	0.503	0.502	0.490	0.460	0.431	0.456	0.444	0.471	6.66
1,2-DICHLOROPROPANE	0.367	0.414	0.419	0.398	0.379	0.363	0.356	0.371	0.357	0.377	6.54
DIBROMOMETHANE	0.222	0.264	0.225	0.241	0.222	0.224	0.217	0.225	0.211	0.227	6.69
BROMODICHLOROMETHANE	0.730	0.662	0.600	0.562	0.573	0.557	0.526	0.550	0.532	0.583	11.28
A,A,A-TRIFLUOROTOLUENE	0.598	0.605	0.610	0.611	0.612	0.604	0.606	0.592	0.587	0.601	1.63
2-CHLOROETHYL VINYL ETHER	0.233	0.275	0.257	0.258	0.246	0.259	0.245	0.258	0.246	0.253	4.49
CIS-1,3-DICHLOROPROPENE	0.655	0.722	0.679	0.703	0.648	0.655	0.638	0.662	0.644	0.665	4.22
4-METHYL-2-PENTANONE (MIBK)	0.151	0.171	0.168	0.165	0.159	0.163	0.154	0.160	0.151	0.160	4.50
TOLUENE-D8	1.168	1.161	1.159	1.167	1.166	1.158	1.169	1.162	1.165	1.162	0.62
TOLUENE	2.180	2.299	1.979	1.929	1.795	1.746	1.670	1.741	1.660	1.865	12.20
TRANS-1,3-DICHLOROPROPENE	0.137	0.183	0.164	0.159	0.164	0.148	0.149	0.153	0.148	0.156	8.13
1,1,2-TRICHLOROETHANE	2.514	2.536	2.597	2.221	2.031	2.105	2.032	2.040	1.949	2.199	11.51
TETRACHLOROETHENE	2.245	2.357	2.420	2.281	2.131	2.113	2.029	2.097	1.994	2.164	7.16
1,3-DICHLOROPROPANE	3.921	4.156	3.981	4.046	3.814	3.800	3.695	3.732	3.589	3.832	5.00
2-HEXANONE	0.971	1.040	1.057	1.006	0.924	0.990	0.988	0.955	0.902	0.974	5.39
CHLORODIBROMOMETHANE	2.476	2.950	2.648	2.815	2.564	2.641	2.673	2.691	2.607	2.671	4.91
1,2-DIBROMOETHANE	2.113	2.197	2.234	2.240	2.046	2.182	2.167	2.182	2.036	2.148	3.45
CHLOROBENZENE	8.972	9.070	8.739	8.633	7.861	7.895	7.739	7.855	7.597	8.182	7.38
1,1,1,2-TETRACHLOROETHANE	3.134	3.242	3.136	3.026	2.720	2.839	2.736	2.805	2.654	2.899	7.41



# Quality Control Summary SDG: L586947

Stearns and Wheeler

Test: Volatile Organic Compounds by Method 8260B

Project: Roblin Steel

Instrument ID: VOCMS20

12065 Lebanon Rd  
Mt. Juliet, TN 37122  
(615) 758-5858  
(800) 767-5859  
Fax (615) 758-5859  
Tax I.D 62-0814289  
Est. 1970

Method Name : V820G27L.M

## Relative Response Factor Summary

Compound Name	Level .50	Level 1	Level 2	Level 5.0	Level 10	Level 25	Level 40	Level 75	Level 100	Average RRF	%RSD
1,1,1,2-TETRACHLOROETHANE	3.134	3.242	3.136	3.026	2.720	2.839	2.736	2.805	2.654	2.899	7.41
ETHYLBENZENE	5.062	5.063	4.954	4.753	4.298	4.324	4.263	4.294	4.105	4.514	8.90
M&P-XYLENE	6.117	6.067	6.087	5.998	5.424	5.403	5.243	5.359	5.125	5.588	7.67
O-XYLENE	5.632	6.565	5.764	5.840	5.492	5.383	5.197	5.348	5.109	5.538	8.11
STYRENE	9.48	9.98	10.04	9.67	8.93	9.11	9.01	8.97	8.71	9.25	5.52
BROMOFORM	1.114	1.555	1.331	1.436	1.375	1.454	1.463	1.505	1.425	1.415	8.73
ISOPROPYLBENZENE	15.27	15.42	14.69	14.17	12.98	12.75	12.39	12.73	12.20	13.47	9.63
4-BROMOFLUOROBENZENE	3.106	3.130	3.203	3.100	3.032	3.151	3.206	3.153	3.126	3.126	1.82
BROMOBENZENE	6.735	7.114	6.164	6.341	5.696	5.793	5.557	5.613	5.415	5.973	10.02
1,1,2,2-TETRACHLOROETHANE	2.530	3.171	2.649	2.754	2.413	2.603	2.485	2.528	2.419	2.598	8.81
1,2,3-TRICHLOROPROPANE	3.419	3.607	3.342	3.612	3.135	3.402	3.281	3.267	3.123	3.333	5.40
TRANS-1,4-DICHLORO-2-BUTENE	1.269	1.356	1.165	1.056	0.913	1.034	1.013	0.999	0.945	1.070	13.71
N-PROPYLBENZENE	17.99	19.67	17.85	17.27	16.08	15.55	14.95	15.47	14.70	16.40	10.48
4-ETHYLTOLUENE	15.83	16.34	14.99	15.10	14.03	13.50	13.24	13.57	12.99	14.26	8.60
2-CHLOROTOLUENE	11.99	12.49	11.90	11.47	10.72	10.78	10.41	10.70	10.27	11.09	7.39
4-CHLOROTOLUENE	11.74	11.40	10.75	10.28	9.95	9.77	9.53	9.70	9.31	10.17	8.55
1,3,5-TRIMETHYLBENZENE	14.20	14.52	13.77	12.60	11.98	11.75	11.41	11.71	11.23	12.43	10.30
TERT-BUTYLBENZENE	11.80	12.77	11.82	11.54	10.61	10.82	10.22	10.55	10.14	11.03	8.20
1,2,4-TRIMETHYLBENZENE	14.09	14.72	13.13	12.98	12.21	12.20	11.70	12.06	11.66	12.63	8.52
SEC-BUTYLBENZENE	18.69	17.33	17.45	16.55	15.60	15.42	14.49	15.10	14.47	15.95	9.35
1,3-DICHLOROBENZENE	6.524	7.509	7.107	6.883	6.379	6.332	6.171	6.226	6.025	6.522	7.53
P-ISOPROPYLTOLUENE	15.06	15.64	15.25	14.61	13.93	13.54	12.88	13.42	12.81	13.99	7.72
DICYCLOPENTADIENE	15.00	16.27	15.75	15.02	14.66	14.19	13.34	13.93	13.30	14.45	7.54
1,4-DICHLOROBENZENE	2.090	2.100	2.047	2.085	1.926	1.844	1.788	1.900	1.816	1.944	6.40
1,2,3-TRIMETHYLBENZENE	4.264	4.421	4.328	4.266	3.931	3.890	3.664	3.906	3.692	4.014	6.99
1,2-DICHLOROBENZENE	1.904	2.104	1.951	1.971	1.810	1.815	1.720	1.824	1.731	1.860	6.51
N-BUTYLBENZENE	3.996	4.213	3.962	3.761	3.649	3.400	3.107	3.462	3.261	3.608	10.20
1,2-DIBROMO-3-CHLOROPROPANE	0.127	0.178	0.170	0.147	0.170	0.175	0.154	0.172	0.159	0.162	9.84



## Quality Control Summary

SDG: L586947

Stearns and Wheeler

Test: Volatile Organic Compounds by Method 8260B

Project: Roblin Steel

Instrument ID: VOCMS20

Method Name : V820G27L.M

### Relative Response Factor Summary

Compound Name	Level .50	Level 1	Level 2	Level 5.0	Level 10	Level 25	Level 40	Level 75	Level 100	Average RRF	%RSD
1,2,4-TRICHLOROBENZENE	1.232	1.422	1.328	1.295	1.213	1.174	1.031	1.182	1.121	1.216	9.10
HEXACHLORO-1,3-BUTADIENE	0.731	0.725	0.708	0.657	0.642	0.591	0.521	0.586	0.544	0.626	12.47
NAPHTHALENE	3.375	3.611	3.202	3.135	3.038	2.956	2.607	2.939	2.814	3.059	9.38
1,2,3-TRICHLOROBENZENE	1.207	1.390	1.199	1.213	1.124	1.093	0.949	1.088	1.013	1.134	10.95
1-METHYLNAPHTHALENE			2.102	1.963	1.781	1.757	1.429	1.765	1.669	1.774	11.19
2-METHYLNAPHTHALENE			1.899	1.748	1.572	1.580	1.262	1.524	1.414	1.556	12.71

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test: Volatile Organic Compounds by Method 8260B  
Project No: 8612403  
Project: Roblin Steel EPA ID: TN00003  
Collection Date: 7/25/2012  
Instrument ID: VOCMS20

Method Name : V820G27L.M  
FileName : 0727\_28.D

Date : 7/27/2012  
Time : 11:04 AM

### Continuing Calibration Verification

Compound Name	Average RRF	CCC RRF	%D	
Dichlorodifluoromethane	0.5930	0.6799	15	
Chloromethane	1.2350	1.3119	6.2	>0.1
Vinyl chloride	0.9270	1.0156	9.6	
Bromomethane	0.3160	0.3903	24	
Chloroethane	0.4240	0.4968	17	
Trichlorofluoromethane	0.9290	1.0450	12	
1,1-Dichloroethene	0.5590	0.5800	19	**
1,1,2-Trichlorotrifluoroethane	0.5930	0.6520	9.9	
Acetone	0.2240	0.2029	9.4	
Carbon disulfide	1.6770	1.6708	0.4	
Methylene Chloride	0.6670	0.6946	4.1	
trans-1,2-Dichloroethene	0.7050	0.7244	2.8	
Methyl tert-butyl ether	1.7800	1.8114	1.8	
1,1-Dichloroethane	1.4980	1.6241	8.4	>0.1
cis-1,2-Dichloroethene	0.7750	0.7834	1.1	
2-Butanone (MEK)	0.3290	0.3244	1.4	
Bromochloromethane	0.4810	0.4816	0.1	
Chloroform	1.2370	1.2822	3.7	
1,1,1-Trichloroethane	1.0580	1.1361	7.4	
Carbon tetrachloride	1.1560	1.2212	5.6	
Benzene	2.7680	2.8520	3.0	
1,2-Dichloroethane	1.0550	1.1007	4.3	
Trichloroethene	0.4710	0.4812	2.2	
1,2-Dichloropropane	0.3770	0.3710	1.6	
Bromodichloromethane	0.5830	0.5616	3.7	
cis-1,3-Dichloropropene	0.6650	0.6438	3.2	
4-Methyl-2-pentanone (MIBK)	0.1600	0.1531	4.3	
Toluene	1.8650	1.7732	4.9	
trans-1,3-Dichloropropene	0.1560	0.1412	9.5	
1,1,2-Trichloroethane	2.1990	2.0256	7.9	
Tetrachloroethene	2.1640	2.1818	0.8	



## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test: Volatile Organic Compounds by Method 8260B  
Project No: 8612403  
Project: Roblin Steel EPA ID: TN00003  
Collection Date: 7/25/2012  
Instrument ID: VOCMS20

Method Name : V820G27L.M  
FileName : 0727\_28.D

Date : 7/27/2012  
Time : 11:04 AM

### Continuing Calibration Verification

Compound Name	Average RRF	CCC RRF	%D	
2-Hexanone	0.9740	0.8996	7.6	
Chlorodibromomethane	2.6710	2.5379	5.0	
1,2-Dibromoethane	2.1480	2.0266	5.7	
Chlorobenzene	8.1820	7.9740	2.5	>0.3
Ethylbenzene	4.5140	4.4835	0.7	
m&p-Xylene	5.5880	5.6071	0.3	
o-Xylene	5.5380	5.5014	0.7	
Styrene	9.2500	9.1540	1.0	
Bromoform	1.4150	1.3351	5.6	>0.1
Isopropylbenzene	13.4700	13.6734	1.5	
1,1,2,2-Tetrachloroethane	2.5980	2.5470	2.0	>0.3
1,3-Dichlorobenzene	6.5220	6.5292	0.1	
1,4-Dichlorobenzene	1.9440	1.9004	2.2	
1,2-Dichlorobenzene	1.8600	1.8052	2.9	
1,2-Dibromo-3-Chloropropane	0.1620	0.1519	6.2	
1,2,4-Trichlorobenzene	1.2160	1.2325	1.4	
1,2,3-Trichlorobenzene	1.1340	1.1224	1.0	
Methyl Acetate	0.5450	0.0087	98	
Cyclohexane	1.7790	0.0000	100	
Methyl Cyclohexane	0.8350	0.0002	100	**

## Quality Control Summary

### SDG: L586947

### Stearns and Wheler

Test:	Volatile Organic Compounds by Method 8260B		
Project No:	8612403	Matrix:	Water - mg/L
Project:	Roblin Steel	EPA ID:	TN00003
Collection Date:	7/25/2012	<b>Analytic Batch:</b>	<b>WG604714</b>
Analysis Date:	7/27/2012	Analyst:	559
Instrument ID:	VOCMS20		
Sample Numbers:	L586947-01, -02, -03		

### Internal Standard Response and Retention Time Summary

FileID:0727\_28.D

Date:7/27/2012

Time:11:04 AM

	IS1		IS2		IS3		IS4	
	Response	RT	Response	RT	Response	RT	Response	RT
12 Hour Std	175908	4.38	300930	4.71	44975	5.86	154010	8.24
Upper Limit	351816	4.88	601860	5.21	89950	6.36	308020	8.74
Lower Limit	87954	3.88	150465	4.21	22487.5	5.36	77005	7.74

Sample ID	Response	RT	Response	RT	Response	RT	Response	RT
Blank WG604714	188168	4.38	317259	4.71	46322	5.87	161530	8.24
L586947-01	172266	4.38	291570	4.71	43979	5.87	152881	8.24
L586947-02	184050	4.38	318015	4.71	47667	5.87	160224	8.24
L586947-03	186636	4.38	314538	4.71	46806	5.87	159884	8.24
LCS WG604714	191475	4.37	331421	4.7	49805	5.86	165132	8.24
LCSD WG604714	188646	4.38	323403	4.7	48314	5.86	162092	8.24
MS WG604714	205402	4.38	345465	4.7	53746	5.86	173112	8.24
MSD WG604714	196645	4.38	330468	4.71	49504	5.87	163472	8.24

<b>Stearns and Wheler</b> 200 John James Audubon Pkwy: Ste 101 Amherst, NY 14228		<b>Billing Information:</b> Mr. Dave Rowlinson 200 John James Audubon Pkwy: S Amherst, NY 14228		<b>Chain of Custody</b> Page <u>  1  </u> of <u>  1  </u>	
<b>Report to:</b> Mr. Dave Rowlinson Project Description: <b>Robin Steel Site</b>		<b>Email:</b> dave.rowlinson@ghd.com		<div style="display: flex; align-items: center; justify-content: center;"> <div> <p><b>ESC</b> L.A.B S.C.I.E.N.C.E.S</p> <p>12085 Lebanon Road Mt Juliet, TN 37122</p> <p>Phone: (800) 767-5859 Phone: (615) 758-5858 Fax: (615) 758-5859</p> </div> </div>	
<b>Phone:</b> (716) 691-8503 <b>FAX:</b>		<b>City/State Collected:</b> Lab Project #			
<b>Client Project #:</b> 8612403		<b>P.O.#:</b>			
<b>Site/Facility ID#:</b>		<b>Rush? (Lab MUST Be Notified)</b> Same Day ..... 200% Next Day ..... 100% Two Day ..... 50% Three Day ..... 25%			
<b>Collected by (signature):</b> Immediately Packed on Ice N <u>  Y  </u> X		<b>Date Results Needed</b> Email? <u>  X  </u> No <u>  </u> Yes <u>  </u> FAX? <u>  </u> No <u>  </u> Yes <u>  </u>		<b>No. of Cntrs</b>	
<b>Sample ID</b> GW-3S FIELD DUP TRIP BLANK		<b>Comp/Grab</b> Grab Grab -		<b>Matrix*</b> GW GW GW	
<b>Depth</b>		<b>Date</b> 7/25/12 7/25/12		<b>Time</b> 14:00 14:00	
<b>Remarks/Contaminant</b> V8260TCL 40ml Amb-HCl-BIK V8260TCL 40ml Amb-HCl		<b>Sample # (lab only)</b> 1586947-01 -02 -03		<b>Analysis/Container/Preservative</b> I133	

\*Matrix: SS - Soil GW - Groundwater WW - Waste/Water DW - Drinking Water OT - Other

Remarks:

pH \_\_\_\_\_ Temp \_\_\_\_\_

Flow \_\_\_\_\_ Other \_\_\_\_\_

<b>Relinquished by (Signature)</b> <i>Brian Doyle</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b> 16:30		<b>Time:</b> 16:30	
<b>Relinquished by (Signature)</b> <i>[Signature]</i>		<b>Received by (Signature)</b> <i>[Signature]</i>	
<b>Date:</b> 7/25/12		<b>Date:</b> 7/25/12	
<b>Time:</b>			

## **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#L586947  
September 14, 2012  
Sampling date: 07/25/2012

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

Roblin Steel  
SDG# L586947

## **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#L586947, submitted to Vali-Data of WNY, LLC on September 11, 2012. 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 cited below in Continuing Calibration.

### **DATA COMPLETENESS**

All criteria were met.

### **NARRATIVE AND DATA REPORTING FORMS**

All criteria were met.

### **CHAIN OF CUSTODY AND TRAFFIC REPORTS**

All criteria were met.

### **HOLDING TIMES**

All holding times were met.

Roblin Steel  
SDG# L586947

**INTERNAL STANDARD (IS)**

All criteria were met.

**SURROGATE SPIKE RECOVERIES**

All criteria were met.

**METHOD BLANK**

All criteria were met except 1,2-Dichloropropane was detected in Blank WG-604714 above the MRL. ESC Lab Sciences has reviewed the data and does not believe this target analyte to be present

**FIELD DUPLICATE SAMPLE PRECISION**

All criteria were met.

**LABORATORY CONTROL SAMPLES**

All criteria were met.

**MS/MSD**

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

**COMPOUND QUANTITATION**

All criteria were met except 1,2-Dichloropropane was detected in the samples above the MRL. ESC Lab Sciences has reviewed the data and does not believe this target analyte to be present.

**INITIAL CALIBRATION**

All criteria were met except linear regression was used on Propene, 1,1-Dichloroethene, Methyl Cyclohexane and Cyclohexane .

The COD's for these target analytes were within ASP QC limits, so no further action is required. Methyl acetate, Cyclohexane and Methyl Cyclohexane were not recorded on the 'Relative Response Factor Summary'. An updated page is attached.

**CONTINUING CALIBRATION**

All criteria were met except Cyclohexane, Methyl acetate and Methylcyclohexane were not monitored in the continuing calibrations. Thus the %D and RRF's were outside QC limits. The data for these target analytes should be considered unusable.

**GC/MS PERFORMANCE CHECK**

All criteria were met.

Roblin Steel  
SDG# L586947

## **APPENDIX F**

---

### **SITE DEVELOPMENT**







**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

February 11, 2013

Chief, Site Control Section  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233-7020


**Re: Buffalo Bolt Industrial Park**  
**Former Roblin Steel Site**  
**101 East Avenue**  
**North Tonawanda, New York**  
**Site No. B00025**  
**Transmittal of 60 Day Advance Notification of Transfer of Ownership to**  
**Taylor Devices, Inc. and IDEK, L.L.C.**

Dear Gentlemen/Ladies


Enclosed you will find a two (2) 60 Day Advance Notifications for Transfer of Ownership of two parcels of land at the former Roblin Steel Site from the City of North Tonawanda to Taylor Devices, Inc and to IDEK, L.L.C. respectively.

If you have any questions, please do not hesitate to call me at (716) 695-8565.

Very truly yours,

  
Dale W. Marshall, P.E.  
City Engineer

DWM:dwm

Cc:  file, w/encls  
Robert G. Ort, Mayor  
Shawn P. Nickerson, City Attorney  
Gregory P. Sutton, P.E., NYSDEC, Region 9  
David Rowlinson, GHD

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): 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

**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: dale.mar@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: dale.mar@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 22<sup>nd</sup> 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 3/12/14



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

Bargain &amp; Sale Deed

Wayne F. Jagow, Niagara County Clerk

Clerk: BH

## This Indenture

Made the 22<sup>nd</sup> 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,

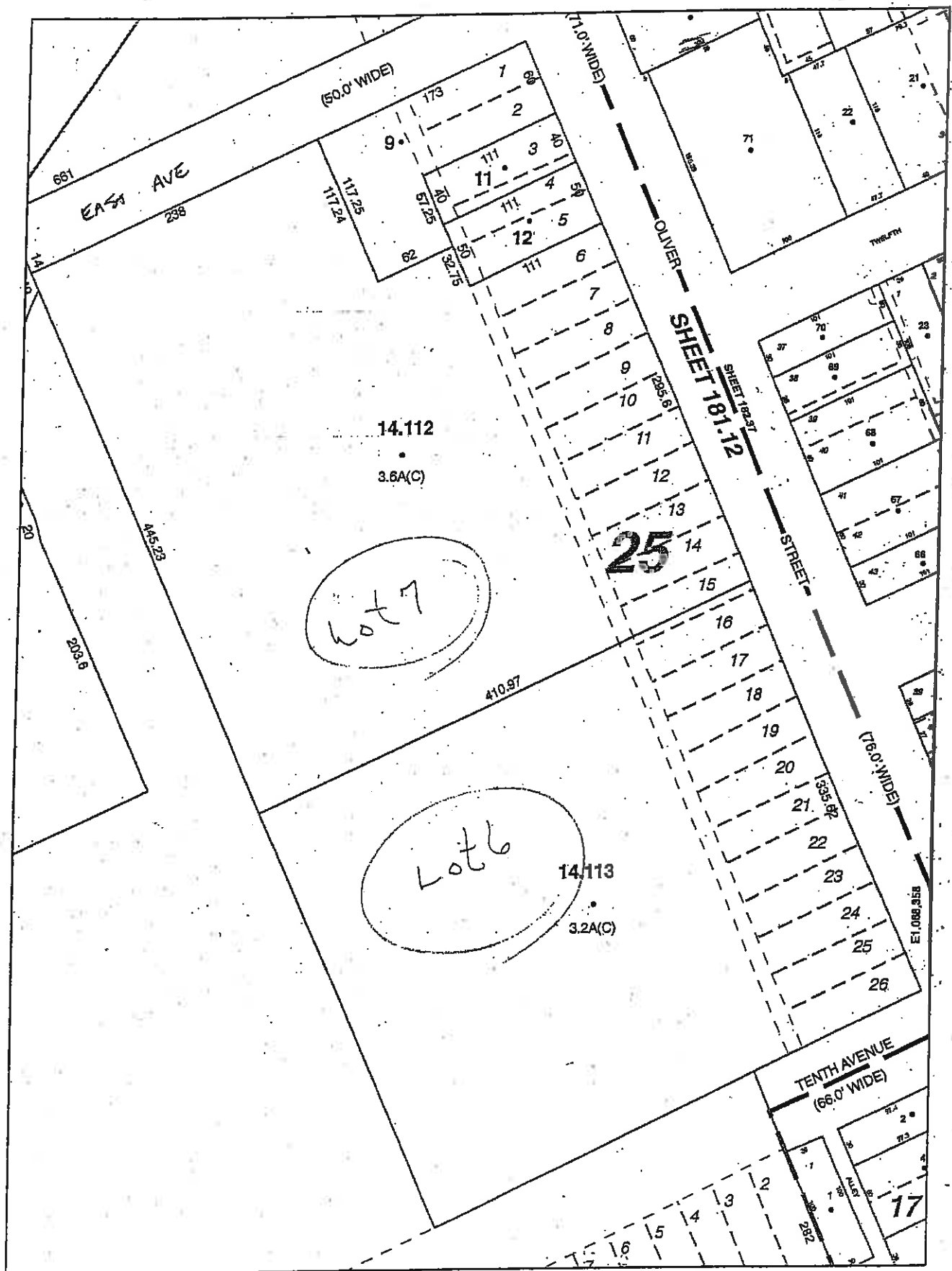
**All that tract or parcel of land**, situate in the City of North Tonawanda, County of Niagara and State of New York, being part of Lot 74 of the Mile Reservation, bounded and described as follows:

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

18.12-1-14.112, 14.113

2010-17604 10-25-10

CL 14.111 = 1067758-1108768

14.112 = 1067944-1109413

14.113 = 1068098-1109075



OWNER'S CONSENT:  
I HEREBY CONSENT TO THE PLANNING OF THIS MAP.  
DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_

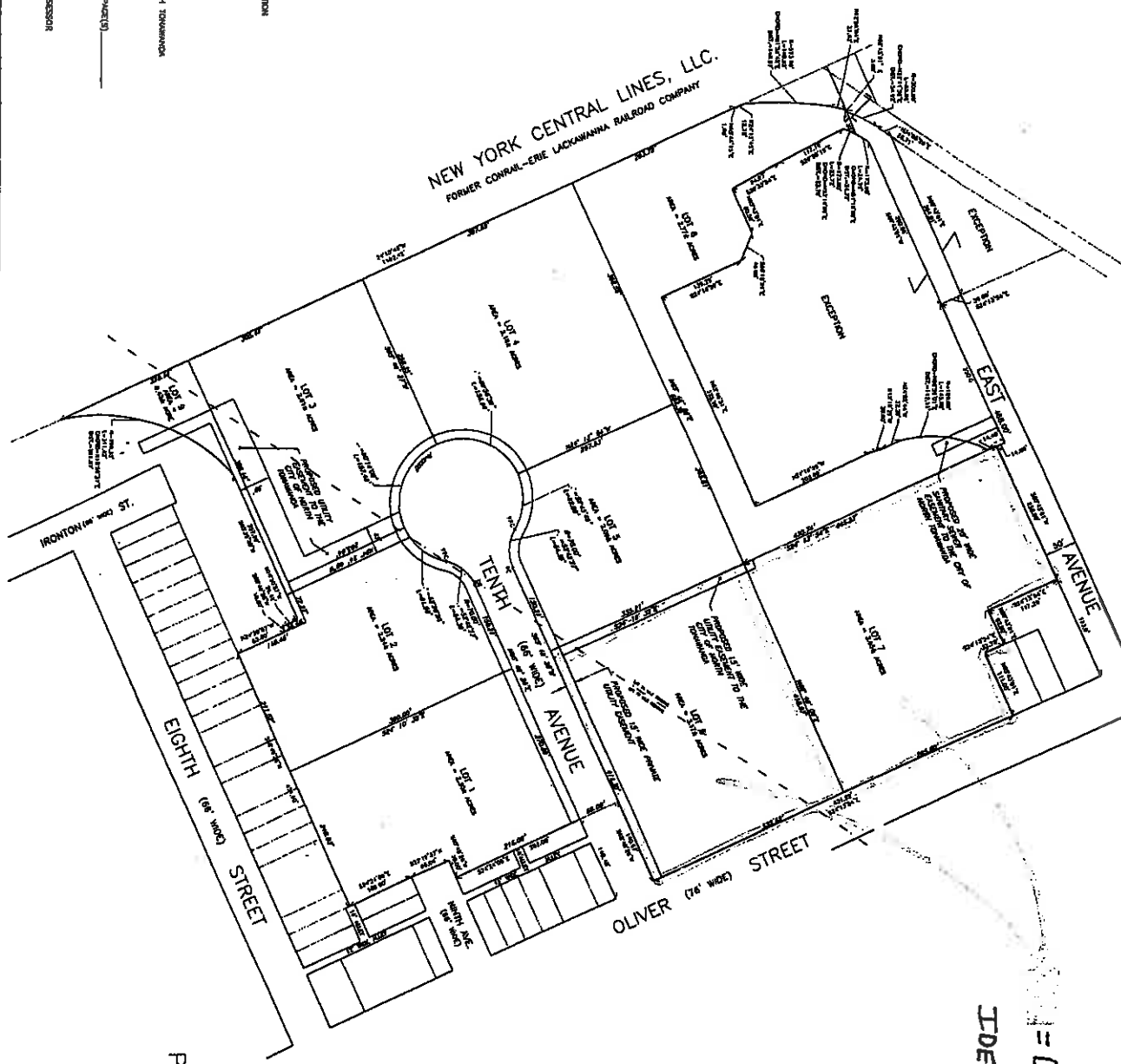
STANDARD SURVEY APPROVED BY  
N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_

APPROVED BY THE PLANNING COMMISSION  
CITY OF NORTH TOWNSHAND  
DATE: \_\_\_\_\_  
CHIEF: \_\_\_\_\_

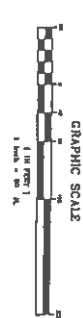
APPROVED BY THE CITY ENGINEER, CITY OF NORTH TOWNSHAND  
DATE: \_\_\_\_\_  
CITY ENGINEER: \_\_\_\_\_

FILED IN THE NASSAU COUNTY CLERK'S  
OFFICE IN BOOK \_\_\_\_\_ OF RECORDS MAPS PAGE(S) \_\_\_\_\_  
DATE: \_\_\_\_\_  
COUNTY CLERK: \_\_\_\_\_

APPROVED BY THE CITY OF NORTH TOWNSHAND ASSESSOR  
DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_



= Deeded to:  
IDEX, LLC



PRELIMINARY  
8/17/10

CITY OF NORTH TOWNSHAND		NASSAU COUNTY		STATE OF NEW YORK	
<b>BUFFALO BOLT BUSINESS PARK SUBDIVISION</b> <b>PART OF LOT NUMBERS 74 AND 75 OF THE MILE RESERVE</b>					
		Designed by: <b>RF</b> Drawn by: <b>UP</b> Checked by: <b>new</b>		Date of Survey: <b>06/15/08</b> Job No.: <b>1000.0034.00</b> Map Scale: <b>1" = 40'</b> North Arrow	
60159 PART 1 OF 1		THIS MAP WAS PREPARED BY TVGA CONSULTANTS, INC. A PROFESSIONAL ENGINEERING FIRM LICENSED BY THE STATE OF NEW YORK. THE ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR THIS MAP TO BE VALID. THE ENGINEER'S SEAL AND SIGNATURE ARE REQUIRED FOR THIS MAP TO BE VALID.			



**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

February 11, 2013

Michael Hacikyan, President  
IDEK, LLC  
80 Thompson Street  
North Tonawanda, New York

RECEIVED  
GHD

FEB 21 2013

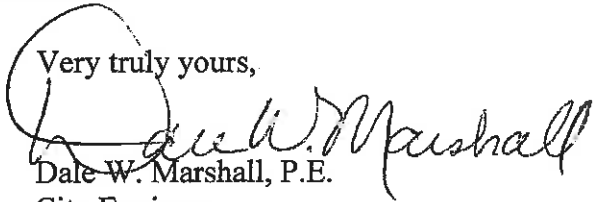
**Re: Buffalo Bolt Industrial Park  
Former Roblin Steel Site  
101 East Avenue  
North Tonawanda, New York  
Site No. B00025  
Transmittal of Site Management Plan**

Dear Mr. Hacikyan:

The New York State Department of Conservation requires that purchasers of property remediated by municipalities under the State's Environmental Restoration Program be 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 remedial work plans and reports.

Enclosed you will find a CD containing an electronic copy in PDF format of the Site Management Plan for the Roblin Steel Site, as prepared Stearns and Wheler, LLC and as approved by NYSDEC, dated March 2007 for your records.

Very truly yours,

  
Dale W. Marshall, P.E.  
City Engineer

DWM:dwm

Cc: file, w/encls  
Robert G. Ort, Mayor  
Shawn P. Nickerson, City Attorney  
Gregory P. Sutton, P.E., NYSDEC, Region 9  
✓ David Rowlinson, GHD



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

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, P.E.  
(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**

Wayne F. Jagow, Niagara County Clerk

Clerk: TH

## This Indenture

Made the 14<sup>th</sup> 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

Taylor  
Buff. Bolt

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 herewith in Liber \_\_\_\_\_ of \_\_\_\_\_ of page \_\_\_\_\_~~  
~~Instrument #2012-03834 of Book 5~~

**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. Ort, Mayor

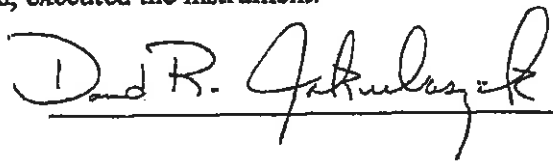
STATE OF NEW YORK )

COUNTY OF NIAGARA ) ss.:

On this 14<sup>th</sup> day of ~~February~~ *February*, 2012, before me the undersigned, a Notary Public in and for the State of New York, personally appeared Robert G. Ort, 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

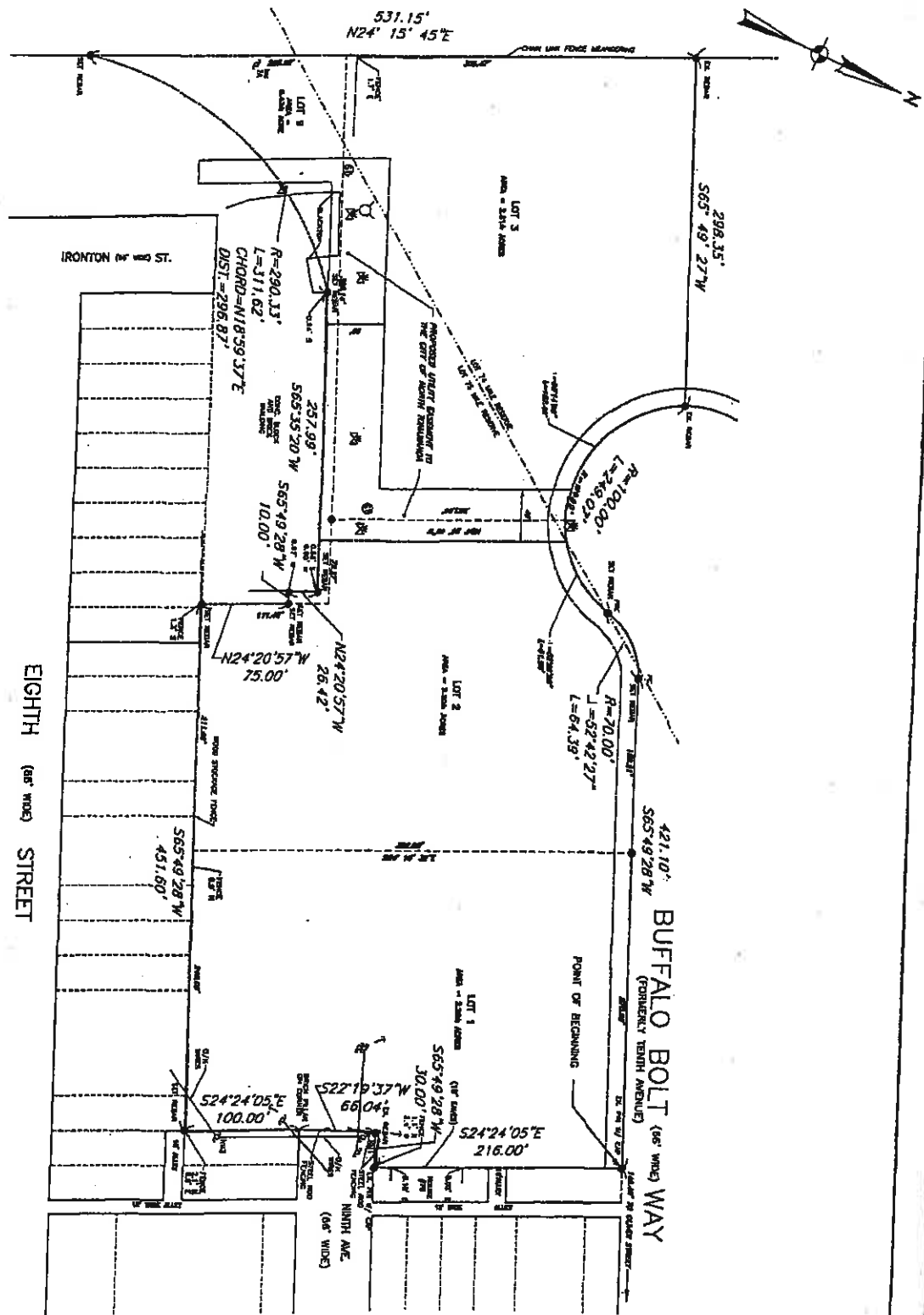


his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

A handwritten signature in dark ink, reading "David R. Jakubaszek", written over a horizontal line.

DAVID R. JAKUBASZEK Reg. No. 4897131  
Notary Public, State of New York  
Appointed in Niagara County  
Commission Expires August 31, 20 13

# SCHEDULE A



<p>Scale 1" = 100'</p>	<p>CITY OF NORTH TOWNSHIPS</p> <p>BOUNDARY SURVEY</p> <p>PART OF LOTS 74 &amp; 78 OF THE MILE RESERVE</p> <p>SUBLOTS 1, 2, 3 &amp; 4</p>	<p>KEY PLAN</p> <p>TVGA CONSULTANTS</p> <p>DATE: 08/01/2017</p> <p>BY: [Signature]</p> <p>FOR: [Signature]</p>	<p>Prepared by: [Signature]</p> <p>Checked by: [Signature]</p> <p>Drawn by: [Signature]</p> <p>Date: 08/01/2017</p>	<p>Field Book: 08/01/2017</p> <p>Lot No: [Blank]</p> <p>Page: [Blank]</p> <p>Date: 08/01/2017</p>	<p>Comments:</p> <p>1. This survey was conducted in accordance with the provisions of the Survey Act, R.S.O. 1990, Chapter S.5, and the regulations made thereunder.</p> <p>2. The survey was conducted in accordance with the provisions of the Survey Act, R.S.O. 1990, Chapter S.5, and the regulations made thereunder.</p> <p>3. The survey was conducted in accordance with the provisions of the Survey Act, R.S.O. 1990, Chapter S.5, and the regulations made thereunder.</p>
------------------------	--	--	---	---	--



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 \*\*\*\*

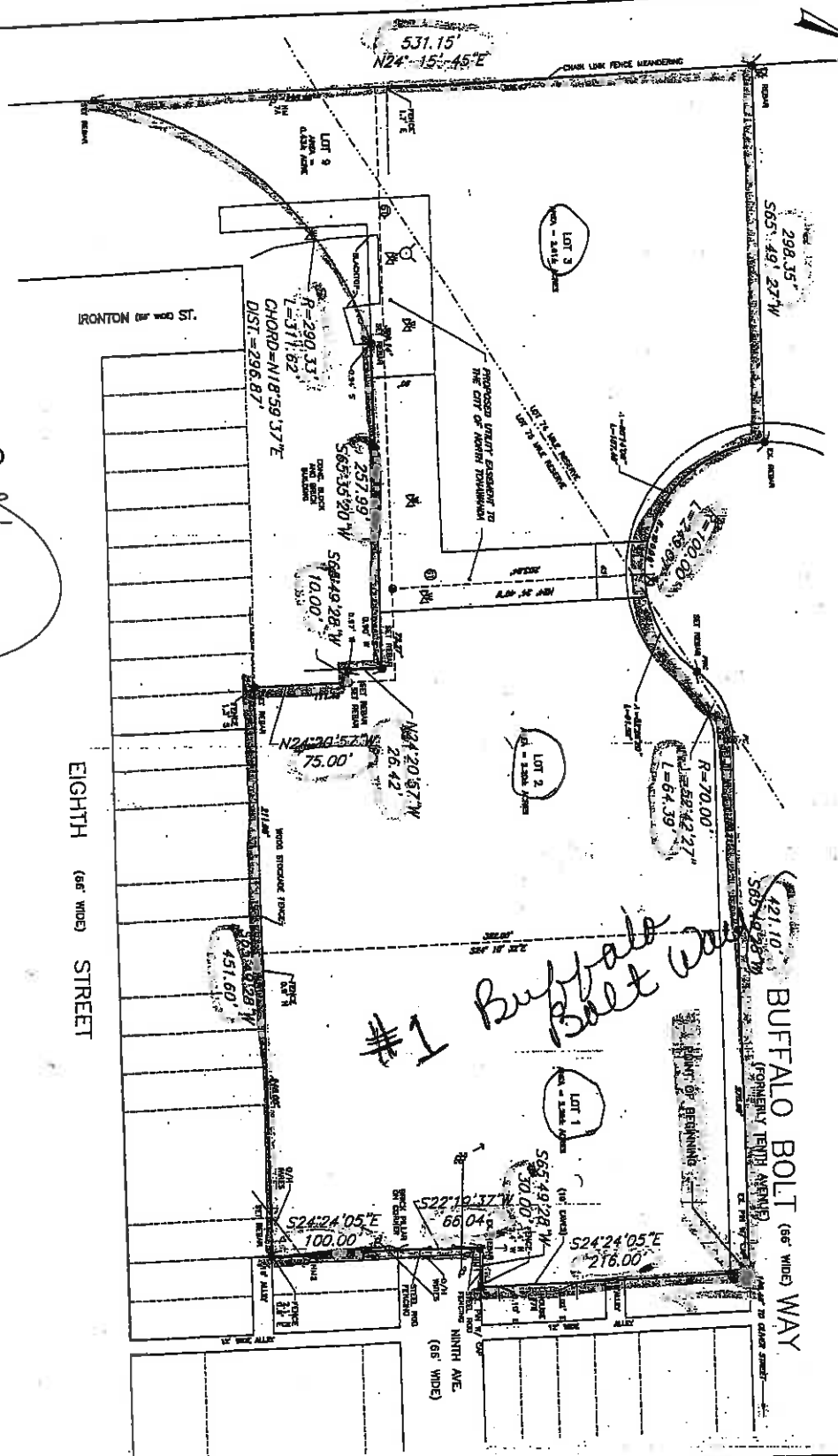
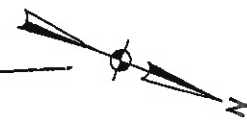
\*\*\*\*\* Transfer Tax \*\*\*\*\*

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



2.61  
2.20  
2.26  

---

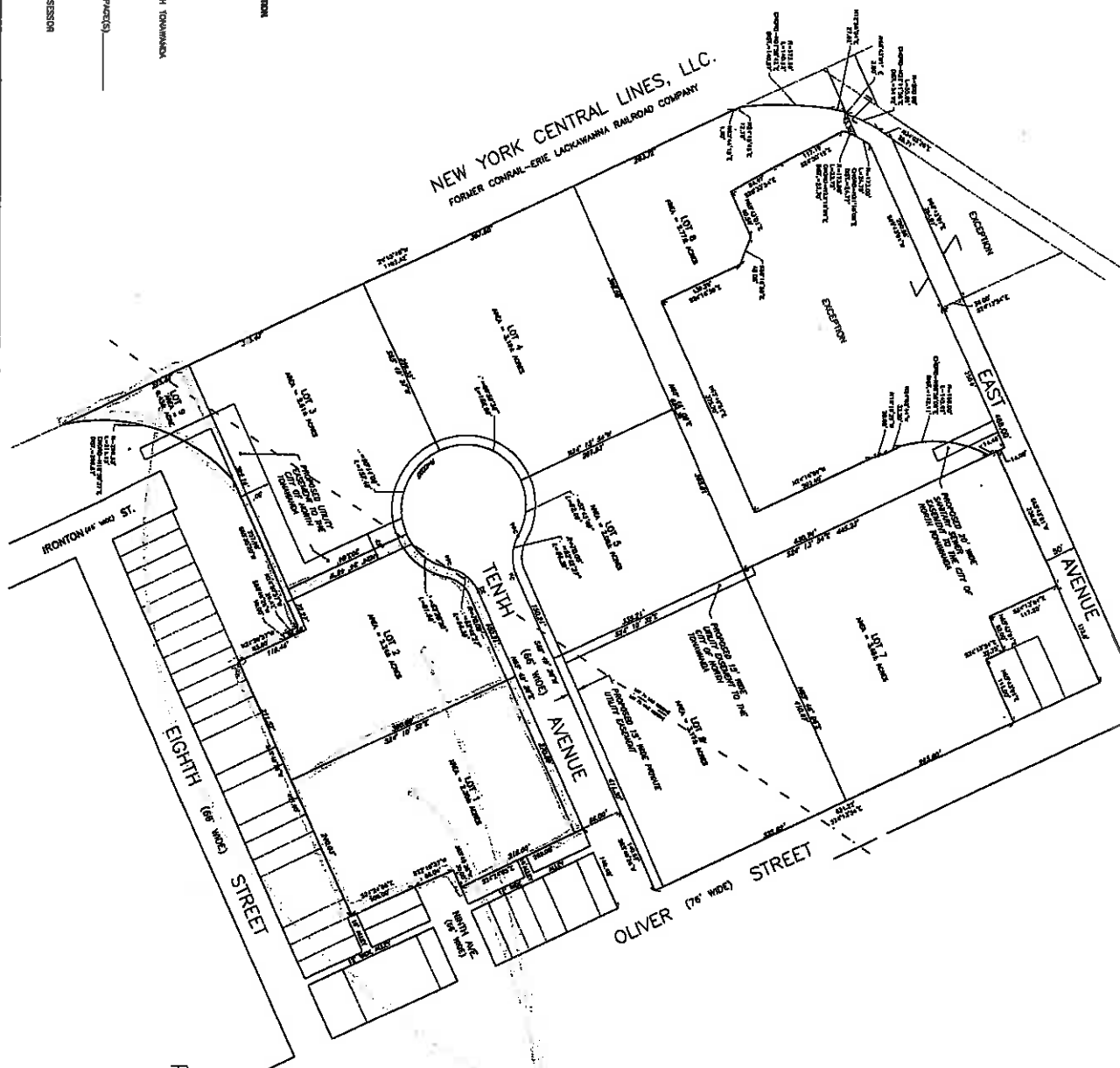
7.07  
AC

#1 Buffalo Bolt Way

CITY OF NORTH TOWNSHIPS NEW YORK		TVGA CONSULTANTS		Project No. 100-000000		Date 4/15/2007	
BOUNDARY SURVEY PART OF LOTS 74 & 75 OF THE MILE RESERVE SUBLOTS 1, 2, 3 & 4		Client: TVGA		Project: 100-000000		Date: 4/15/2007	
Scale: 1" = 100'		Drawn: J. J. J.		Checked: J. J. J.		Date: 4/15/2007	
Sheet 1 of 1		Project: 100-000000		Date: 4/15/2007		Date: 4/15/2007	

[illegible]

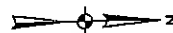
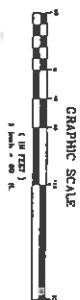
NEW YORK CENTRAL LINES, LLC.  
FORMER CONRAIL-ERIE LACKAWANNA RAILROAD COMPANY




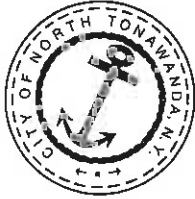
PRELIMINARY  
8/17/10

Taylor Devices, Inc

Decided to:



60159 COUNTY OF COLUMBIA SECTION 18	CITY OF NORTH DAKOTA NORTHERN DISTRICT STATE OF NORTH DAKOTA		 TVGA CONSULTANTS CHESTERFIELD LAND SERVICE MAPPER - CIVIL ENGINEER 1000 14th Street SW PO BOX 1000 FARGO, ND 58103 701.785.8888 www.tvga.com	Prepared by: RUT	Date of Survey: 04/19/00	1/4 1/2 3/4 1/8 1/16 1/32 1/64 1/128 1/256 1/512 1/1024 1/2048 1/4096 1/8192 1/16384 1/32768 1/65536 1/131072 1/262144 1/524288 1/1048576 1/2097152 1/4194304 1/8388608 1/16777216 1/33554432 1/67108864 1/134217728 1/268435456 1/536870912 1/1073741824 1/2147483648 1/4294967296 1/8589934592 1/17179869184 1/34359738368 1/68719476736 1/137438953472 1/274877906944 1/549755813888 1/1099511627776 1/2199023255552 1/4398046511104 1/8796093022208 1/17592186044416 1/35184372088832 1/70368744177664 1/140737488355328 1/281474976710656 1/562949953421312 1/1125899906842624 1/2251799813685248 1/4503599627370496 1/9007199254740992 1/18014398509481984 1/36028797018963968 1/72057594037927936 1/144115188075855872 1/288230376151711744 1/576460752303423488 1/1152921504606846976 1/2305843009213693952 1/4611686018427387904 1/9223372036854775808 1/18446744073709551616 1/36893488147419103232 1/73786976294838206464 1/147573952589676412928 1/295147905179352825856 1/590295810358705651712 1/1180591620717411303424 1/2361183241434822606848 1/4722366482869645213696 1/9444732965739290427392 1/18889465931478580854784 1/37778931862957161709568 1/75557863725914323419136 1/151115727451828646838272 1/302231454903657293676544 1/604462909807314587353088 1/1208925819614629174706176 1/2417851639229258349412352 1/4835703278458516698824704 1/9671406556917033397649408 1/19342813113834066795298816 1/38685626227668133590597632 1/77371252455336267181195264 1/154742504910672534362390528 1/309485009821345068724781056 1/618970019642690137449562112 1/1237940039285380274899124224 1/2475880078570760549798248448 1/4951760157141521099596496896 1/9903520314283042199192993792 1/19807040628566084398385987584 1/39614081257132168796771975168 1/79228162514264337593543950336 1/158456325028528675187087900672 1/316912650057057350374175801344 1/633825300114114700748351602688 1/1267650600228229401496703205376 1/2535301200456458802993406410752 1/5070602400912917605986812821504 1/10141204801825835211973625643008 1/20282409603651670423947251286016 1/40564819207303340847894502572032 1/81129638414606681695789005144064 1/162259276829213363891578010288128 1/324518553658426727783156020576256 1/649037107316853455566312041152512 1/1298074214633706911132624082305024 1/2596148429267413822265248164610048 1/5192296858534827644530496329220096 1/10384593717069655289060992658440192 1/20769187434139310578121985316880384 1/41538374868278621156243970633760768 1/83076749736557242312487941267521536 1/166153499473114484624975882535042752 1/332306998946228969249951765070085504 1/664613997892457938499903530140171008 1/1329227995784915876999807060280342016 1/2658455991569831753999614120560684032 1/5316911983139663507999228241121368064 1/10633823966279327015998456482242736128 1/21267647932558654031996912964485472256 1/42535295865117308063993825928970944512 1/85070591730234616127987651857941889024 1/170141183460469232255975303715883778048 1/340282366920938464511950607431767556096 1/680564733841876929023901214863535112192 1/1361129467683753858047802429727070224384 1/2722258935367507716095604859454140448768 1/5444517870735015432191209718908280897536 1/10889035741470030864382419437816561795072 1/21778071482940061728764838875633123590144 1/43556142965880123457529677751266247180288 1/8711228593176024691505935550253
--	--	--	--	---------------------	-----------------------------	--



**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

February 11, 2013

Douglas P. Taylor, President  
Taylor Devices, Inc.  
90 Taylor Drive  
P.O. Box 748  
North Tonawanda, New York

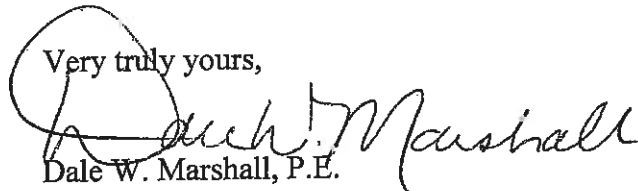
**Re: Buffalo Bolt Industrial Park  
Former Roblin Steel Site  
101 East Avenue  
North Tonawanda, New York  
Site No. B00025  
Transmittal of Site Management Plan**

Dear Mr. Taylor:

The New York State Department of Conservation requires that purchasers of property remediated by municipalities under the State's Environmental Restoration Program be 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 remedial work plans and reports.

Enclosed you will find a CD containing an electronic copy in PDF format of the Site Management Plan for the Roblin Steel Site, as prepared Stearns and Wheler, LLC and as approved by NYSDEC, dated March 2007 for your records.

Very truly yours,

  
Dale W. Marshall, P.E.  
City Engineer

DWM:dwm

Cc: file, w/encls  
Robert G. Ort, Mayor  
Shawn P. Nickerson, City Attorney  
Gregory P. Sutton, P.E., NYSDEC, Region 9  
David Rowlinson, GHD