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**THIRD FIVE-YEAR REVIEW REPORT FOR  
RECTICON/ALLIED STEEL SUPERFUND SITE  
PARKERFORD, CHESTER COUNTY, PENNSYLVANIA**

ORIGINAL



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**Date**

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- A- Groundwater Sampling Analytical Results October 2011 through September 2014
- B- Summary of historical TCE, DCE and vinyl chloride concentrations
- C- Risk Calculations using 2014 groundwater sampling results

## List Of Acronyms

ARAR	Applicable or Relevant and Appropriate Requirement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CIC	Community Involvement Coordinator
COC	Contaminant of Concern
DCE	cis-1,2-dichloroethene
EA	Exposure Area
EPA	United States Environmental Protection Agency
ESD	Explanation of Significant Differences
GMUC	Groundwater Migration Under Control
GPRA	Government Performance and ResultsAct
HEUC	Human Exposure Under Control
HI	Hazard Index
HRC	Hydrogen Releasing Compound
HQ	Hazard Quotient
IC	Institutional Control
MCL	Maximum Contaminant Level
µg/L	Microgram per liter
NCP	National Contingency Plan (the “National Oil and Hazardous Substances Pollution Contingency Plan”)
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
O&M	Operation and Maintenance
OU	Operable Unit
PADEP	Pennsylvania Department of Environmental Protection
PADER	Pennsylvania Department of Environmental Resources
PRP	Potentially Responsible Party
RA	Remedial Action
RAO	Remedial Action Objective
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
RSL	Risk Screening Level
SWRAU	Site-wide Ready for Anticipated Use
TBC	To Be Considered
TCE	Trichloroethylene
UAO	Unilateral Administrative Order
VOC	Volatile Organic Compound

## **Executive Summary**

The U.S. Environmental Protection Agency (EPA) Region 3 has conducted the third five-year review for the Recticon/Allied Steel Superfund Site. The Recticon/Allied Steel Superfund Site is located in Parkerford, Chester County, Pennsylvania. The Site is approximately 8 miles northwest of Phoenixville and 3.2 miles southeast of Pottstown - (See Figure 1). The 5-acre Site consists of two properties, the former Allied Steel Products Corporation facility, and the former Recticon facility. In 1972, Allied Steel Products Corporation (Allied) began fabrication of various steel products on a property approximately 100 feet east of Recticon. Recticon was a subsidiary of Rockwell International and manufactured silicon wafers for the electronics industry at the Site from 1974 to 1981.

The Commonwealth of Pennsylvania and Recticon entered into a Consent Order in 1981 to undertake initial cleanup actions at the Site. Recticon, under Pennsylvania Department of Environmental Resources (PADER) oversight, removed contaminated soils from the Site and transported them to an EPA-approved facility for disposal. Recticon also pumped and treated some of the groundwater beneath the Site for a few months. Under PADER oversight, Allied Steel also excavated contaminated soil and shipped it off-site for proper disposal. In 1990, EPA entered into two Consent Orders with Rockwell International, the former parent company of Recticon, to provide residential well filters to nearby residents and to conduct the Remedial Investigation/Feasibility Study (RI/FS).

The Site was divided into three Operable Units (OUs). The remedy for the first OU was to install a public water supply to an estimated twelve residences and several businesses. The second OU called for the excavation and off-site disposal of contaminated soils. OU3 called for a comprehensive study of the groundwater at the Site. Based on the findings of this study, the ROD selected a source-reduction program, consisting of a groundwater extraction and treatment system (pump and treatment) for contaminated groundwater, as well as the installation of additional monitoring wells. Subsequently, the groundwater remedy was changed to enhanced bioremediation to reach cleanup goals by an Explanation of Significant Differences (ESD) dated May 26, 2010.

The Remedial Action (RA) for OU1 (waterline), was completed in November 1999. Site soil contamination (OU2) was excavated and disposed of during removal actions. Additional soil excavation was eliminated in a ROD Amendment. The Site groundwater reached cleanup standards during the 2011 annual sampling. In accordance with the ROD, twelve (12) quarters of groundwater sampling were performed to establish that the cleanup objectives have been met at the Site. Attachment A contains the results of the post cleanup standards quarterly sampling. The first quarterly sampling, conducted on October 27, 2011, identified 2.7 µg/L of vinyl chloride, which has a MCL of 2 µg/L, in well OW-1. No other samples identified any contaminant of concern (COC) above the action level throughout the twelve quarters of sampling.

A risk assessment was completed by the EPA Site Toxicologist using 2014 sampling results. All cumulative risk results are below or within EPA's acceptable risk criteria. The Site

groundwater has met the criteria established to meet the Site Remedial Action Objectives (RAOs).

The Site is protective of human health and the environment. The RAOs established for the Site have been accomplished.

**Government Performance Review Act (GPRA) Measure Review**

As part of this Five-Year Review, the GPRA Measures have also been reviewed. The GPRA Measures and their status are provided as follows:

**Environmental Indicators**

Human Health: HEUC (Current Human Exposure Under Control)

Groundwater Migration: GMUC (Groundwater Migration Under Control)

**Site-wide Ready For Anticipated Use (SWRAU)**

The Site was determined to be Site-Wide Ready for Anticipated Use (SWRAU) on June 26, 2006.

## Five-Year Review Summary Form

SITE IDENTIFICATION		
<b>Site Name:</b> Recticon/Allied Steel Superfund Site		
<b>EPA ID:</b> PAD002353969		
<b>Region:</b> 3	<b>State:</b> PA	<b>City/County:</b> Parkerford, East Coventry Township, Chester County
SITE STATUS		
<b>NPL Status:</b> Final		
<b>Multiple OUs?</b> Yes	<b>Has the site achieved construction completion?</b> Yes	
REVIEW STATUS		
<b>Lead agency:</b> EPA		
<b>Author name (Federal or State Project Manager):</b> Jill Lowe		
<b>Author affiliation:</b> EPA		
<b>Review period:</b> 9/2014 – 5/2015		
<b>Date of site inspection:</b> 1/21/2015		
<b>Type of review:</b> Policy		
<b>Review number:</b> 3		
<b>Triggering action date:</b> 6/23/2010		
<b>Due date (five years after triggering action date):</b> 6/23/2015		

### Issues/Recommendations

**Issues and Recommendations Identified in the Five-Year Review: None**

### Sitewide Protectiveness Statement (if applicable)

**Protectiveness Statement:** The Site is protective of human health and the environment. The RAOs established for the Site have been accomplished.

## Five-Year Review Report

### I. Introduction

The purpose of the five-year review is to determine whether the remedy at a Site is protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in five-year review reports. In addition, five-year review reports identify issues found during the review, if any, and recommendations to address them.

The United States Environmental Protection Agency (EPA) is preparing this five-year review report pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) §121 and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA §121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each Five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgment of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

The Agency interpreted this requirement further in the NCP 40 C.F.R. §300.430(f)(4)(ii):

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

EPA Region 3 has conducted a five-year review of the remedial actions implemented at the Recticon/Allied Steel Superfund Site, East Coventry Township, Chester County, Pennsylvania. This review was conducted from September 2014 through May 2015. The purpose of the five-year review is to determine whether the remedy at the site is protective of human health and the environment. The methods, findings, and conclusions of the review are documented in this report.

This is the third five-year review for the Recticon/Allied Steel Superfund Site. The triggering action for this review is the date of the second five-year review, June 23, 2010. This is a policy review, since the remedial action, upon completion, will not leave hazardous substances, pollutants, or contaminants on site above levels that allow for unlimited use and unrestricted exposure.

## II. Site Chronology

The table below summarizes important events and relevant dates in the chronology of the Recticon/Allied Steel Superfund Site.

**Table 1: Chronology of Site Events**

Event	Date
Allied Steel begins steel fabrication	1972
Recticon Corporation manufactures silicon wafers	1974-1981
Recticon enters into Consent Order with Pennsylvania Department of Environmental Resources (PADER) to cleanup Site contamination	1981
Final listing on National Priorities List (NPL)	October 4, 1989
EPA issues Administrative Order on Consent to perform Remedial Investigation/Feasibility Study (RI/FS) (III-90-22-DC)	March 29, 1990
Potentially Responsible Party (PRP) lead RI/FS completed	May 19, 1993
Record of Decision (ROD) issued	June 30, 1993
EPA issues Unilateral Administrative Order to Rockwell and three other PRPs to perform Remedial Design/Remedial Action (RD/RA) (III-94-16-DC)	March 24, 1994
Phase I Archeology Survey Completed	April 1995
ROD Amendment to reflect Maximum Contaminant Levels (MCLs) as groundwater cleanup standards	August 29, 1997
Time critical removal conducted by EPA for copper and zinc soil contamination at the former Allied Steel Property	April 1998
Groundwater pump and treatment system construction completed	April 19, 1999
Conexant Systems Inc., a successor to Rockwell, takes over operation of cleanup	June 1999
Residential hook-ups to Public Waterline complete	November 1999
Preliminary Closeout Report issued	December 14, 1999
Remedial Action Report Approved	March 31, 2000
Explanation of Significant Differences (ESD) issued which eliminated the requirement for institutional controls for soil and groundwater	September 10, 2004
First Five-Year Review issued	March 14, 2005
Second ESD issued to change the treatment to Enhanced Natural Bioremediation and to reinstate the requirement for institutional controls for groundwater	May 26, 2010
Second Five-Year Review issued	June 23, 2010
Site meets cleanup goals in groundwater	October 2011
Conexant Systems, Inc. files petition for relief under Chapter 11 of the U.S. Bankruptcy Code, 11 U.S.C. §§ 101-1532	February 28, 2013
Twelve quarterly samples of groundwater completed	October 2014

### **III. Background**

#### **Physical Characteristics**

The Site, located at the intersection of State Route 724 and Wells Road in Parkers Ford, is located approximately 8 miles northwest of Phoenixville and 3.2 miles southeast of Pottstown - (See Figure 1). The 5-acre Recticon/Allied Steel Site consists of two properties, the former Allied Steel Products Corporation facility and the former Recticon facility. From 1972-1988, Allied Steel Products Corporation (Allied) began fabrication of various steel products on a property located on the eastern corner of the intersection. Recticon was a subsidiary of Rockwell International and manufactured silicon wafers for the electronics industry from 1974 to 1981, on the western corner of the intersection. - (See Figure 2).

The area to the east of the Site is agricultural and commercial and also serves as a flood plain for the Schuylkill River. The areas north, south, and west of the Site is a mix of residential and industrial/commercial properties, with some light agricultural activity. Runoff from the Site flows into the Schuylkill River. The local water company, Pennsylvania American Water Company, blends treated water from the Schuylkill River with well water to serve its customers. All the residential and business properties with individual carbon filtration units and any other residence/business that was affected or potentially affected by the plume of contamination were connected to the public water supply, although approximately eight residents/businesses maintained private wells during the change to the public water supply for outside activities such as lawn watering.

#### **Site Hydrology/Hydrogeology**

The Site is underlain by about 20 to 37 feet of overburden consisting of silt, sand and gravel. The Triassic-age Brunswick Formation underlies the overburden and is composed of shale, silty sandstone, and siltstone. The regional strike of the bedrock trends approximately east-west.

Groundwater exists within the overburden and bedrock geological formations. Groundwater gradients in the overburden and bedrock are generally east, following topography, to the Schuylkill River. The overburden wells are completed at depths ranging from approximately 20 to 37 feet below ground surface. The shallow bedrock wells are completed at depths ranging from approximately 35 to 125 feet below ground surface. The lower bedrock wells are completed at depths ranging from approximately 150 to 200 feet below ground surface.

#### **Land and Resource Use**

Land use in the area of the Site is a mixture of residential, industrial/commercial, and agricultural. As the metropolitan areas of Pottstown and Philadelphia expand towards one another, it is expected that this area will develop into a mixture of residential and industrial properties. The nearest residences are located approximately 1/3 mile from the Site. The aquifers located beneath the Site are still used for drinking water, but within the original plume of groundwater contamination there were no drinking water wells.

The Allied property (approximately 5 acres in size) was purchased (subject to a Prospective Purchaser's Agreement with the United States) by the Longstreh Corporation for operating a women's sports equipment business. The Recticon property is currently in use as a marble and granite showroom.

### **History of Contamination**

In 1979, the Pennsylvania Department of Environmental Resources (PADER), now known as the Pennsylvania Department of Environmental Protection (PADEP), detected trichloroethylene (TCE) in the groundwater beneath the Site. In 1980, a Recticon contractor determined that leakage in the area of Allied's compressor room had released TCE into the ground. High levels of TCE were found in Allied's on-site well. In addition, sediment samples taken from the drainage ditch alongside the Allied building yielded high levels of copper and zinc, well above ecological risk levels.

### **Initial Response**

The Commonwealth of Pennsylvania and Recticon entered into a Consent Order in 1981 to undertake initial cleanup actions at the Site. Recticon, under PADER oversight, removed contaminated soils from the Site and transported them to an EPA-approved facility for disposal. Recticon also pumped and treated some of the groundwater beneath the Site for a few months. Under PADER oversight, Allied Steel also excavated contaminated soil and shipped it off-site for proper disposal. In 1990, EPA entered into two Consent Orders with Rockwell International, the former parent company of Recticon, to provide residential well filters to nearby residents and to conduct the RI/FS.

### **Basis for Taking Action**

Contaminants in Site soil and groundwater included volatile organic compounds (VOCs) and some metals. Exposures to Site soil (including subsurface soils) and groundwater were associated with unacceptable human health risks, due to the exceedance of EPA's acceptable criteria of  $10^{-4}$ . All cancer risks estimated represent an "excess lifetime cancer risk" or the additional cancer risk on top of that which we all face from other causes. The Risk Assessment, which was completed as part of the Remedial Investigation, showed a total cumulative cancer risk level of 6.0E-04 for adult residents from ingestion, dermal contact and inhalation of groundwater.

To assess the potential for adverse effects other than cancer, a hazard quotient (HQ) is calculated. A  $\text{HQ} \leq 1$  indicates that a receptor's dose of a single contaminant is less than the Reference Dose, and that toxic noncarcinogenic effects from that chemical are unlikely. The Hazardous Index (HI) is generated by adding the HQs for all media to which the same individual may reasonably be exposed. A  $\text{HI} \leq 1$  indicates that toxic noncarcinogenic effects are unlikely. The total cumulative noncancer HI for the Site was determined to be 3.6 for a future on-site resident.

## **IV. Remedial Actions**

### **Remedy Selection**

The ROD for the Recticon/Allied Steel Superfund Site was signed on June 30, 1993. The selected remedy included the following major components:

- Installation of a municipal water line;
- Excavation and off-site disposal of contaminated soils;
- Extraction and treatment of groundwater with discharge to the Schuylkill River following a pre-design hydrogeologic investigation and well abandonment;
- Long-term groundwater monitoring;
- Verification sampling to determine the source and extent of the copper and zinc found in drainage ditch sediments; and,
- Performance of a Phase I archeological survey.

The Remedial Action Objectives (RAOs) for the Site as established in the ROD were:

1. Prevent human exposure to contaminants in the groundwater.
2. Restore contaminated groundwater to its beneficial use and to background concentrations, if technically practicable, or MCLs, whichever is more stringent.
3. Protect uncontaminated groundwater and surface water for current and future use, and environmental receptors.

EPA divided the Site remedial work into components or operable units (OUs) to facilitate management of the remedial process.

#### Operable Unit 1 (OU1)

OU1 called for the installation of a public water supply to East Coventry Township to an estimated twelve residences and several businesses.

#### Operable Unit 2 (OU2)

OU2 called for the excavation and off-site disposal of contaminated soils. The ROD was amended in August 1997 to change the clean-up standards for some VOCs from "background" to maximum contaminant levels (MCLs). The ROD Amendment was based on the Commonwealth of Pennsylvania's enactment of Land Recycling and Environmental Remediation Standards Act (Act 2) on May 19, 1995, 35 Pa. Stat. § 6026.101 *et seq.*, which established MCLs as the protective groundwater performance standards. The soil performance levels in the ROD were

based on the amount of contamination that could remain in the soil without further contributing to groundwater contamination above “background” concentrations. As a result of the change in groundwater clean-up standards to MCLs, a new soil action level was calculated for soil excavation at the former Recticon facility. Site specific modeling was used to determine the maximum concentration of TCE that could be in the soil and not cause leaching into the groundwater above the MCL. The modeling resulted in a cleanup level of 1,600 ppb of TCE in soil. It was determined that soil excavation was no longer necessary because the concentrations of contaminants in the soil were below the action levels. The ROD Amendment also required that institutional controls be implemented to prohibit soils excavation on the Recticon property (hot spot under the driveway at boring location RA 7, see Figure 3 ) and to prohibit any new wells on Site until the groundwater performance standards are met.

On September 10, 2004, an ESD was issued for the Site. The ESD eliminated the requirement for institutional controls to prohibit dermal contact with the soil on the Recticon property. The ESD identified PADEP Act 2 Standards for TCE direct contact with soils as the cleanup level to establish institutional controls (ICs). The ESD also eliminated the requirement to prohibit the construction of new groundwater wells at the Site, as required by the ROD Amendment.

#### Operable Unit 3 (OU3)

OU3 called for extraction and treatment of groundwater with discharge to the Schuylkill River following a pre-design hydrogeologic investigation and well abandonment. A comprehensive pre-design study of the groundwater at the Site was conducted to further define the outer boundaries of the groundwater plume and the hydraulic properties within the aquifer. Based on the findings of this study, a groundwater extraction and treatment system (pump and treatment) for contaminated groundwater was designed. The design consisted of extraction followed by shallow tray air stripper treatment and granular activated carbon to remove the VOCs followed by discharge to the Schuylkill River.

A second ESD was issued on May 26, 2010 to change the groundwater remedy to enhanced natural bioremediation of TCE using a Hydrogen Reducing Compound (HRC). A successful pilot test, which continued to reduce the levels of TCE in the Site wells, was conducted using this technology. The second ESD also re-instituted the requirement for institutional controls for groundwater use on both the Recticon and Allied Steel properties, since all wells on these properties were not below the cleanup levels.

#### **Remedy Implementation**

The Remedial Design and Remedial Action (RD/RA) were performed by Rockwell under Administrative Order No. III-94-16-DC (issued on March 24, 1994). In 1999 Rockwell spun off its semiconductor business as an independent company called Conexant Systems, Inc. Conexant assumed responsibility for performing the RD/RA as required by the Unilateral Administrative Order (UAO) for the Site.<sup>1</sup>

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<sup>1</sup> On February 28, 2013, Conexant filed a voluntary petition for relief under Chapter 11 of the United States Bankruptcy Code, 11 U.S.C. §§ 101-1532. The United States filed a protective proof of claim on August 21, 2013, asserting that Conexant's injunctive obligations to comply

The Remedial Action (RA) site work for OU1 began in October 1998. The major components of the RA included contracting with the Citizens Utility Home Water Company to run a water line to the area and hooking up 12 residences. The work was completed in November 1999. The RA did not leave waste on-site; therefore, a review of this action is not required.

Verification sampling was conducted on the soils (OU2) to determine the source and extent of copper and zinc contamination at the former Allied Steel facility as required in the ROD. An ecological investigation revealed that the copper and zinc levels far exceeded the Region III Biological Technical Assistance Group screening values, and that any terrestrial or aquatic receptors on or near the Site would be exposed to unacceptable levels of these contaminants. As a result, EPA conducted a time-critical removal at the Site in April 1998. Six inches of contaminated soil were excavated and removed, the area was backfilled with clean soil and grass was planted.

The ROD for the Site also required the excavation of contaminated soils on the former Recticon facility. This requirement was modified by the ROD Amendment which changed the cleanup standard. As a result of this change, further soil excavation was not required, but institutional controls were determined to be needed to prohibit soil excavation. The first ESD for the Site eliminated the requirement for institutional controls.

The remedial construction of the groundwater portion of the remedy (OU3) started in June 1998. The work, performed by Rockwell/Conexant, included the construction of approximately 10 additional monitoring wells and an extraction well and the construction of a groundwater extraction and treatment system to clean the contaminated groundwater. The remedy also included periodic sampling of the groundwater.

A Preliminary Closeout Report was issued on December 14, 1999 for the site.

A Pilot Study was initiated in 2001 to evaluate the effectiveness of using Hydrogen Releasing Compounds (HRC) to enhance the natural bioremediation of TCE in groundwater in order to clean up the groundwater contamination in a timelier manner as compared to the groundwater pump and treat remedy. The study allowed the addition of nontoxic food-grade amendments and other approved supplements to be added to the groundwater, as necessary, to enhance the natural bioremediation activity occurring at the Site. The Pilot Study was conducted between 2001 and 2006, by Roux Associates on behalf of Conexant and utilized several different electron donors to reduce VOC concentrations in the groundwater through reductive dechlorination. The following table summarizes the 13 injections made during the course of the pilot study. The well locations can be found on Figures 4, 5, and 6.

Date of Injection	Material Injected	Method	Injection Area/Wells
June 2001	HRC	Geoprobe	Area of OB-5
January 2003	HRC	Pumping	BR-5, DBR-12S
March 2004	WilClear	Geoprobe	Area of BR-2, BR-3, BR-5, BR-8, DBR-12S, OW-1
May 2004	WilClear	Geoprobe	Area of OB-5, OB-8
December 2004	WilClear	Pumping	OB-2, BR-2, BR-3, OB-5, BR-5, BR-7, OB-8, BR-8, OW-1
January 2005	WilClear	Pumping	BR-2, BR-3, OB-5, BR-5, OB-8, OW-2
March 2005	WilClear	Pumping	OB-2, BR-3, BR-5, OB-8, BR-8, OW-2
May 2005	WilClear	Pumping	OB-2, BR-2, OB-5, BR-5, BR-8, OW-2
June 2005	WilClear	Pumping	OB-2, BR-3, OB-5, BR-5, OB-8, BR-8, OW-1
September 2005	WilClear/SRS	Pumping	BR-2, BR-3, BR-8, DBR-12S, OW-1
October 2005	WilClear/SRS	Pumping	BR-2, BR-8, OW-1
August 2006	CarbStrate™	Pumping	OB-5, BR-5, OB-8, BR-8, AND OW-1
February 2007	CarbStrate™	Pumping	OW-1

The pilot test effectively reduced VOC contamination in the groundwater. An ESD was issued on May 26, 2010, to change the groundwater remedy to the enhanced bioremediation remedy of the pilot study. In the second five-year review, it was noted that the years of extraction and treatment coupled with the injections made during the pilot test successfully reduced the concentration of contaminants. At that time, the contaminant levels in most of the wells were at or slightly above MCLs.

#### Institutional Controls

The ROD at Section IX.3.C provides that, for the groundwater remedy,

[I]nstitutional controls may be provided or maintained to restrict access to those portions of the aquifer where contaminants remain above performance standards. . . . The decision to invoke . . . these measures may be made during implementation or operation of the remedy or during the 5-year reviews of the remedial action. If such a decision is made, EPA shall amend the ROD or issue and Explanation of Significant Differences.

Institutional Controls (ICs) were first addressed in the 1997 ROD Amendment. The ROD Amendment required the implementation of ICs to prohibit soil excavation on the Recticon

property and to prohibit any new wells on the property until groundwater performance standards were met.

The first ESD (2004) stated that ICs were no longer required for the soil and that groundwater cleanup standards were being met, therefore, ICs prohibiting new wells were no longer required. However, in the second ESD (2010), EPA determined that ICs for groundwater were still required since the Site cleanup objectives for groundwater had not been met. The installation of new groundwater wells on the two properties comprising the Site is prohibited until the groundwater at the Site meets the cleanup levels selected in the 1997 ROD Amendment. This land-use restriction has been implemented by existing deed notices which have been placed on the titles for the two Site properties pursuant to a 2002 Prospective Purchaser Agreement with the current owner of the former Allied Steel property, and a 2005 Consent Decree with Wellsford, Inc., the current owner of the Recticon portion of the Site.

The Chester County (PA) Health Departments Rules and Regulations, § 501.12.5.1, currently provide an additional layer of use restriction for the Site groundwater:

501.12.5.1 A permit shall be denied and/or approval to use the water supply shall be withheld in those areas of the County where the Chester County Health Department has been notified by State or Federal agencies or other sources that the area is unsuitable for the installation of on-site water wells due to known groundwater contamination unless the following conditions are met:

501.12.5.1.1 The water well must be tested prior to use and on a yearly basis for all known and suspected contaminants in the area.

501.12.5.1.2 When the water quality analysis shows that the contaminant level exceeds the maximum contaminant levels allowed by the Safe Drinking Water Act, the water must be treated by the appropriate treatment unit before approval can be granted.

## **System Operation/Operation and Maintenance**

Operations and Maintenance (O&M) activities for the Site are focused on the groundwater portion of the remedy (OU3). O&M activities have been conducted by Rockwell or Conexant since the construction of the treatment system was completed. The initial groundwater activity involved pumping and treating the contaminated groundwater from the Site. The water was treated using a shallow tray air stripper and the clean water was discharged to the Schuylkill River. The discharge was in continuous compliance with the substantive requirements of the Clean Water Act National Pollutant Discharge Elimination System (NPDES) and the Clean Air Act. The system treated approximately 200 million gallons of contaminated groundwater prior to being shut down in December 2002. The use of the groundwater remediation system was discontinued to evaluate the use of enhanced bioremediation to reduce the VOC concentration to the cleanup standards.

Since 2010, the contaminant levels have reached MCLs or below and post-remedy sampling, consisting of twelve quarters of groundwater sampling, has been conducted.

Conexant estimates that the annual cost for O&M was approximately \$100,000 using the groundwater extraction process and is approximately \$75,000 using the enhanced natural bioremediation process.

## V. Progress Since the Last Review

The protectiveness statement from the last Five-Year Review (June 2010) was as follows:

*The site is protective of human health and the environment because the remedial actions at all Operable Units are protective. There are no human or environmental receptors exposed to site contaminants and institutional controls are in place. Based on current site ownership and use, the site is expected to remain protective of human health and the environment. EPA will continue to evaluate the effectiveness of the groundwater remedy by reviewing the groundwater sampling data provided by the annual sampling event.*

One issue with a recommendation and follow-up action was identified in the 2010 Five-Year Review as follows:

### Issue

Issue	Issue	Affects Current Protective (Y/N)	Affects Future Protective (Y/N)
1. Slight increase in vinyl chloride in groundwater		N	Y

### Recommendation and Follow-Up Action

Issue	Recommendations And Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness	
					Current (Y/N)	Future (Y/N)
1.	Sample and review groundwater data for vinyl chloride	PRP	EPA	Ongoing	N	Y

Action taken to resolve the issue identified above:

Issue # 1: Monitor vinyl chloride levels – Groundwater sampling has continued quarterly since October 2011. Well OW-1 had one sample (2.7 µg/L) slightly over the action level (2 µg/L) for vinyl chloride during the October 27, 2011 sampling event. Since that time all the wells have been below the vinyl chloride action level.

## **VI. Five-Year Review Process**

### **Administrative Components**

The Recticon/Allied Steel Five-Year Review team was led by Jill Lowe of EPA, Remedial Project Manager (RPM) for the Site, and included Mindi Snoparsky, EPA Hydrogeologist, Linda Watson, EPA Toxicologist, Gina Soscia, Community Involvement Coordinator (CIC) and Joshua Crooks, the Project Officer for PADEP. Conexant was notified in September 2014 that a Five-Year Review was taking place.

### **Community Involvement**

A notice announcing that EPA was conducting a five-year review for the Site was published in the *Pottstown Mercury Newspaper*, on February 25, 2015. The advertisement explained the Five-Year Review process, provided point of contact information, and identified the location of the information repositories for the Site.

### **Document Review**

Documents reviewed in the process of conducting this five-year review included, but are not limited to the following:

- Record of Decision, dated June 30, 1993
- Record of Decision Amendment, dated August 29, 1997
- First Explanation of Significant Differences, dated September 10, 2004
- Second Explanation of Significant Differences, dated May 26, 2010
- Annual Groundwater Sampling Reports

During the review of the decision documents for the Site, an assessment of the applicable or relevant and appropriate requirements (ARARs) was conducted. The groundwater cleanup standards were revised in the ROD Amendment for the Site to be MCLs which are in keeping with Pennsylvania's Land Recycling and Environmental Remediation Standards Act (Act 2). MCLs are still applicable cleanup standards for the Site for TCE, cis-1,2-DCE, and vinyl chloride.

The ROD Amendment for the Site stated that, based on new risk guidance and the limits set by PADEP, the concentrations of contaminants present in the soils did not warrant excavation. Furthermore, groundwater monitoring data showed that the TCE present in the soils at the former Recticon property was not contributing to the contamination in the groundwater.

The groundwater pump and treat system was taken off-line in December 2002. During operation, the applicable portions of the NPDES requirements were met. When the pump and treat is used to dispose of purge water during well sampling events, the NPDES requirements are met.

Other ARARs associated with the remedial action pertained to the construction process and were adhered to during the construction phase as appropriate.

## Data Review

The Site groundwater reached cleanup standards during the 2011 annual sampling. In accordance with the ROD, twelve (12) quarters of groundwater sampling were performed to establish that the cleanup objectives have been met at the Site. Attachment A contains the results of the quarterly sampling. The first quarterly sampling, conducted on October 27, 2011, identified 2.7 micrograms/Liter ( $\mu\text{g}/\text{L}$ ) of vinyl chloride, which has a MCL of 2  $\mu\text{g}/\text{L}$ , in well OW-1. No other samples identified any COC above the action level throughout the twelve quarters of sampling. Figures 4, 5, and 6 depict the sampling results for the last quarter sampled (September 2014) in the overburden wells, shallow bedrock wells and the lower bedrock wells, respectively.

Attachment B contains historical sampling results for TCE, cis-1,2-dichloroethene (DCE) and vinyl chloride.

Since the data collected during the last 12 rounds of quarterly sampling suggested that groundwater performance standards were, met, EPA toxicologist performed a risk assessment using the 2014 sampling results. Contaminants were compared against EPA's Tap Water Risk Screening Level table (RSL) and if a contaminant was detected above EPA's risk-based screening level, during any of the 2014 sampling events, a risk assessment was performed. The data were grouped in Exposure Areas (EAs) based on groundwater sampling locations (See below and Figure 2). Since the dataset for each EA is three samples or less, the maximum detected concentration is used to evaluate risk. The following EAs were established based on groundwater sampling locations (see Figure 2):

- EA1 – Former Recticon Property (OB-2, BR-2, BR-3, DBR-12S)
- EA2 – Former Allied Steel Property (BR-7, OB-8, BR-8, OW-1, OW-2)
- EA3 – Discharge Pipeline Area/Linfield Road (DBR-9D, BR-14)

### EA1

For the January 30, 2014 sampling event, TCE was identified above EPA's tap water RSL at a maximum detected concentration of 3.4  $\mu\text{g}/\text{L}$ . However, non-cancer and cancer risk were both calculated to be below EPA's acceptable criteria. More recent TCE detections (September 9, 2014 – 0.64  $\mu\text{g}/\text{L}$  and March 19, 2014 – 1.5  $\mu\text{g}/\text{L}$ ) were also below EPA's acceptable criteria. During the March sample event, chloroform was also detected above its RSL at a maximum detected concentration of 0.31  $\mu\text{g}/\text{L}$ . However, non-cancer and cancer risk were calculated and do not exceed EPA's risk criteria. For risk details, see Attachment C.

### EA2

For the January 30, 2014 sampling event, TCE was detected at a maximum concentration of 1.2  $\mu\text{g}/\text{L}$ , for March 19, 2014 the maximum was 1.8  $\mu\text{g}/\text{L}$  and for September 9, 2014 the maximum was 0.71  $\mu\text{g}/\text{L}$ . Since all EA2 TCE detections were below concentrations at EA1 (maximum of 3.4  $\mu\text{g}/\text{L}$ ), a risk assessment was not performed since it is apparent the risk results

would be below EPA's acceptable criteria based on the level of detections. In addition, vinyl chloride was detected above its RSL at a maximum detected concentration of 1.2 ug/L during the June 18, 2014 sampling event. However, non-cancer and cancer risk were calculated to be below EPA's acceptable risk criteria. For risk details, see Attachment C.

#### **EA3**

For the January 31, 2014 sampling event, TCE was detected at a maximum concentration of 0.57 ug/L, for March 20, 2014 the maximum was 0.73 ug/L and for September 10, 2014 the maximum was 0.46 ug/L. Since all EA3 TCE detections are below concentrations at EA1 (maximum of 3.4 ug/L), a risk assessment was not performed since it is apparent the risk results would be below EPA's acceptable criteria based on the level of detections and the previous risk results. The one vinyl chloride detection (0.41 ug/L) is below the detection of vinyl chloride in EA2; therefore, a risk assessment was not performed since it is apparent the risk results would be below EPA's acceptable criteria. For risk details, see Attachment C.

All cumulative risk results are below or within EPA's acceptable risk criteria at EA1, EA2 and EA3. Therefore, Site groundwater has met the criteria established to meet the Site RAOS.

The potential for vapor intrusion was determined to be very low in the previous Five-Year Review. Since that assessment, TCE levels have been below the MCL, which strengthens the conclusion that vapor intrusion is not a concern at this Site.

#### **Site Inspection**

A Site visit was conducted on January 21, 2015 as part of the Five-Year Review. The Site visit was attended by Jill Lowe, EPA RPM, Gina Soscia, EPA Community Involvement Coordinator (CIC), Josh Crooks, PADEP Project Officer, Bruce McClain, PADEP Hydrologist, Monica McHugh and Tom Buggey with Conexant's consulting firm, Mr. Dick Heylmun, the current owner of the former Allied Steel property, and his attorney David Allebach.

The Site visit included a discussion on the next steps for the Site and a Site tour. The discussions were focused on how and when Conexant will dismantle the treatment equipment and remove it from the property now owned by Mr. Heylmun. The treatment equipment has only been used to process purge water collected during sampling of the monitoring wells for the past twelve years. Mr. Heylmun was also concerned about the removal of a telephone pole, which is located in the property driveway and supplies power to the treatment equipment. Conexant's consultant will work with the Township and Mr. Heylmun to reach an agreement regarding the removal.

#### **Interviews**

On February 25, 2015, EPA CIC Gina Soscia conducted a telephone interview with the Township Manager of East Coventry, PA. The purpose of the interview was to inform the Township of the Five-Year Review and discuss its knowledge and perception of EPA's activities at the Recticon/Allied Steel Site. The Township has been satisfied with the project and did not express any concerns regarding the Site or the Five-Year Review. The Township stated that

since the site has met its clean up goals, it will pursue the removal of the telephone pole with the property owner, Mr. Heylmun.

## VII. Technical Assessment

- *Question A: Is the remedy functioning as intended by the decision documents?*

The remedy functioned as intended by the RODs and ESDs for the Site. A time-critical removal was performed in 1998 to excavate soils contaminated with zinc and copper. A municipal water line was installed in November 1999. The Site groundwater was first remediated using groundwater pump and treat followed by enhanced natural bioremediation. The Site groundwater now meets the performance standards established in the ROD.

- *Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives (RAOs) used at the time of remedy selection still valid?*

### Changes in Standards and To Be Considered (TBCs)

*Have standards identified in the ROD been revised, and does this call into question the protectiveness of the remedy? Do newly promulgated standards call into question the protectiveness of the remedy? Have TBCs used in selecting cleanup levels at the site changed, and could this affect the protectiveness of the remedy?*

The Recticon/Allied Steel ROD identified trichloroethene, tetrachloroethene, vinyl chloride, 1,1 dichloroethene, 1,2 dichloroethane, 1,2 dichloroethene, arsenic and beryllium as COCs for the Site. The ROD performance standard was MCLs or background, whichever was more stringent for all the COCs except arsenic and beryllium. The 1997 ROD Amendment identified MCLs as the performance standard, eliminating the requirement to reach background levels. Neither the ROD nor ROD Amendment mentioned performance standards for either arsenic or beryllium.

The Recticon/Allied Steel RI discusses arsenic and beryllium in the groundwater. The RI states that arsenic in groundwater ranged from not detected above the detection limit of 2 µg/L to 3.8 µg/L in the unfiltered overburden monitoring well samples and not detected to 2.4 µg/L in the unfiltered bedrock monitoring wells. The range of detections were well below the then current MCL of 50 µg/L for arsenic. Arsenic was not detected above the detection limit of 2 µg/L in all the filtered samples. The current MCL for arsenic is 10 µg/L. Arsenic was never detected above the current MCL.

In the RI, beryllium ranged from not detected to 2.4 µg/L in the unfiltered bedrock and overburden monitoring well samples. The detected levels in the groundwater samples were not significantly different from the beryllium concentrations in the method blank. The current MCL for beryllium is 4 µg/L, therefore, the last detected concentration of beryllium, sampled on April 2, 1991, is below the current MCL.

The groundwater standards currently in effect were set in the 1997 ROD Amendment: 1,2-dichloroethane – 5 µg/L, 1,1-dichloroethylene – 7 µg/L, cis-1,2-dichloroethylene – 70 µg/L,

tetrachloroethene – 5 µg/L, trichloroethene – 5 µg/L, vinyl chloride – 2 µg/L. These standards are at current Federal MCLs.

#### Changes in Exposure Pathways

*Has land use or expected land use on or near the site changed?*

Local land use still remains a mixture of light industrial/commercial, agricultural, and residential.

*Have human health or ecological routes of exposure or receptors been newly identified or changed in a way that could affect the protectiveness of the remedy? Are there newly identified contaminants or contaminant sources? Are there unanticipated toxic byproducts of the remedy not previously addressed by the decision documents? Have physical site conditions or the understanding of these conditions changed in a way that could affect the protectiveness of the remedy?*

No.

#### Changes in Toxicity and Other Contaminant Characteristics

*Have toxicity factors for contaminants of concern at the site changed in a way that could affect the protectiveness of the remedy? Have other contaminant characteristics changed in a way that could affect the protectiveness of the remedy?*

Of the toxicity changes, some have increased while others have decreased throughout the cleanup process. The Site Toxicologist performed a risk assessment based on the October 2014 sampling event (see Data Review section of this report). All risk results are below or within EPA's acceptable risk criteria. The Site groundwater has met the criteria established to meet the Site RAOs.

#### Changes in Risk Assessment Methods

*Have standardized risk assessment methodologies changed in a way that could affect the protectiveness of the remedy?*

There have been many changes in EPA's risk assessment guidance since the original risk assessment was performed, however, these changes were taken into account when the Site Toxicologist performed a risk assessment based on the 2014 sampling event (see Data Review section of this report). All risk results are below or within EPA's acceptable risk criteria. The Site groundwater has met the criteria established to meet the Site RAOs.

#### Expected Progress Towards Meeting RAOs

*Is remedy progressing as expected?*

The remedy has met the RAOs established for the Site.

*Question C: Has any other information come to light that could call into question the protectiveness of the remedy?*

No other information has come to light that would call into question the protectiveness of the remedy.

### **Technical Assessment Summary**

The Remedial Action (RA) for OU1 (waterline) was completed in November 1999. Site soil contamination (OU2) was excavated and disposed of during removal actions. The 1993 ROD's requirement of additional soil excavation was eliminated in a 1997 ROD Amendment. The Site groundwater reached cleanup standards during the 2011 annual sampling. In accordance with the ROD, twelve quarters of groundwater sampling were performed to establish that the cleanup objectives have been met at the Site. Attachment A contains the results of the quarterly sampling. The first quarterly sampling, conducted on October 27, 2011, identified 2.7 µg/L of vinyl chloride, which has a MCL of 2 µg/L, in well OW-1. No other samples identified any COC above the action level throughout the twelve quarters of sampling.

A risk assessment was completed using 2014 sampling results. All cumulative risk results are below or within EPA's acceptable risk criteria. The Site groundwater has met the criteria established to meet the Site RAOs.

### **VIII. Issues**

No issues were identified during the Five-Year Review process.

### **IX. Recommendations and Follow-up Actions**

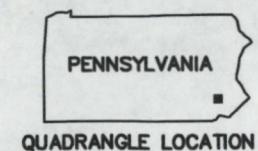
There are no recommendations and follow-up actions as a result of this Five-Year Review.

### **X. Protectiveness Statement**

The Site is protective of human health and the environment. The RAOs established for the Site have been accomplished.

### **XI. Next Review**

EPA will not conduct another five-year review for this Site since the RAOs have been accomplished.



## SOURCE

- 1.) U.S.G.S. PHOENIXVILLE, PENNSYLVANIA, QUADRANGLE 1955  
7.5 MINUTES SERIES (TOPOGRAPHIC)  
PHOTOREVISED 1983.

Title:

## SITE LOCATION MAP

PARKER FORD, PENNSYLVANIA

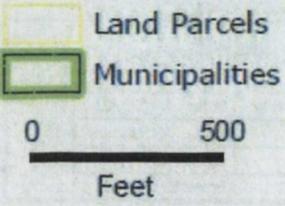
Prepared For:

RECTICON/ALLIED STEEL SITE

**ROUX**  
ROUX ASSOCIATES, INC.  
Environmental Consulting  
& Management

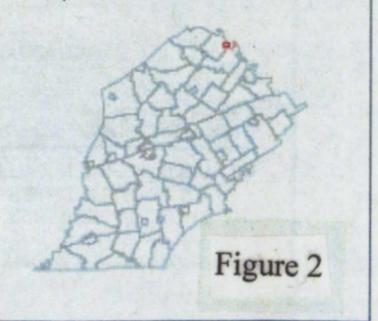
Compiled by: M.M.	Date: 05/28/03	FIGURE
Prepared by: J.R.M.	Scale: AS SHOWN	
Project Mgr: M.M.	Office: NJ	
File No: 107002017	Project: 107002J	

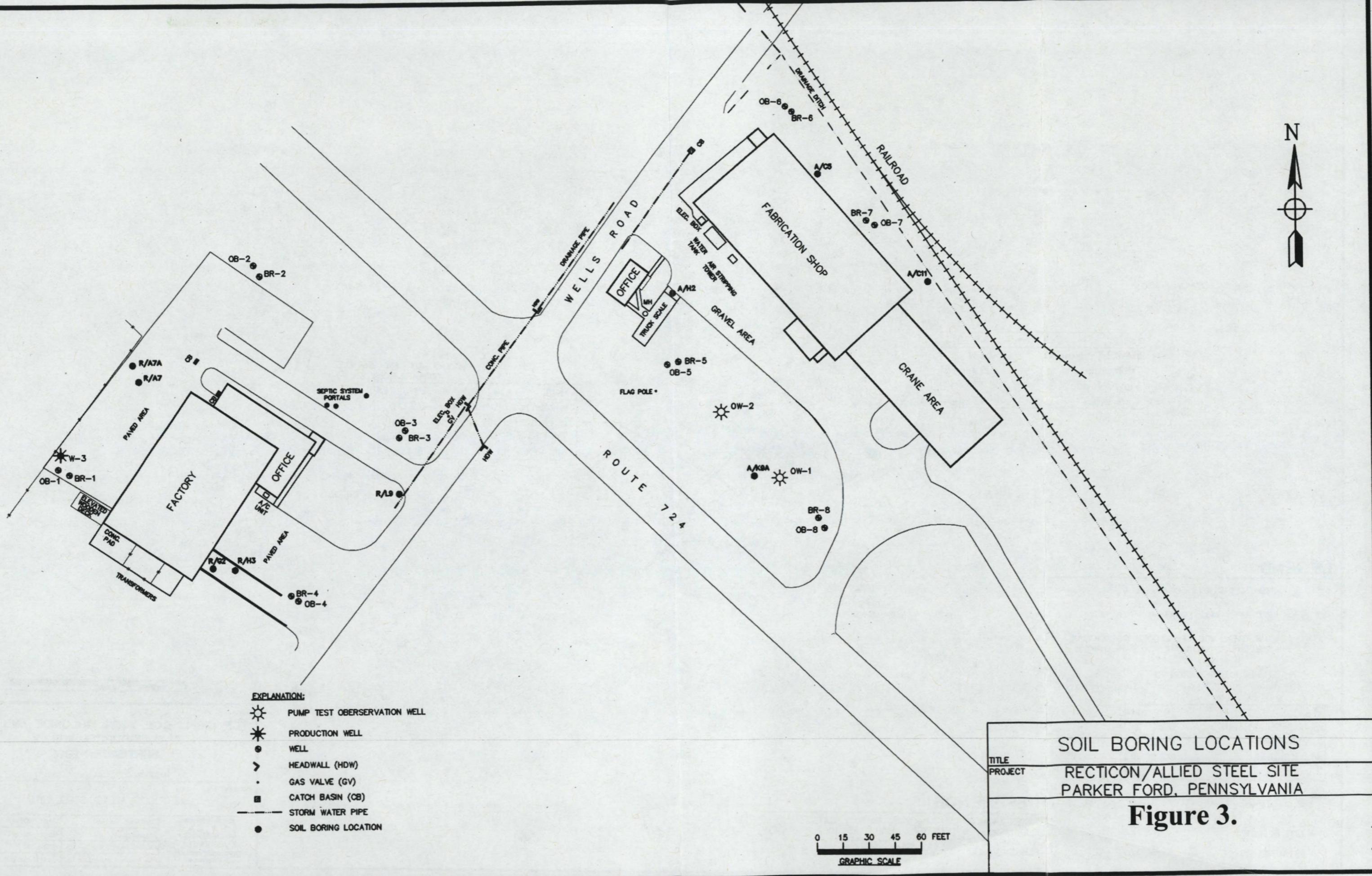
## Recticon/Allied Steel Superfund Site



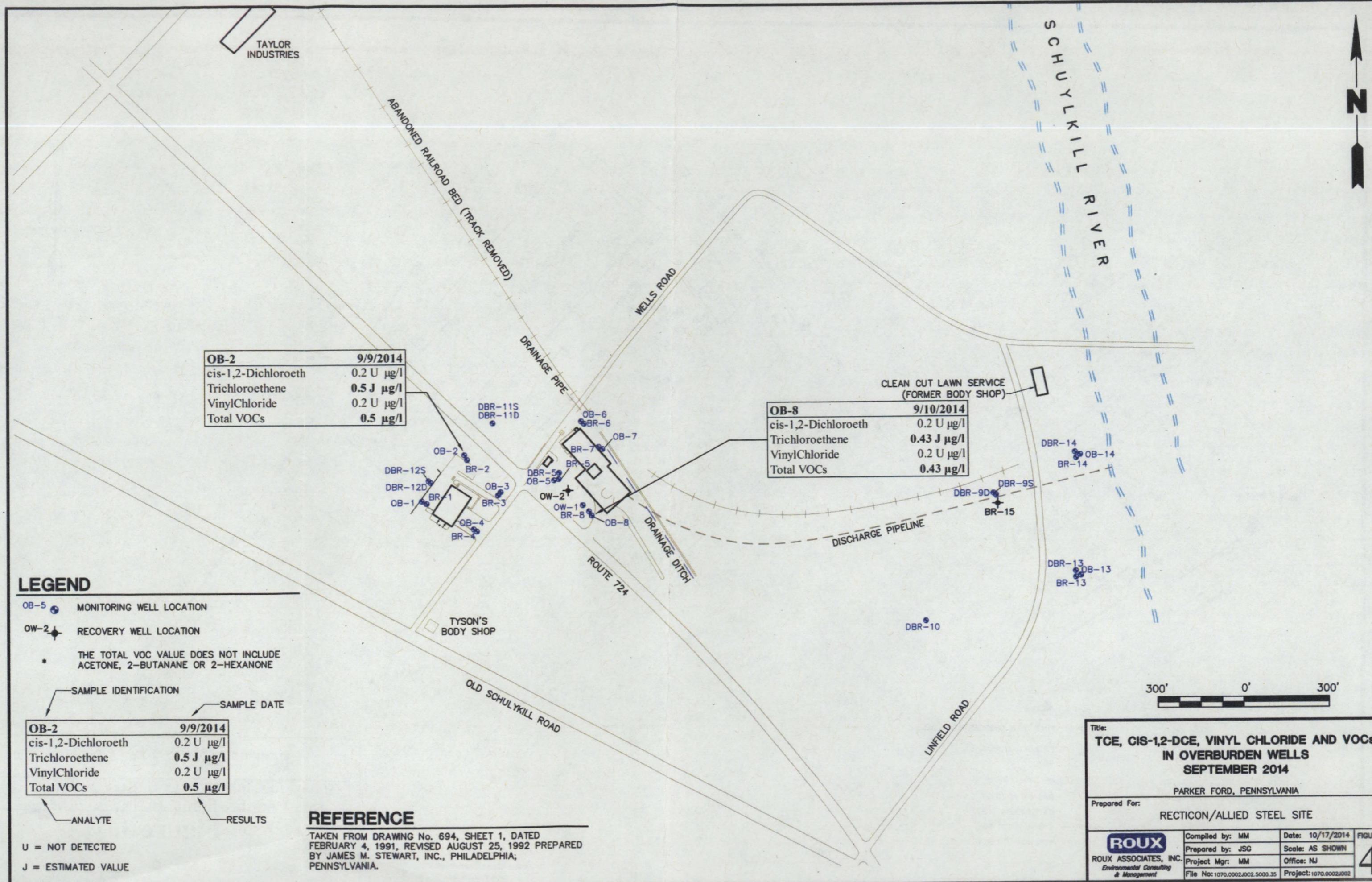
Map Created: 4/1/2010

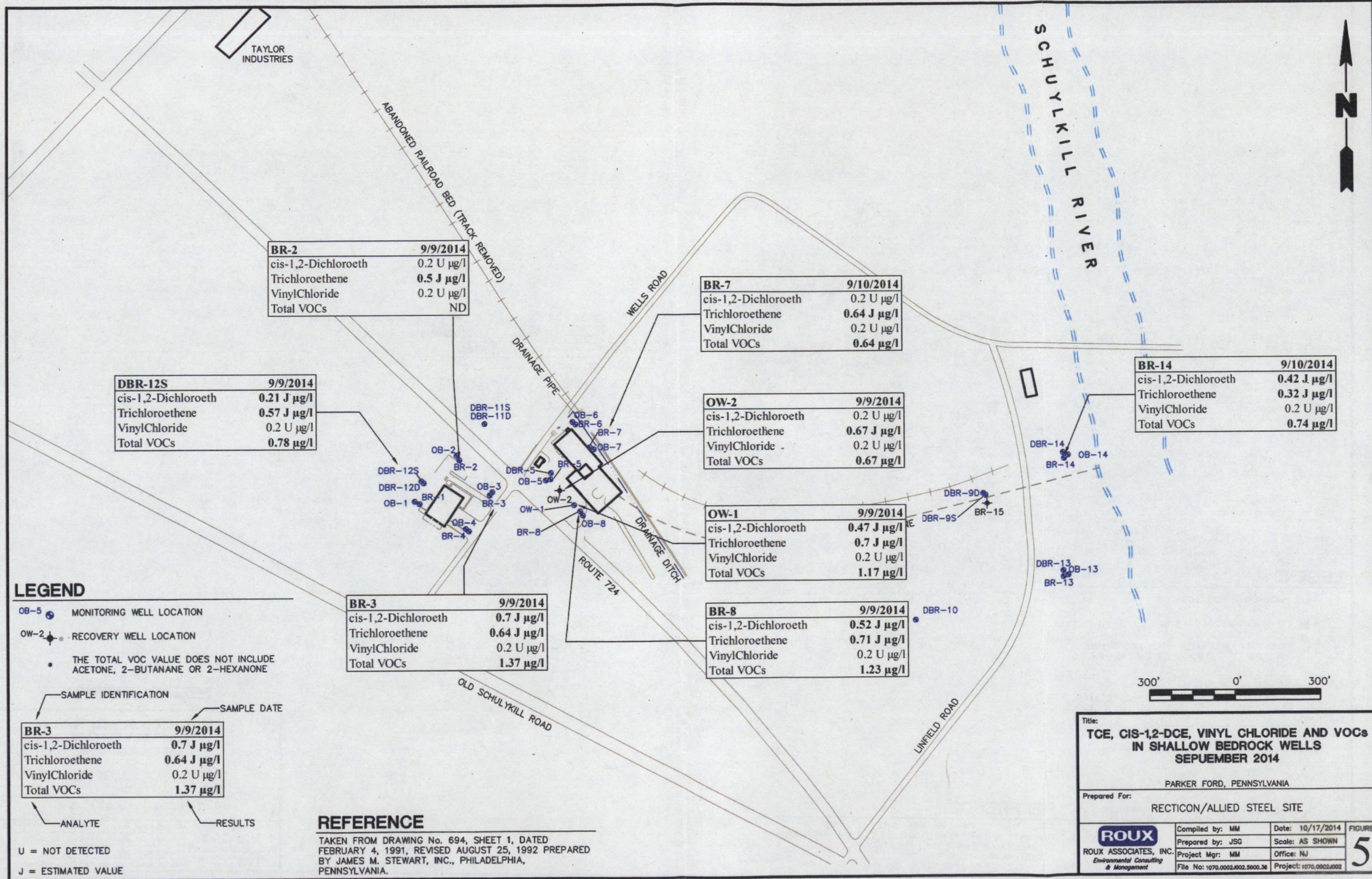
Limitation of Liability and Use: County of Chester, Pennsylvania makes no claims as to the completeness, accuracy or content of any data contained herein, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred with respect to the information or data furnished herein.



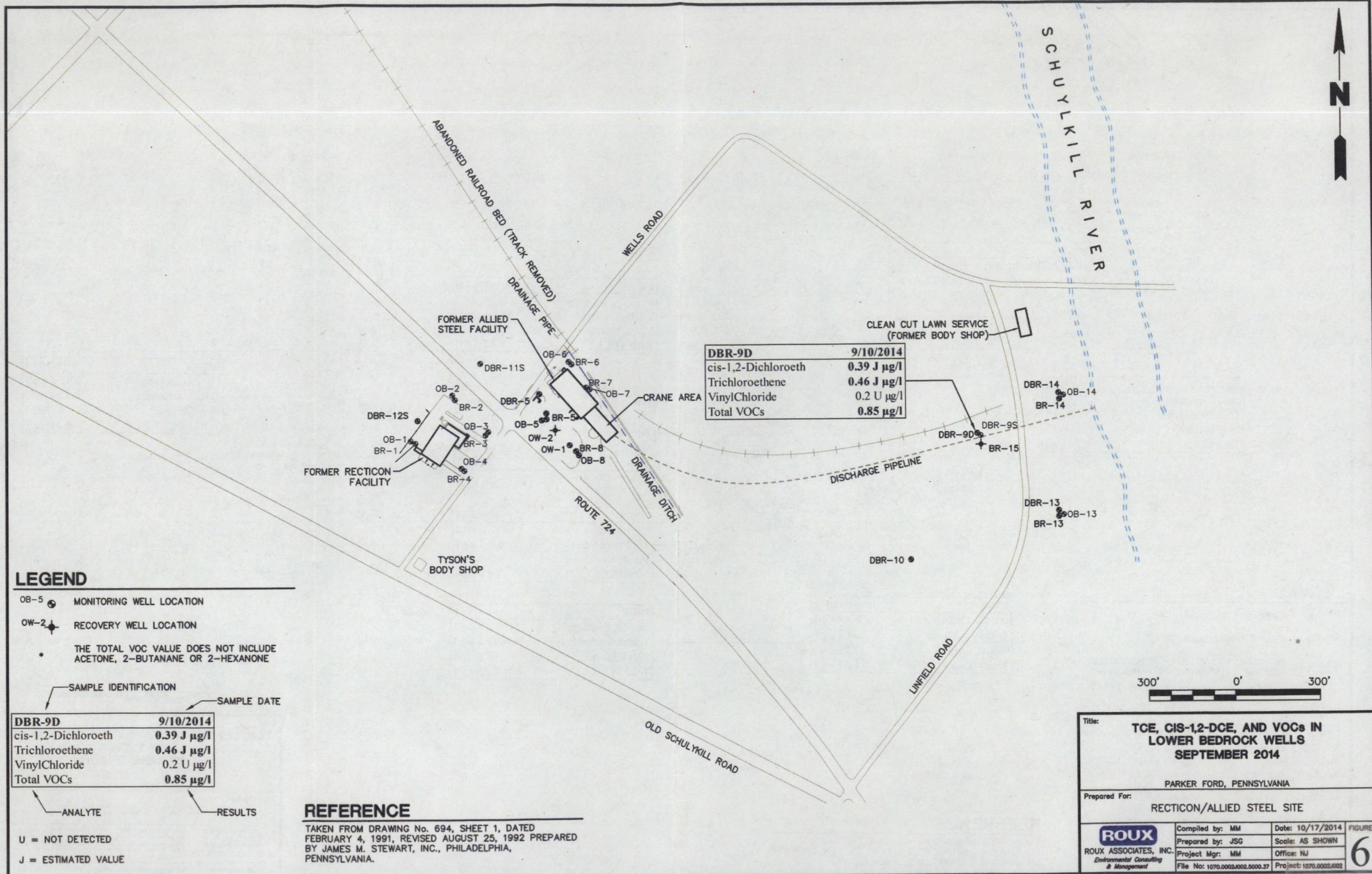


**Figure 3.**





N



**ATTACHMENT A**

**Groundwater Sample Analytical Results October 2011 through September 2014**

**Recticon/Allied Steel**

## Groundwater Sample Analytical Results - October 2011 through September 2014, Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	OB - 2											
		C4362-05 10/26/2011	D1958-02 3/21/2012	D3086-02 6/12/2012	D4296-02 9/18/2012	DS223-02 12/11/2012	E1637-02 3/19/2013	E2623-02 6/17/2013	E3658-02 9/9/2013	F1313-02 1/30/2014	F1742-02 3/19/2014	F2818-02 6/17/2014	F3895-01 9/9/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dioxane	NS	-	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	70	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	2.7	1.1	1.1	1.1	1.3	0.68 J	0.77 J	0.2 U	3.4	1.5	0.2 U	0.5 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

## Groundwater Sample Analytical Results - October 2011 through September 2014, Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	OB - 2											
		C4362-05 10/26/2011	D1958-02 3/21/2012	D3086-02 6/12/2012	D4296-02 9/18/2012	DS223-02 12/11/2012	E1637-02 3/19/2013	E2623-02 6/17/2013	E3658-02 9/9/2013	F1313-02 1/30/2014	F1742-02 3/19/2014	F2818-02 6/17/2014	F3895-01 9/9/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Total Target VOCs	NS	<b>2.7</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.3</b>	<b>0.68</b>	<b>0.77</b>	ND	4.27	2.25	ND	0.5
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	6 J	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 2											
		C4362-04 10/26/2011	D1958-03 3/21/2012	D3086-03 6/12/2012	D4296-03 9/18/2012	D5223-03 12/11/2012	E1637-03 3/19/2013	E2623-03 6/17/2013	E3658-03 9/9/2013	F1313-03 1/30/2014	F1742-03 3/19/2014	F2818-01 6/17/2014	F3895-01 9/9/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dioxane	NS	-	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	3.6 J	13 J	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.96 J	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	70	0.75 J	0.5 U	0.74 J	0.5 U	0.5 U	0.5 U	0.2 U	0.82 J	1.1	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Syrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	1	0.5 U	1.9	0.42 J	0.5 U	0.5 J	0.5 U	1	0.9 J	0.65 J	0.2 U	0.5 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

## Groundwater Sample Analytical Results - October 2011 through September 2014, Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 2											
		C4362-04 10/26/2011	D1958-03 3/21/2012	D3086-03 6/12/2012	D4296-03 9/18/2012	D5223-03 12/11/2012	E1637-03 3/19/2013	E2623-03 6/17/2013	E3658-03 9/9/2013	F1313-03 1/30/2014	F1742-03 3/19/2014	F2818-01 6/17/2014	F3895-01 9/9/2014
Vinyl Chloride	2	0.34 U	<b>0.97 J</b>	0.5 U	0.5 U	0.5 U	<b>0.58 J</b>	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Total Target VOCs	NS	<b>1.75</b>	<b>0.97</b>	<b>2.64</b>	1.38	3.6	<b>2.38</b>	ND	ND	1.72	1.75	ND	ND
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	6.8 J	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 3											
		C4362-06 10/26/2011	D1958-04 3/21/2012	D3086-04 6/12/2012	D4296-05 9/18/2012	DS223-04 12/11/2012	E1637-04 3/19/2013	E2623-04 6/17/2013	E3658-04 9/9/2013	F1313-04 1/30/2014	F1742-04 3/19/2014	F2818-04 6/17/2014	F3895-03 9/9/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	70	1.6	1.4	2.2	2.6	2	1.4	1.3	0.2 U	1.2	1.2	0.2 U	0.7 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	1 J	1.1	1.1	1.6	0.5 U	0.72 J	0.58 J	0.67 J	0.87 J	0.76 J	0.2 U	0.64 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 3											
		C4362-06 10/26/2011	D1958-04 3/21/2012	D3086-04 6/12/2012	D4296-05 9/18/2012	DS223-04 12/11/2012	E1637-04 3/19/2013	E2623-04 6/17/2013	E3658-04 9/9/2013	F1313-04 1/30/2014	F1742-04 3/19/2014	F2818-04 6/17/2014	F3895-03 9/9/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.2 U	0.4 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Total Target VOCs	NS	2.6	2.5	3.3	4.2	2	2.12	1.88	0.67	2.07	1.96	ND	1.37
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run.

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL 10/27/2011	C4362-08 3/22/2012	D1958-08 6/13/2012	D3086-16 6/13/2012	D4296-14 9/19/2012	D5223-13 12/12/2012	E1637-11 3/20/2013	E2623-09 6/18/2013	E3658-11 9/10/2013	F1313-12 1/31/2014	F1742-12 3/20/2014	F2818-08 6/18/2014	F3895-13 9/10/2014
BR - 7													
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethene	70	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	1.8	1.5	1.2	1.4	1.7	1.4	1	0.91 J	0.67 J	1.6	0.2 U	0.64 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 7											
		C4362-08 10/27/2011	D1958-08 3/22/2012	D3086-16 6/13/2012	D4296-14 9/19/2012	DS223-13 12/12/2012	E1637-11 3/20/2013	E2623-09 6/18/2013	E3658-11 9/10/2013	F1313-12 1/31/2014	F1742-12 3/20/2014	F2818-08 6/18/2014	F3895-13 9/10/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.85 J	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U				
Total Target VOCs	NS	1.8	1.5	1.2	1.4	1.7	1.4	1	0.91	0.67	1.6	0.85	0.64
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank

TB = Trip Blank

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements.

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	OB - 8											
		C4362-10 10/27/2011	D1958-11 3/12/2012	D3086-12 6/13/2012	D4296-01 9/18/2012	DS223-12 12/12/2012	E1637-10 3/20/2013	E2623-06 6/17/2013	E3658-09 9/10/2013	F1313-11 1/31/2014	F1742-11 3/20/2014	F2818-06 6/17/2014	F3895-12 9/10/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	3.9 J	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethene	70	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	1	0.81 J	0.77 J	0.5 U	0.82 J	0.71 J	0.5 U	0.2 U	0.7 J	0.89 J	0.2 U	0.43 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	OB - 8											
		C4362-10 10/27/2011	D1958-11 3/22/2012	D3086-12 6/13/2012	D4296-01 9/18/2012	DS223-12 12/12/2012	E1637-10 3/20/2013	E2623-06 6/17/2013	E3658-09 9/10/2013	F1313-11 1/31/2014	F1742-11 3/20/2014	F2818-06 5/17/2014	F3895-12 9/10/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.2 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U				
Total Target VOCs	NS	1	0.81	0.77	3.9	0.82	0.71	ND	ND	0.7	0.89	ND	0.43
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10 J

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL 10/27/2011	C4362-09 3/22/2012	D1958-12 6/13/2012	D3086-11 6/13/2012	D4296-12 9/19/2012	DS223-11 12/12/2012	E1637-06 3/19/2013	E2623-08 6/18/2013	E3658-08 9/10/2013	F1313-10 1/31/2014	F1742-06 3/19/2014	F2818-11 6/18/2014	F3895-11 9/9/2014
BR - 8													
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.2 J	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromochloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromodichloromethane	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethene	70	4	1.5	1.4	1.4	1.2	0.92 J	0.91 J	0.2 U	0.73 J	1.7	0.93 J	0.52 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	5.2	2.7	2.9	2.4	2	1.5	1.6	1.6	1.2	1.8	0.2 U	0.71 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR - 8											
		C4362-09 10/27/2011	D1958-12 3/22/2012	D3086-11 6/13/2012	D4296-12 9/19/2012	D5223-11 12/12/2012	E1637-06 3/19/2013	E2623-08 6/18/2013	E3658-08 9/10/2013	F1313-10 1/31/2014	F1742-06 3/19/2014	F2818-11 6/18/2014	F3895-11 9/9/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
m/p-Xylenes	NS	0.95 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U				
Total Target VOCs	NS	9.2	4.2	4.3	3.8	3.2	4.62	2.51	1.6	0.73	3.5	1.93	1.23
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

~ = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	DBR-9D											
		C4362-02 10/26/2011	D1958-07 3/22/2012	D3086-15 6/13/2012	D4296-16 9/19/2012	D5223-15 12/12/2012	E1637-13 3/20/2013	E2623-11 6/18/2013	E3658-13 9/10/2013	F1313-14 1/31/2014	F1742-14 3/20/2014	F2818-13 6/18/2014	F3895-15 9/10/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethane	70	1.2	0.5 U	0.41 J	0.51 J	0.49 J	0.5 U	0.46 J	0.2 U	0.2 U	0.94 J	0.2 U	0.39 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	0.28 U	0.7 J	0.79 J	1	0.48 J	0.66 J	0.6 J	0.57 J	0.69 J	0.2 U	0.2 U	0.46 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014. Reclicon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	DBR-9D											
		C4362-02 10/26/2011	D1958-07 3/22/2012	D3086-15 6/13/2012	D4296-16 9/19/2012	DS223-15 12/12/2012	E1637-13 3/20/2013	E2623-11 6/18/2013	E3658-13 9/10/2013	F1313-14 1/31/2014	F1742-14 3/20/2014	F2818-13 6/18/2014	F3895-15 9/10/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.41 J	0.2 U	
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.4 U	
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	
Total Target VOCs	NS	1.2	0.7	1.2	1.3	1.49	0.48	1.12	0.6	0.57	1.63	0.41	0.85
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements.

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL 10/26/2011	C4362-03 D1958-01 3/21/2012	D3086-01 6/12/2012	D4296-04 9/18/2012	DS223-01 12/11/2012	E1637-01 3/19/2013	E2623-01 6/17/2013	E3658-01 9/9/2013	F1313-01 1/30/2014	F1742-01 3/19/2014	F2818-03 6/17/2014	F3895-04 9/9/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>												
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotetrafluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dioxane	NS	-	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.2 J	2.5 U	2.5 U	5.7	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	790 D	1700 D	1700 D	110	140	430	210	170	160	18.2
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	NS	-	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	NS	0.2 U	0.5 U	0.5 U	1.7	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	70	0.42 J	0.5 U	0.5 U	1.2	1.1	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.21 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	0.28 U	0.4 J	0.65 J	2.1	0.75 J	0.41 J	0.94 J	0.59 J	0.67 J	0.3 J	0.2 U
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	DBR-12S											
		C4362-03 10/26/2011	D1958-01 3/21/2012	D3086-01 6/12/2012	D4296-04 9/18/2012	D5223-01 12/11/2012	E1637-01 3/19/2013	E2623-01 6/17/2013	E3658-01 9/9/2013	F1313-01 1/30/2014	F1742-01 3/19/2014	F2818-03 6/17/2014	F3895-04 9/9/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Total Target VOCs	NS	0.42	790.4	1700.65	1707.2	111.85	140.41	436.64	210.59	170.67	160.3	ND	18.98
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank

TB = Trix Blank

NS = No standard currently established.

-- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID		BR-14											
Lab Sample ID	USEPA MCL	C4363-01 10/26/2011	D1958-06 3/22/2012	D3086-17 6/13/2012	D4296-15 9/19/2012	DS223-14 12/12/2012	E1637-12 3/20/2013	E2623-10 6/18/2013	E3658-12 9/10/2013	F1313-13 1/31/2014	F1742-13 3/20/2014	F2818-12 6/18/2014	F3895-14 9/10/2014
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	5.5	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethene	70	1	0.5 U	0.5 U	0.83 J	0.82 J	0.64 J	0.7 J	0.2 U	0.58 J	1	0.2 U	0.42 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	0.75 J	0.5 U	0.5 U	0.68 J	0.54 J	0.5 U	0.51 J	0.53 J	0.51 J	0.73 J	0.2 U	0.32 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	BR-14											
		C4362-01 10/26/2011	D1958-06 3/22/2012	D3086-17 6/13/2012	D4296-15 9/19/2012	DS223-14 12/12/2012	E1637-12 3/20/2013	E2623-10 6/18/2013	E3658-12 9/10/2013	F1313-13 1/31/2014	F1742-13 3/20/2014	F2818-12 6/18/2014	F3895-14 9/10/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U				
Total Target VOCs	NS	1.75	ND	ND	1.51	6.86	0.64	1.21	0.53	1.09	1.73	ND	0.74
Total VOC TICs	NS	ND	ND	ND	ND	ND	0.53 J	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank

TB = Trip Blank

NS = No standard currently established.

- = Sample not analyzed

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements.

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL 10/27/2011	C4362-11 3/22/2012	D1958-09 6/13/2012	D3086-09 6/19/2012	D4296-11 9/19/2012	DS223-10 12/12/2012	E1637-15 3/20/2013	E2623-07 6/18/2013	E3658-07 9/10/2013	F1313-08 1/30/2014	F1742-10 3/20/2014	F2818-07 6/18/2014	F3895-08 9/9/2014
<b>OW-1</b>													
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1,2-Trichlorofluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
cis-1,2-Dichloroethene	70	3.3	1.5	1.7	1.4	1.3	0.94 J	0.96 J	0.2 U	0.58 J	1.6	0.85 J	0.47 J
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.4 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.5 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Sterene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Toluene	1000	0.37 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
trans-1,2-Dichloroethene	100	1.9	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
Trichloroethene	5	4.3	2.6	2.9	3.4	1.2	1.2	1.1	1.2	0.95 J	1.6	0.2 U	0.7 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

## Groundwater Sample Analytical Results - October 2011 through September 2014, Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

OW-1													
Sample ID	USEPA MCL	C4362-11 10/27/2011	D1958-09 3/22/2012	D3086-09 6/13/2012	D4296-11 9/19/2012	DS223-10 12/12/2012	E1637-15 3/20/2013	E2623-07 6/18/2013	E3658-07 9/10/2013	F1313-08 1/30/2014	F1742-10 3/20/2014	F2818-07 6/18/2014	F3895-08 9/9/2014
Lab Sample ID													
Sample Date													
Vinyl Chloride	2	2.7	1.1	1.2	0.5 U	0.88 J	0.58 J	0.5 U	0.2 U	0.2 U	0.99 J	1.2	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U				
Total Target VOCs	NS	12.2	5.1	5.8	4.8	3.38	2.72	2.06	1.2	1.53	4.19	2.05	1.17
Total VOC TICs	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank

TB = Trip Blank

NS = No standard currently established.

- = Sample not analyzed.

µg/l = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL 12/7/2011	C4907-01 3/22/2012	D1958-10 6/13/2012	D3086-10 9/18/2012	D4296-06 12/11/2012	DS323-05 3/19/2013	E1637-05 6/17/2013	E2623-05 9/9/2013	E3658-05 1/30/2014	F1313-07 F1742-05 3/19/2014	F1742-05 3/19/2014	F2818-05 6/17/2014	F3895-07 9/9/2014
<b>OW-2</b>													
<b>VOLATILE ORGANIC COMPOUNDS - EPA 624 (µg/l)</b>													
1,1,1-Trichloroethane	200	0.4 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Tetrachloroethane	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichloroethane	5	0.38 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1,2-Trichlorotrifluoroethane	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,1-Dichloroethene	7	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,3-Trichlorobenzene	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2,4-Trichlorobenzene	70	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromo-3-Chloropropane	0.2	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dibromoethane	0.05	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichlorobenzene	600	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloroethane	5	0.48 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,2-Dichloropropane	5	0.46 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,3-Dichlorobenzene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dichlorobenzene	75	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1,4-Dioxane	NS	—	10 U	10 U	10 U	10 U	50 U	100 U	100 U	100 U	100 U	100 U	100 U
2-Butanone	NS	1.3 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
2-Hexanone	NS	1.9 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-Pentanone	NS	2.1 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Acetone	NS	0.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	1 U	1 U	1 U	1 U	1 U
Benzene	5	0.32 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromochloromethane	NS	—	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	NS	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromoform	NS	0.47 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Bromomethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Disulfide	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon Tetrachloride	5	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chlorobenzene	100	0.49 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloroethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroform	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Chloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
cis-1,2-Dichloroethene	70	0.72 J	0.5 U	0.42 J	0.5 U	0.43 J	0.5 U	0.2 U	0.35 J	0.39 J	0.2 U	0.2 U	0.2 U
cis-1,3-Dichloropropene	NS	0.31 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Cyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dibromochloromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Dichlorodifluoromethane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Ethyl Benzene	700	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Isopropylbenzene	NS	0.45 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methyl Acetate	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methyl tert-butyl Ether	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Methylcyclohexane	NS	0.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Methylene Chloride	5	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Styrene	100	0.36 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
t-1,3-Dichloropropene	NS	0.29 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Tetrachloroethene	5	0.27 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Toluene	1000	2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-1,2-Dichloroethene	100	0.41 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Trichloroethene	5	2.4	1.3	1.4	1.2	1.3	1	0.92 J	0.96 J	0.56 J	1.2	0.2 U	0.67 J
Trichlorofluoromethane	NS	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U

## Groundwater Sample Analytical Results - October 2011 through September 2014. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Sample ID Lab Sample ID Sample Date	USEPA MCL	OW-2											
		C4907-01 12/7/2011	D1958-10 3/22/2012	D3086-10 6/13/2012	D4296-06 9/18/2012	DS223-05 12/11/2012	E1637-05 3/19/2013	E2623-05 6/17/2013	E3658-05 9/9/2013	F1313-07 1/30/2014	F1742-05 3/19/2014	F2818-05 6/17/2014	F3895-07 9/9/2014
Vinyl Chloride	2	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
o-Xylene	NS	0.43 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
m/p-Xylenes	NS	0.95 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	0.4 U	0.4 U	0.2 U	0.4 U
Total Xylenes	10000	1.38 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.6 U	0.6 U	0.6 U	0.6 U	0.6 U
Total Target VOCs	NS	<b>5.12</b>	<b>1.3</b>	<b>1.82</b>	<b>1.2</b>	<b>1.73</b>	<b>1</b>	<b>0.92</b>	<b>0.96</b>	<b>0.91</b>	<b>1.59</b>	ND	<b>0.67</b>
Total VOC TICs	NS	<b>5.4 J</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

USEPA = United States Environmental Protection Agency

MCL = Maximum Contaminant Level

FB = Field Blank.

TB = Trip Blank.

NS = No standard currently established.

- = Sample not analyzed.

 $\mu\text{g/l}$  = micrograms per liter.

ND = None detected.

U = Not detected above laboratory detection limit.

J = Result below the reporting limit (estimated value).

Q = Indicates LCS control criteria did not meet requirements..

D = Result from diluted run

Bold = Detected concentration.

Boxed concentrations exceed the USEPA MCL.

**ATTACHMENT B**

**Summary of Historical TCE, DCE and Vinyl Chloride Concentrations**

Table 1. Summary of Historical TCE Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

Page 2 of 2

Well	SEP 04 ( $\mu\text{g/L}$ )	DEC 04 ( $\mu\text{g/L}$ )	MAR 05 ( $\mu\text{g/L}$ )	JUN 05 ( $\mu\text{g/L}$ )	SEP 05 ( $\mu\text{g/L}$ )	MAR 06 ( $\mu\text{g/L}$ )	SEP 06 ( $\mu\text{g/L}$ )	APR 07 ( $\mu\text{g/L}$ )	AUG 07 ( $\mu\text{g/L}$ )	SEP 07 ( $\mu\text{g/L}$ )	MAR 08 ( $\mu\text{g/L}$ )	SEP 08 ( $\mu\text{g/L}$ )	OCT 09 ( $\mu\text{g/L}$ )	OCT 10 ( $\mu\text{g/L}$ )	OCT 11 ( $\mu\text{g/L}$ )	MAR 12 ( $\mu\text{g/L}$ )	JUN 12 ( $\mu\text{g/L}$ )	SEP 12 ( $\mu\text{g/L}$ )	DEC 12 ( $\mu\text{g/L}$ )	MAR 13 ( $\mu\text{g/L}$ )	JUN 13 ( $\mu\text{g/L}$ )	SEP 13 ( $\mu\text{g/L}$ )	JAN 14 ( $\mu\text{g/L}$ )	MAR 14 ( $\mu\text{g/L}$ )	JUN 14 ( $\mu\text{g/L}$ )	SEP 14 ( $\mu\text{g/L}$ )
OB-1	<10	NS	NS	NS	NS	NS	<0.12	NS																		
BR-1	NS	<0.28	NS																							
OB-2	51	NS	NS	NS	14	NS	33	NS	NS	13	NS	6.7	<0.28	3.3	2.7	1.1	1.1	1.3	0.68	0.77	0.2 U	3.4	1.5	0.2 U	0.50	
BR-2	30	NS	8.4	NS	17	4.6	18	14	NS	2.2	11	3.2	<0.28	1.0	1.0	0.5 U	1.9	0.42	0.5 U	0.50	0.5 U	1.0	0.90	0.65	0.2 U	0.50
OB-3	<10	NS	NS	NS	0.81	NS	<1.2	NS	NS	<0.12	NS	<5.6	<0.28	NS												
BR-3	120	39	73	<58	53	28	40	21	NS	3.6	14	6.2	2.2	2.5	1.0	1.1	1.1	1.6	0.5 U	0.72	0.58	0.67	0.87	0.76	0.2 U	0.64
OB-4	NS	<0.28	NS																							
BR-4	<10	NS	NS	NS	15	0.55	NS	2.2	NS	9.1	1.0	<0.56	<0.28	<1.0	NS											
OB-5	39	NS	21	NS	NS	23	28	7.7	NS	5.5	4.0	<1.1	1.2	1.4	NS											
BR-5	90	69	59	32	22	9.8	23	3.3	NS	2.7	3.7	<0.56	<0.28	NS												
DBR-5	<10	NS	1.1	NS	1.4	NS	1.1	NS	NS	1.2	NS	<0.56	1.4	NS												
OB-6	NS	<0.28	NS																							
BR-6	6.0	NS	NS	NS	<0.12	NS	2.4	NS	NS	0.70	NS	<0.56	<0.28	NS												
OB-7	<10	NS	NS	NS	1.5	NS	NS	NS	NS	<2.9	NS	<0.56	0.5	NS												
BR-7	31	NS	NS	NS	13	NS	12	NS	NS	6.4	NS	8.5	1.8	1.3	1.0	1.5	1.2	1.4	1.7	1.4	1.0	0.91	0.67	1.6	0.2 U	0.64
OB-8	63	49	59	NS	20	13	23	4.6	NS	3.2	8.6	4.2	<0.28	1.3	1.0	0.81	0.77	0.5 U	0.82	0.71	0.5 U	0.2 U	0.70	0.89	0.2 U	0.43
BR-8	190	92	93	70	120	4.4	15	5.3	20	13	11	6.2	6.5	2.7	5.2	2.7	2.9	2.4	2	1.5	1.6	1.6	1.2	1.8	0.2 U	0.71
DBR-9S	<10	NS	4.3	NS	0.96	NS	<0.12	NS	NS	0.77	NS	2.9	3.2	NS												
DBR-9D	<10	NS	NS	NS	1.3	NS	NS	NS	NS	0.74	NS	1.7	<0.28	NS	0.28 U	0.70	0.79	1	0.48	0.66	0.60	0.57	0.69	0.2 U	0.46	
DBR-10	<10	NS	NS	NS	1.5	NS	NS	NS	NS	0.55	NS	<0.56	<0.28	NS												
DBR-11S	9.6	NS	NS	NS	3.9	NS	5.8	NS	NS	2.6	NS	2.0	<0.28	NS												
DBR-11D	7.8	NS	NS	NS	8.8	NS	3.1	NS	NS	3.5	NS	<0.56	2.1	NS												
DBR-12S	10	NS	23	NS	47	<0.58	14	2.7	NS	17	7.4	<0.56	3.4	1.1	0.28 U	0.40	0.65	2.1	0.75	0.41	0.94	0.59	0.67	0.30	0.20	0.57
DBR-12D	<10	NS	NS	NS	0.60	NS	<5.2	NS	NS	0.84	NS	<0.56	<0.28	NS												
OB-13	NS	NS	NS	NS	1.0	NS	NS	NS	NS	0.56	NS	<0.56	<0.28	NS												
BR-13	NS	NS	NS	NS	1.1	NS	NS	NS	NS	<0.12	NS	<0.56	<0.28	NS												
DBR-13	NS	NS	<0.19	NS	3.1	NS	NS	NS	NS	<0.12	NS	1.8	<0.28	NS												
OB-14	<10	NS	NS	NS	0.58	NS	NS	NS	NS	<0.12	NS	<0.56	<0.28	NS												
BR-14	<10	NS	0.82	NS	1.1	0.97	NS	0.40	NS	0.52	<0.34	<0.56	<0.28	NS	0.75	0.5 U	0.5 U	0.68	0.54	0.5 U	0.51	0.53	0.51	0.73	0.2 U	0.32
DBR-14	4.0	NS	2.7	NS	1.9	NS	NS	NS	NS	0.73	NS	<0.56	0.84	NS												
BR-15	<10	NS	1.4	NS	1.2	1.1	1.5	0.97	NS	0.98	1.0	0.81	<0.28	NS												
OW-1	NS	NS	NS	NS	93	25	34	9.2	<2.3	1.3	7.1	1.5	5.5	1.4	4.3	2.6	2.9	3.4	1.2	1.2	1.1	1.2	0.95	1.6	0.2 U	0.70
OW-2	120	NS	56	1.3	42	56	17	28	NS	19	17	7.8	3.5	3.8	2.4	1.3	1.4	1.2	1.3	1	0.92	0.96	0.56	1.2	0.2 U	0.67

NS - Not sampled.

**Table 1. Summary of Historical TCE Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.**

Well	APR 91 ( $\mu\text{g/L}$ )	JUL 91 ( $\mu\text{g/L}$ )	SEP 91 ( $\mu\text{g/L}$ )	NOV 91 ( $\mu\text{g/L}$ )	SEP 92 ( $\mu\text{g/L}$ )	DEC 94 ( $\mu\text{g/L}$ )	OCT 98 ( $\mu\text{g/L}$ )	JAN 99 ( $\mu\text{g/L}$ )	MAY 99 ( $\mu\text{g/L}$ )	SEP 99 ( $\mu\text{g/L}$ )	DEC 99 ( $\mu\text{g/L}$ )	MAR 00 ( $\mu\text{g/L}$ )	JUN 00 ( $\mu\text{g/L}$ )	SEP 00 ( $\mu\text{g/L}$ )	MAR 01 ( $\mu\text{g/L}$ )	SEP 01 ( $\mu\text{g/L}$ )	MAR 02 ( $\mu\text{g/L}$ )	OCT 02 ( $\mu\text{g/L}$ )	MAY 03 ( $\mu\text{g/L}$ )	SEP 03 ( $\mu\text{g/L}$ )	3/4/2015 ( $\mu\text{g/L}$ )	MAY 04 ( $\mu\text{g/L}$ )	JUL 04 ( $\mu\text{g/L}$ )
OB-1	100	NS	3.3	NS	NS	NS																	
BR-1	0.80	0.46	0.3	<0.5	<0.5	NS	<0.5	NS	NS	<0.5	NS	NS	NS	<1	NS	<0.5	NS	<0.5	NS	<10	NS	NS	
OB-2	1,100	11	100	170	110	210	76	NS	NS	700	NS	NS	NS	63	NS	88	NS	160	NS	250	78	NS	
BR-2	1,600	940	490	400	230	160	170	NS	NS	99	NS	NS	NS	52	NS	45	NS	48	NS	43	19	52	
OB-3	0.59	0.45	NS	NS	5.8	NS	8.8	NS	NS	NS	NS	NS	NS	12	NS	8.5	NS	NS	NS	1.6	<10	NS	
BR-3	1,300	1,900	1,400	1,400	1,400	1,100	440	NS	NS	540	NS	NS	NS	290	NS	200	NS	160	NS	240	140	19	
OB-4	0.66	0.41	0.17	<0.5	<0.5	NS	<0.5	NS	NS	<0.5	NS	NS	NS	0.2	NS	<0.5	NS	<0.5	NS	<10	NS	NS	
BR-4	30	150	78	120	160	12	26	NS	NS	11	NS	NS	NS	5.0	NS	12	NS	22	NS	5.9	NS	3.5	
OB-5	510	67	48	48	26	NS	140	25	120	60	85	51	170	24	89	22	NS	9.4	140	90	NS	NS	
BR-5	1,500	970	970	780	290	1,400	720	460	500	360	360	340	310	170	140	140	110	100	56	90	81	1.3	
DBR-5	NS	NS	NS	NS	750	160	130	54	25	75	30	25	29	20	17	30	29	34	44	25	NS	NS	
OB-6	1.9	0.88	1.0	2.5	1.8	NS	2.5	NS	NS	2.2	NS	NS	NS	1.0	NS	0.8	NS	0.3	NS	0.85	NS	NS	
BR-6	2.6	5.4	3.2	3.4	1.0	NS	15	NS	NS	1.4	NS	NS	NS	0.6	NS	1.6	NS	1.7	NS	5.7	NS	NS	
OB-7	7.3	5.9	2.4	2.0	3.3	NS	4.0	NS	NS	3.3	NS	NS	NS	2.0	NS	2.0	NS	NS	NS	2.4	NS	NS	
BR-7	170	90	84	83	63	NS	4.3	NS	NS	100	NS	NS	NS	17	NS	31	NS	39	NS	48	NS	NS	
OB-8	1,200	240	130	110	120	280	440	NS	840	58	100	85	13	26	45	NS	NS	150	96	59	NS	31	
BR-8	1,400	1,400	1,400	1,200	670	1,400	760	610	94	720	540	490	410	370	520	410	380	360	300	270	240	76	5.3
DBR-9S	NS	NS	NS	NS	860	810	220	660	160	510	180	NS	87	110	380	300	260	160	2.9	13	3.5	NS	NS
DBR-9D	NS	NS	NS	NS	350	230	950	140	35	130	34	NS	27	53	95	74	99	1.4	3.2	4.1	NS	NS	
DBR-10	NS	NS	NS	NS	190	78	73	42	10	60	2.7	17	13	5.0	4.0	8.3	10	7.0	1.3	<10	NS	NS	
DBR-11S	NS	NS	NS	NS	6.9	NS	19	NS	NS	20	NS	NS	NS	3.0	NS	28	NS	2.6	NS	27	NS	NS	
DBR-11D	NS	NS	NS	NS	78	NS	70	NS	NS	36	NS	NS	NS	24	NS	1.5	NS	24	NS	33	NS	NS	
DBR-12S	NS	NS	NS	NS	1,400	520	640	480	48	270	420	58	170	560	220	230	240	340	45	72	NS	41	
DBR-12D	NS	NS	NS	NS	270	160	21	26	4.5	5.1	5.7	4.5	5.0	6.0	5.0	20	21	32	1.8	<10	NS	NS	
OB-13	NS	NS	NS	NS	NS	120	NS	NS	86	NS	NS	NS	31	NS	20	NS	13	NS	0.8	NS	NS	NS	
BR-13	NS	NS	NS	NS	NS	240	NS	NS	130	10	26	30	0.8	<1	47	63	0.2	<0.5	<10	<10	NS	NS	
DBR-13	NS	NS	NS	NS	130	NS	90	<0.5	3.8	41	57	42	6.0	30	26	22	12	0.86	NS	NS	NS		
OB-14	NS	NS	NS	NS	NS	<1	2.0	NS	NS	<0.5	NS	NS	NS	3.0	NS	2.2	NS	1.3	NS	<10	NS	NS	
BR-14	NS	NS	NS	NS	NS	110	37	170	96	110	100	79	32	39	33	22	1.9	7.5	3.2	NS	NS	NS	
DBR-14	NS	NS	NS	NS	NS	220	1.9	120	78	85	79	190	110	71	91	110	65	56	23	9.6	NS	NS	
BR-15	NS	NS	NS	NS	NS	780	NS	700	500	560	420	140	120	74	128	90	68	37	6.3	1.7	<10	NS	
OW-1	NS																						
OW-2	NS	NS	NS	NS	NS	NS	430	NS	580	390	570	260	280	440	120	210	240	180	190	100	130	110	

NS - Not sampled.

**Table 2. Summary of Historical Cis-1,2-DCE Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.**

Well	SEP 04 ( $\mu\text{g/L}$ )	DEC 04 ( $\mu\text{g/L}$ )	MAR 05 ( $\mu\text{g/L}$ )	JUN 05 ( $\mu\text{g/L}$ )	SEP 05 ( $\mu\text{g/L}$ )	MAR 06 ( $\mu\text{g/L}$ )	SEP 06 ( $\mu\text{g/L}$ )	APR 07 ( $\mu\text{g/L}$ )	AUG 07 ( $\mu\text{g/L}$ )	SEP 07 ( $\mu\text{g/L}$ )	MAR 08 ( $\mu\text{g/L}$ )	SEP 08 ( $\mu\text{g/L}$ )	OCT 09 ( $\mu\text{g/L}$ )	OCT 10 ( $\mu\text{g/L}$ )	OCT 11 ( $\mu\text{g/L}$ )	MAR 12 ( $\mu\text{g/L}$ )	JUN 12 ( $\mu\text{g/L}$ )	SEP 12 ( $\mu\text{g/L}$ )	DEC 12 ( $\mu\text{g/L}$ )	MAR 13 ( $\mu\text{g/L}$ )	JUN 13 ( $\mu\text{g/L}$ )	SEP 13 ( $\mu\text{g/L}$ )	JAN 14 ( $\mu\text{g/L}$ )	MAR 14 ( $\mu\text{g/L}$ )	JUN 14 ( $\mu\text{g/L}$ )	SEP 14 ( $\mu\text{g/L}$ )
OB-1	<10	NS	NS	NS	NS	NS	<0.09	NS	NS	NS	NS	NS	NS	<0.35	NS											
BR-1	NS	<0.35	NS																							
OB-2	4.2	NS	NS	NS	6.6	NS	6.6	NS	NS	1.8	NS	0.75	<0.35	<1.0	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.87	0.44	0.2 U	0.2 U	
BR-2	44.0	NS	6.3	NS	3.2	19	5.9	6.9	NS	14	4.6	2.3	0.77	<1.0	0.75	0.5 U	0.74	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.82	1.1	0.2 U	0.2 U
OB-3	<10	NS	NS	NS	0.94	NS	<0.92	NS	NS	1.3	NS	<5.3	<0.35	NS												
BR-3	120	48	31	<46	22	16	14	33	NS	9.9	10.0	7.6	4.0	3.6	1.4	1.4	2.2	2.6	2.0	1.4	1.3	0.2 U	1.2	1.2	0.2 U	0.76
OB-4	NS	<0.35	NS																							
BR-4	<10	NS	NS	NS	2.0	0.31	NS	<0.09	NS	0.76	<0.72	0.73	<0.35	<1.0	NS											
OB-5	4.8	NS	2.6	NS	NS	1.7	2.7	11	NS	<0.92	<0.72	<1.1	<0.35	<1.0	NS											
BR-5	14	9.4	13	33	14	11.0	21	17	NS	5.9	2.5	2.8	<0.35	NS												
DBR-5	<10	NS	1.3	NS	1.2	NS	<0.09	NS	NS	<0.09	NS	0.57	<0.35	NS												
OB-6	NS	<0.35	NS																							
BR-6	<10	NS	NS	NS	0.72	NS	0.4	NS	NS	<0.09	NS	<0.53	<0.35	NS												
OB-7	<10	NS	NS	<0.09	NS	NS	NS	NS	NS	<2.3	NS	<0.53	<0.35	NS												
BR-7	1.9	NS	NS	NS	1.8	NS	1.1	NS	NS	1.5	NS	<0.53	<0.35	<1.0	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U					
OB-8	11	4.0	3.7	NS	7.1	<5.5	2.4	11	NS	<0.92	<0.72	1.2	<0.35	<1.0	0.35 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U					
BR-8	260	28	30	22	47	5.2	57	19	11	9.1	5.8	3.2	3.4	1.6	4.0	1.9	1.4	1.4	1.2	0.92	0.91	0.2 U	0.73	1.7	0.93	0.52
DBR-9B	3.5	NS	2.8	NS	2.3	NS	<0.09	NS	NS	1.6	NS	1.4	0.41	NS												
DBR-9D	7.2	NS	NS	NS	5.2	NS	NS	NS	NS	2.1	NS	6.2	0.89	NS	1.2	0.5 U	0.41	0.51	0.49	0.5 U	0.46	0.2 U	0.2 U	0.94	0.2 U	0.39
DBR-10	1.1	NS	NS	NS	0.97	NS	NS	NS	NS	0.56	NS	<0.53	<0.35	NS												
DBR-11S	<10	NS	NS	<0.09	NS	2.7	NS	NS	0.67	NS	1.7	<0.35	NS													
DBR-11D	1.3	NS	NS	NS	1.8	NS	5.8	NS	NS	2.1	NS	1.5	0.73	NS												
DBR-12S	4.5	NS	5.9	NS	11	<0.46	0.92	2.2	NS	7.6	1.3	<0.53	1.9	<1.0	0.42	0.5 U	0.5 U	1.2	1.1	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	0.21	
DBR-12D	<10	NS	NS	NS	0.75	NS	<0.92	NS	NS	<0.09	NS	<0.53	<0.35	NS												
OB-13	NS	NS	NS	NS	0.94	NS	NS	NS	NS	<0.09	NS	<0.53	<0.35	NS												
BR-13	NS	NS	NS	NS	2.5	NS	NS	NS	NS	<0.09	NS	<0.53	<0.35	NS												
DBR-13	NS	NS	<0.27	NS	3.2	NS	NS	NS	NS	<0.09	NS	1.7	1.4	NS												
OB-14	<10	NS	NS	<0.09	NS	NS	NS	NS	NS	<0.09	NS	<0.53	<0.35	NS												
BR-14	4.3	NS	1.6	NS	2.9	2.7	NS	0.94	NS	1.1	<0.72	<0.53	<0.35	NS	1.0	0.5 U	0.5 U	0.83	0.82	0.64	0.7	0.2 U	0.58	1.0	0.2 U	0.42
DBR-14	6.9	NS	3.3	NS	2.8	NS	NS	NS	NS	1.1	NS	1.3	1.4	NS												
BR-15	3.6	NS	5.5	NS	3.4	2.8	2.3	3.2	NS	2.4	2.4	1.7	1.8	NS												
OW-1	200	NS	NS	NS	40	11	70	13	36	4.3	9.4	3.9	4.2	2.5	3.3	1.5	1.7	1.4	1.3	0.94	0.96	0.2 U	0.58	1.6	0.85	0.47
OW-2	15.0	NS	10	56	6.6	6.6	9.8	10	NS	3.0	4.1	1.9	1.4	0.93	0.72	0.5 U	0.42	0.5 U	0.43	0.5 U	0.5 U	0.2 U	0.35	0.39	0.2 U	0.2 U

NS - Not sampled.

**Table 2. Summary of Historical Cis-1,2-DCE Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.**

Well	APR 91 ( $\mu\text{g/L}$ )	JUL 91 ( $\mu\text{g/L}$ )	SEP 91 ( $\mu\text{g/L}$ )	NOV 91 ( $\mu\text{g/L}$ )	SEP 92 ( $\mu\text{g/L}$ )	DEC 94 ( $\mu\text{g/L}$ )	OCT 98 ( $\mu\text{g/L}$ )	JAN 99 ( $\mu\text{g/L}$ )	MAY 99 ( $\mu\text{g/L}$ )	SEP 99 ( $\mu\text{g/L}$ )	DEC 99 ( $\mu\text{g/L}$ )	MAR 00 ( $\mu\text{g/L}$ )	JUN 00 ( $\mu\text{g/L}$ )	SEP 00 ( $\mu\text{g/L}$ )	MAR 01 ( $\mu\text{g/L}$ )	SEP 01 ( $\mu\text{g/L}$ )	MAR 02 ( $\mu\text{g/L}$ )	OCT 02 ( $\mu\text{g/L}$ )	MAY 03 ( $\mu\text{g/L}$ )	SEP 03 ( $\mu\text{g/L}$ )	3/4/2015 ( $\mu\text{g/L}$ )	MAY 04 ( $\mu\text{g/L}$ )	JUL 04 ( $\mu\text{g/L}$ )	
OB-1	3.1	NS	<10	NS	NS	NS																		
BR-1	<0.5	<0.5	<0.5	<0.5	<0.5	NS	<0.5	NS	NS	<0.5	NS	NS	<1	NS	<0.5	NS	<0.5	NS	<10	NS	NS	NS		
OB-2	190	13	67	160	55	46	8.1	NS	NS	67	NS	NS	6	NS	9.9	NS	15	NS	20	11	NS	2.6		
BR-2	270	170	94	88	110	90	81	NS	NS	46	NS	NS	20	NS	17	NS	7.6	NS	20	9.8	12	14		
OB-3	0.11	<0.5	NS	NS	<0.5	NS	<0.5	NS	NS	NS	NS	NS	0.2	NS	0.2	NS	NS	NS	<10	<10	NS	1.6		
BR-3	570	680	540	580	510	320	140	NS	NS	89	NS	NS	94	NS	73	NS	140	NS	54	34	91	92		
OB-4	7.7	<0.5	<0.5	<0.5	<0.5	NS	<0.5	NS	NS	<0.5	NS	NS	<1	NS	<0.5	NS	<0.5	NS	<10	NS	NS	NS		
BR-4	2.8	14.0	8	14.0	17.0	5.5	3.1	NS	NS	4.8	NS	NS	2	NS	1.1	NS	1.7	NS	<10	NS	<10	<10		
OB-5	53	25	21	30	16	NS	3.7	<0.5	7.3	1.9	5.0	2.9	5	0.8	4.0	1.1	NS	0.2	9.2	7.1	NS	NS		
BR-5	430	200	270	170	78	190	30	23	30	42	38	43	13	6	11	6.6	5.1	4.9	41	51	32	88	21	
DBR-5	NS	NS	NS	NS	330	59	53	10	18	32	8.7	7.3	21	15	3	4.7	3.6	5.3	12	12	NS	NS	NS	
OB-6	0.31	0.35	0.35	<0.5	1.0	NS	<0.5	NS	NS	<0.5	NS	NS	0.4	NS	0.2	NS	<0.5	NS	<10	NS	NS	NS		
BR-6	0.38	1.8	0.56	<0.5	1.1	NS	0.54	NS	NS	<0.5	NS	NS	0.4	NS	0.2	NS	0.2	NS	1.4	NS	NS	NS		
OB-7	0.29	0.26	0.13	<0.5	NS	1.4	NS	NS	<0.5	NS	NS	NS	0.2	NS	0.2	NS	NS	NS	<10	NS	NS	NS		
BR-7	16	12	12	10	11	NS	4	NS	NS	2.7	NS	NS	1	NS	1.0	NS	1.4	NS	2.7	NS	NS	NS		
OB-8	120	47	50	49	61	22	14	NS	280	2.8	7.7	3.7	0.4	1	2	NS	NS	NS	10	5.9	3.8	4.3		
BR-8	730	700	610	530	500	190	260	200	3.1	240	230	190	130	75	160	91	120	120	120	100	110	17	110	
DBR-9S	NS	NS	NS	NS	NS	220	270	55	180	52	140	64	NS	34	45	100	80	54	71	41	26	5.0	NS	
DBR-9D	NS	NS	NS	NS	94	84	260	36	12	32	9.5	NS	6	15	15	12	13	7.3	9.4	8.1	NS	NS		
DBR-10	NS	NS	NS	NS	31	24	8.1	4.8	1.6	9.3	3.4	2.2	2	1	0.7	1.3	1.8	1.4	0.93	0.97	NS	NS		
DBR-11S	NS	NS	NS	NS	1.8	NS	0.51	NS	NS	2.0	NS	NS	0.3	NS	2.7	NS	0.2	NS	1.7	NS	NS	NS		
DBR-11D	NS	NS	NS	NS	17	NS	15	NS	NS	3.8	NS	NS	2	NS	<0.5	NS	3.6	NS	4.7	NS	NS	NS		
DBR-12S	NS	NS	NS	NS	500	95	60	58	4.8	35	50	5.3	12	38	15	29	30	46	51	47	NS	7.1	15	
DBR-12D	NS	NS	NS	NS	64	38	2.8	2.7	0.58	<0.5	<0.50	<0.4	0.5	0.8	0.8	2.4	2.5	3.5	<10	<10	NS	NS		
OB-13	NS	NS	NS	NS	NS	23	NS	NS	NS	8.1	NS	NS	4	NS	2.2	NS	4.0	NS	1.0	NS	NS	NS		
BR-13	NS	NS	NS	NS	NS	37	NS	NS	15	2.7	20	15	3	2	8	6.4	2.2	1.0	<10	2.1	NS	NS		
DBR-13	NS	NS	NS	NS	NS	36	NS	NS	22	<0.5	1.3	14	11	11	2	7.9	6.4	6.1	5.9	0.78	NS	NS		
OB-14	NS	NS	NS	NS	NS	<1	<0.5	NS	NS	<0.5	NS	NS	0.3	NS	0.1	NS	<0.5	NS	<10	NS	NS	NS		
BR-14	NS	NS	NS	NS	NS	24	11	56	31	32	26	16	9	13	9	11	8.0	4.6	2.2	5.9	NS	NS		
DBR-14	NS	NS	NS	NS	NS	72	53	29	52	56	46	58	29	24	29	39	21	24	11	10	NS	NS		
BR-15	NS	NS	NS	NS	NS	14	NS	130	120	130	100	35	38	29	24	18	15	12	19	12	6.6	NS		
OW-1	NS	NS																						
OW-2	NS	NS	NS	NS	NS	NS	310	NS	140	62	74	58	47	25	20	28	15	13	16	17	29	11	39	27

NS - Not sampled.

**Table 3. Summary of Historical Vinyl Chloride Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.**

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<b>Well</b>	OCT 02 ( $\mu\text{g/L}$ )	MAY 03 ( $\mu\text{g/L}$ )	SEP 03 ( $\mu\text{g/L}$ )	MAR 04 ( $\mu\text{g/L}$ )	JUL 04 ( $\mu\text{g/L}$ )	SEP 04 ( $\mu\text{g/L}$ )	MAR 05 ( $\mu\text{g/L}$ )	JUN 05 ( $\mu\text{g/L}$ )	SEP 05 ( $\mu\text{g/L}$ )	MAR 06 ( $\mu\text{g/L}$ )	SEP 06 ( $\mu\text{g/L}$ )	APR 07 ( $\mu\text{g/L}$ )	AUG 07 ( $\mu\text{g/L}$ )	SEP 07 ( $\mu\text{g/L}$ )
OB-1	NS	NS	<10	NS	NS	<10	NS	NS	NS	NS	<0.09	NS	NS	NS
BR-1	<0.5	NS	<10	NS										
OB-2	<2.5	NS	<10	<10	<10	<10	NS	NS	<0.09	NS	<0.09	NS	NS	<0.09
BR-2	<1.0	NS	<10	<10	<10	<10	<0.11	NS	<0.09	<0.09	<0.09	<0.09	NS	3.0
OB-3	NS	NS	<10	<10	<10	<10	NS	NS	<0.09	NS	<0.85	NS	NS	<0.09
BR-3	<2.5	NS	<10	<10	<10	<10	2.4	<42	2.6	<0.09	<0.85	2.5	NS	4.1
OB-4	<0.5	NS	<10	NS										
BR-4	<0.5	NS	<10	NS	<10	<10	NS	NS	<0.09	<0.09	NS	<0.09	NS	<0.09
OB-5	<0.5	<10	<10	NS	NS	<10	<0.11	NS	NS	<0.09	<0.09	<0.09	NS	<0.85
BR-5	<2.5	<10	<10	<10	2.7	<10	1.2	1.2	2.9	4.2	<0.78	2.7	NS	4.8
DBR-5	<1.0	<10	<10	NS	NS	<10	<0.11	NS	<0.09	NS	<0.09	NS	NS	<0.09
OB-6	<0.5	NS	<10	NS										
BR-6	<0.5	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	<0.09	NS	NS	<0.09
OB-7	NS	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	NS	NS	NS	<2.1
BR-7	<1.0	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	<0.09	NS	NS	<0.09
OB-8	NS	<10	<10	<10	<10	<10	<0.11	NS	<0.09	<0.85	<0.09	<0.09	NS	<0.85
BR-8	<10	<10	<10	<10	<10	<10	1.8	<0.09	<0.09	<0.42	<0.09	18	14	13
DBR-9S	<2.5	<10	<10	<10	NS	<10	<0.11	NS	<0.09	NS	<0.09	NS	NS	<0.09
DBR-9D	<0.5	<10	<10	NS	NS	<10	NS	NS	<0.09	NS	NS	NS	NS	<0.09
DBR-10	<0.5	<10	<10	NS	NS	<10	NS	NS	<0.09	NS	NS	NS	NS	<0.09
DBR-11S	<0.5	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	<0.09	NS	NS	<0.09
DBR-11D	<0.5	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	<0.09	NS	NS	<0.09
DBR-12S	<5.0	<10	<10	NS	<10	<10	<0.11	NS	<0.09	<0.42	<0.85	<0.09	NS	<0.09
DBR-12D	<0.5	<10	<10	NS	NS	<10	NS	NS	<0.09	NS	<0.85	NS	NS	<0.09
OB-13	<0.5	NS	<10	NS	NS	NS	NS	NS	<0.09	NS	NS	NS	NS	<0.09
BR-13	<0.5	<10	<10	NS	NS	NS	NS	NS	<0.09	NS	NS	NS	NS	<0.09
DBR-13	<0.5	<10	<10	NS	NS	NS	<0.11	NS	<0.09	NS	NS	NS	NS	<0.09
OB-14	<0.5	NS	<10	NS	NS	<10	NS	NS	<0.09	NS	NS	NS	NS	<0.09
BR-14	<0.5	<10	<10	NS	NS	<10	<0.11	NS	<0.09	<0.09	NS	<0.09	NS	<0.09
DBR-14	<1.0	<10	<10	NS	NS	<10	<0.11	NS	<0.09	NS	NS	NS	NS	<0.09
BR-15	<1.0	<10	<10	<10	NS	<10	<0.11	NS	<0.09	<0.09	<0.09	<0.09	NS	<0.09
OW-1	NS	3.9	2.6	<4.2	<1.7	<1.7	1.5							
OW-2	<2.5	<10	<10	<10	<10	<10	<0.11	0.7	0.9	<0.09	<0.09	1.6	NS	1

NS - Not sampled.

Table 3. Summary of Historical Vinyl Chloride Concentrations. Recticon/Allied Steel Site; Parker Ford, Pennsylvania.

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Well	MAR 08 ( $\mu\text{g/L}$ )	SEP 08 ( $\mu\text{g/L}$ )	OCT 09 ( $\mu\text{g/L}$ )	OCT 10 ( $\mu\text{g/L}$ )	OCT 11 ( $\mu\text{g/L}$ )	MAR 12 ( $\mu\text{g/L}$ )	JUN 12 ( $\mu\text{g/L}$ )	SEP 12 ( $\mu\text{g/L}$ )	DEC 12 ( $\mu\text{g/L}$ )	MAR 13 ( $\mu\text{g/L}$ )	JUN 13 ( $\mu\text{g/L}$ )	SEP 13 ( $\mu\text{g/L}$ )	JAN 14 ( $\mu\text{g/L}$ )	MAR 14 ( $\mu\text{g/L}$ )	JUN 14 ( $\mu\text{g/L}$ )	SEP 14 ( $\mu\text{g/L}$ )
OB-1	NS															
BR-1	NS	NS	<0.34	NS												
OB-2	NS	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
BR-2	<0.3	<b>3.9</b>	<b>3.1</b>	<1.0	0.34 U	<b>0.97</b>	0.5 U	0.5 U	0.5 U	<b>0.58</b>	0.5 U	0.2 U				
OB-3	NS	<4.6	<0.34	NS												
BR-3	<0.3	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
OB-4	NS	NS	<0.34	NS												
BR-4	<0.3	<0.46	<0.34	<1.0	NS											
OB-5	<0.3	<9.2	<0.34	<1.0	NS											
BR-5	<0.3	<0.46	<0.34	NS												
DBR-5	NS	<0.46	<0.34	NS												
OB-6	NS	NS	<0.34	NS												
BR-6	NS	<0.46	<0.34	NS												
OB-7	NS	<0.46	<0.34	NS												
BR-7	NS	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	<b>0.85</b>	0.2 U
OB-8	<0.3	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
BR-8	<b>5.4</b>	<0.46	<b>1.1</b>	<b>1.0</b>	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	<b>1.0</b>	0.2 U
DBR-9S	NS	<0.46	<0.34	NS												
DBR-9D	NS	<0.46	2.8	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U	0.2 U	0.2 U	<b>0.41</b>	0.2 U
DBR-10	NS	<0.46	<0.34	NS												
DBR-11S	NS	<0.46	<0.34	NS												
DBR-11D	NS	<0.46	<0.34	NS												
DBR-12S	<0.3	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
DBR-12D	NS	<0.46	<0.34	NS												
OB-13	NS	<0.46	<0.34	NS												
BR-13	NS	<0.46	<0.34	NS												
DBR-13	NS	<0.46	<0.34	NS												
OB-14	NS	<0.46	<0.34	NS												
BR-14	<0.3	<0.46	<0.34	NS	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				
DBR-14	NS	<0.46	<0.34	NS												
BR-15	<0.3	<0.46	<0.34	NS												
OW-1	<b>3.5</b>	<0.46	<b>3.4</b>	<b>1.7</b>	<b>2.7</b>	<b>1.1</b>	<b>1.2</b>	0.5 U	<b>0.88</b>	<b>0.58</b>	0.5 U	0.2 U	0.2 U	<b>0.99</b>	<b>1.2</b>	0.2 U
OW-2	<0.3	<0.46	<0.34	<1.0	0.34 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.2 U				

NS - Not sampled.

## **Attachment C**

Risk Calculations using 2014 groundwater sampling results

**Attachment C**  
**Risk Calculations using 2014 groundwater sampling results**

The following EAs were established based on groundwater sampling locations (see Figure 2):

- EA1 – Former Recticon Property (OB-2, BR-2, BR-3, DBR-12S)
- EA2 – Former Allied Steel Property (BR-7, OB-8, BR-8, OW-1, OW-2)
- EA3 – Discharge Pipeline Area/Linfield Road (DBR-9D, BR-14)

**EA1 (Sample date 9/9/14)**

	<i>Maximum Detected Concentration (ug/L)</i>	<i>Adult HI</i>	<i>Child HI</i>	<i>Lifetime Cancer Risk</i>
TCE	0.64	1.0E-01	8.8E-02	7.0E-07
<b>Total Risk</b>		1.0E-01	8.8E-02	7.0E-07

**EA1 (Sample date 3/19/14)**

	<i>Maximum Detected Concentration (ug/L)</i>	<i>Adult HI</i>	<i>Child HI</i>	<i>Lifetime Cancer Risk</i>
TCE	1.5	1.4E-01	2.1E-01	2.2E-06
Chloroform	0.31	1.2E-03	2.4E-03	3.2E-07
<b>Total Risk</b>		1.4E-01	2.1E-01	2.5E-06

**EA1 (Sample date 1/30/14)**

	<i>Maximum Detected Concentration (ug/L)</i>	<i>Adult HI</i>	<i>Child HI</i>	<i>Lifetime Cancer Risk</i>
TCE	3.4	3.1E-01	4.7E-01	4.3E-06
<b>Total Risk</b>		3.1E-01	4.7E-01	4.3E-06

**EA2**

TCE maximum detected during 9/9/14 sampling event – 0.71 ug/L

TCE maximum detected during 3/19/14 sampling event – 1.8 ug/L

TCE maximum detected during 1/30/14 sampling event – 1.2 ug/L

Since all EA2 TCE detections are below concentrations at EA1 (3.4 ug/L), a risk assessment was not performed since it is apparent the risk results would be below EPA's acceptable criteria based on the detections and risk results.

**EA2 (Sample date 6/18/14)**

	<b>Maximum Detected Concentration (ug/L)</b>	<b>Adult HI</b>	<b>Child HI</b>	<b>Lifetime Cancer Risk</b>
Vinyl Chloride (VC)	1.2	1.3E-02	2.7E-02	7.5E-05
<b>Total Risk</b>		1.3E-02	2.7E-02	7.5E-05

**EA3**

TCE maximum detected during 9/10/14 sampling event – 0.46 ug/L

Vinyl Chloride maximum detected during 6/18/14 sampling event – 0.41 ug/L

TCE maximum detected during 3/20/14 sampling event – 0.73 ug/L

TCE maximum detected during 1/31/14 sampling event – 0.57 ug/L