# SUPPLEMENTAL REMEDIAL INVESTIGATION REPORT INDUSTRIAL OVERALL SERVICES SITE # 360109

WORK ASSIGNMENT NO. D007619-07

Prepared for:

# New York State Department of Environmental Conservation Albany, New York

Prepared by: MACTEC Engineering and Consulting, P.C. Portland, Maine

## MACTEC: 3612112221

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## GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AOCs	areas of concern
Aztech	Aztech Technologies Inc.
bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
COC	contaminant of concern
CSM	Conceptual Site Model
DER	Department of Environmental Remediation
DNAPL	dense non-aqueous phase liquid
DUSR	Data Usability Summary Report
FAP	Field Activities Plan
FDR	field data record
FS	feasibility study
ft	feet
IDW	investigation derived waste
Industrial Overall	Industrial Overall Service Corporation
MACTEC	MACTEC Engineering and Consulting, P.C.
mg/kg	milligram(s) per kilogram
MNR	Metro-North Railroad
NYCRR	New York Codes, Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health

## GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

PCE	tetrachloroethene
PID	photoionization detector
PVC	polyvinyl chloride
Report	Supplemental Remedial Investigation Report
RI	Remedial Investigation
SCGs	standards, criteria and guidance values
SCO	Soil Cleanup Objective
Site	Industrial Overall Service Corporation site
SRI	Supplemental Remedial Investigation
SVI	soil vapor intrusion
TCA	trichloroethane
TCE	trichloroethene
TestAmerica	TestAmerica Laboratories
µg/cm <sup>3</sup>	microgram(s) per cubic centimeter
µg/l	microgram(s) per liter
VC	vinyl chloride
VOC	volatile organic compound
WA	Work Assignment

#### **EXECUTIVE SUMMARY**

The Industrial Overall Service Corporation (Industrial Overall) Site (New York State Department of Environmental Conservation Site No. 360109) (Site) is located at 10 Bartels Place in New Rochelle, Westchester County, New York. It is 0.42 acres in size and resides on a slightly sloping irregular shaped parcel. The main Site feature includes a six-sided building which occupies the majority of the property and a small parking area located to the south and southwest of the building. The surrounding area is urban with a mix of commercial and residential structures.

The Site began operations in 1950 as a uniform and industrial clothing cleaning facility for heavily soiled clothing from auto body and gasoline dispensing businesses. In 1980, Workingman's Closet, a direct factory sales division of Industrial Overall which sells new and reclaimed work clothes, was opened. The Site owner indicated that the Site operated as a dry cleaning laundering facility in the past. The exact period of operation is unknown but has been reported as between the 1960's and the 1980's. Current operations at the Site include laundering linens and uniforms for restaurant and other businesses and retail uniform sales.

MACTEC Engineering and Consulting, P.C. conducted a Supplemental Remedial Investigation (RI) to evaluate the following areas where data gaps were identified in the RI Report:

- MetroNorth Railroad (MNR) the area of contamination adjacent to the tracks southwest of the Site had not been delineated in soil or groundwater;
- Sewer Line –both inside the pipe and in bedding material surrounding the pipe was identified as a potential soil vapor migration pathway; and
- 1,1,1- Trichloroethane (TCA) groundwater contamination the source of 1,1,1-TCA detected in groundwater which appears to be originating upgradient of the lint trap had not been identified.

Subsequent to submittal of the Draft RI an additional data gap was identified:

• Site building – at a potential location of the former dry cleaning machine which was identified by the Site Owner;

Results of this investigation indicates:

• The former dry-cleaning machine location, newly identified by the Site owner, is not an additional source of contamination to soil and shallow groundwater in this area of the Site;

- The source of 1,1,1-TCA in groundwater appears to be the result of an upgradient source;
- The observed contaminants on the MNR property generally correspond with the surface disposal areas (western debris pile, northwestern debris pile and along the MNR tracks), and the extent of the soil contamination has be vertically and laterally delineated;
- No soil contamination was observed in the sanitary sewer bedding materials in the vicinity of the lint trap source area;
- The sanitary sewer line is not acting as a preferential pathway for contaminants originating at the lint trap to migrate and enter into nearby structures as soil vapor; and
- Vapors were detected in storm drains downgradient of the Site which may be a result of volatilization from groundwater entering the storm system.

The Qualitative Exposure Assessment indicated ecological receptors are not present; however; a potential completed exposure pathways exist for:

• Direct exposure to workers conducting sub-surface activities in the vicinity of the identified contaminated soil, groundwater or soil vapor.

Based on the results of the Supplemental RI the following data gap was identified:

• The source of and migration pathway for contaminated vapors entering a residential structure through the sanitary sewer line should be further investigated.

#### 1.0 INTRODUCTION

This Supplemental Remedial Investigation (SRI) report (Report) has been prepared by MACTEC Engineering and Consulting, P.C. (MACTEC) in response to Work Assignment (WA) No. D007619-07 from the New York State (NYS) Department of Environmental Conservation (NYSDEC) for the Industrial Overall Service Corporation (Industrial Overall) site (Site) in New Rochelle, Westchester County, New York (Figure 1.1). The Site is listed as a Class 2 Inactive hazardous waste site; NYSDEC Site Number 360109, in the Registry of Hazardous Waste Sites in NYS.

Based on the findings of the Draft RI, MACTEC identified data gaps and recommended that these gaps be addressed prior to implementing a remedial action. These data gaps included:

- Delineate the extent of contamination on the Metro-North Railroad (MNR) property
- Evaluate the potential for Dense Non-Aqueous Phase Liquid (DNAPL) and/or soil contamination to exist along the sanitary sewer line
- Delineate the extent of contamination in the bedrock south of the Site
- Delineate the extent of contamination downgradient of the Site
- Evaluate the potential upgradient source(s) of 1,1,1-trichloroethane (TCA) that is contributing to groundwater contamination at the Site.

Subsequent to submitting the Draft Remedial Investigation (RI) Report the Site owner provided additional information related to the location of the dry-cleaning machine within the building as well as the years of operation that differed from the previous available information. The new information identified the former dry-cleaning machine location in the western portion of the building near the boiler room rather than the area previously investigated which is in the northern portion of the building. The owner also indicated that the Site operated as a dry-cleaner from the 1960's to the early 1980's.

Based on this additional information and the data gaps identified during the Draft RI the NYSDEC requested that MACTEC perform a SRI. The RI report was finalized in November 2016 (MACTEC, 2016). The purpose of the SRI was to provide additional data to support the development of a Focused Feasibility Study (FS) for remediation of onsite sources.

The SRI focuses on the following areas:

- Site building at the reported location of the former dry cleaning machine and in the vicinity of the 1,1,1 TCA groundwater contamination;
- MNR along the tracks southwest of the Site, and;
- Sewer Line –along the sewer line both inside the pipe and in bedding material surrounding the pipe.

This Report presents the technical scope of work for SRI field activities and presents and interprets the data collected. The SRI has been conducted in accordance with the WA and associated WA Amendments (WA No. D007619-07.1 through D007619-07.7), as well as with applicable portions of the following documents:

• NYSDEC Department of Environmental Remediation (DER)-10 "Technical Guidance for Site Investigation and Remediation" (NYSDEC, 2010);

#### 1.1 **REPORT ORGANIZATION**

The SRI report is structured in general in accordance with the NYSDEC DER-10 Guidance (NYSDEC, 2010). The SRI includes Sections 1.0 to 6.0, and associated Appendices.

Section 1.0:	Discusses the purpose of the SRI, Site history and previous investigations.
Section 2.0:	Presents the specific scope of work for the SRI.
Section 3.0:	Summarizes the physical characteristics of the Site and surrounding area. This includes results of physical characteristics as observed during the SRI field program.
Section 4.0:	Presents results of the analytical data and discusses the nature and extent of contamination.
Section 5.0:	Discusses the revised Conceptual Site Model (CSM).
Section 6.0:	Discussed the revised Qualitative Exposure Assessment for the sanitary sewer.
Section 7.0:	Presents the summary and conclusions

The Report is supplemented by the following attached documents:

- Appendix A Site Photographs
- Appendix B Field Data Records (FDRs)
- Appendix C Manifest for off-site Transport and Disposal of Waste Materials
- Appendix D Site Survey Data
- Appendix E Data Usability Summary Reports (DUSRs)

#### **1.2 PURPOSE OF SUPPLEMENTAL REMEDIAL INVESTIGATION**

The SRI was conducted as a result of detections of chlorinated solvents in groundwater at and near the Site exceeding the NYS Class GA groundwater standard as defined in Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 700-705 (NYS, 1999b). Contaminants of concern from former Site-related processes, include tetrachloroethene (PCE) and trichloroethene (TCE), which are listed as hazardous wastes under Title 6 NYCRR Part 371 (NYS, 1999a). This SRI was performed to evaluate the following technical objectives:

- potential additional source areas on the Site, which may be acting as a continuing source of contamination to groundwater beneath the Site; and,
- contaminant migration pathways and potential receptors (i.e., potential present and future human health and ecological exposure pathways) including soil vapor intrusion (SVI).

#### **1.3 SITE BACKGROUND**

Background information related to the Site history was obtained during a Site visit conducted in May 2012 and 2015 as well as by reviewing documents pertaining to the history of Site operations and past releases of contamination that were supplied by the NYSDEC. The information obtained was used to develop a CSM, assess data gaps in the Site understanding, and prepare the RI Field Activities Plans (FAP) for the RI field investigation. The Site background information is summarized in the RI Report.

#### **1.3.1** Site Location and Description

The Site is located at 10 Bartels Place in New Rochelle, Westchester County, New York (Figure 1.1) and is 0.42 acres in size and resides on a slightly sloping irregular shaped parcel. The main site feature is a six-sided building which occupies the majority of the property. The remainder of the site is a small parking area located to the south and southwest of the building. The property is an active business, Apparel + Plus, which is owned by Robert O'Brien. The surrounding area is urban with a mix of commercial and residential structures. The Site is bordered to the northwest by the MNR and to the west and south by residential dwellings.

## 1.3.2 Site History

The Site has been operating at the current location as an uniform and industrial clothing laundering facility (Industrial Overall), historically cleaning heavily soiled clothing from auto body and gasoline dispensing businesses since 1939 (NYSDEC, 2011). Based on a Sanborn Fire Insurance map from 1931, the Site previously operated as an automobile garage, with the capacity to store/service 275 cars and housed four gasoline tanks on the northeastern corner of the property. In 1980, Workingman's Closet, a direct factory sales division of Industrial Overall which sells new and reclaimed work clothes, was opened. The Site reportedly operated as a dry cleaning laundering facility from the 1960's to the early 1980's.

## **1.4 REMEDIAL INVESTIGATION**

A RI was completed at the Site between March 2012 and April 2015 to evaluate the nature and extent of contamination in soil, groundwater, soil vapor, and pore water both on and off-site. Results of this investigation indicate:

- Two sources of contamination (primarily PCE) were identified at the Site 1) the lint trap and 2) the debris disposal areas;
- PCE concentrations in soil on the Site and MNR property adjacent to the Site exceed the NYS standards, criteria, and guidance values (SCGs);
- Concentrations of PCE in overburden and bedrock groundwater exceed the NYS groundwater criteria (5 micrograms per liter  $[\mu g/L]$ ) on the Site, and extend approximately 1,900 feet (ft) downgradient of the Site;
- PCE in residential sub-slab soil vapor and indoor air exceeded the NYS Department of Health (NYSDOH) recommended guidance values at two residential structures and mitigation measures have been implemented;
- Four additional residential structures require ongoing monitoring based on the NYSDOH SVI matrix; and
- The sanitary sewer line was identified as preferential pathway for contaminated vapor to enter into nearby structures.

A Qualitative Exposure Assessment indicated ecological receptors are not present; however; complete exposure pathways exist for:

- Direct exposure to contaminated media on-site (soil, soil vapor, groundwater, and sludge), and
- SVI into nearby structures.

During the RI, two interim remedial measures were implemented to mitigate direct exposure to contaminated soil on an adjacent residential property and to remove a source of contamination within the on-site building.

Site features observed during the initial Site visit and subsequent investigations conducted for the RI, including the Site building layout and the potential locations of the former dry cleaning unit, are detailed on Figure 1.2.

## **1.5 SITE AREAS OF CONCERN**

Based on findings from the remedial field investigation and for discussion purposes in this report, the Site vicinity has been divided into areas of concerns (AOCs). An AOC is defined as "a location (or former location) at a site where contaminants are known or suspected to have been discharged. These include locations where contaminants were generated, manufactured, refined, transported, stored, handled, treated, disposed or where they have or may have migrated" (NYSDEC, 2010). The following AOCs were investigated during the SRI:

#### • <u>Site Building Data Gap Investigation:</u>

- 1) potential contamination in soil and shallow groundwater in the vicinity of the former dry-cleaning machine, recently identified by the Site Owner, and;
- 2) a potential source of 1,1,1-TCA upgradient (north) of the lint trap.

#### <u>MetroNorth Railroad Data Gap Investigation:</u>

- 1) the vertical and horizontal extent of soil contamination along the railroad tracks located topographically upgradient and south of the Site.
- 2) if contamination may be migrating to groundwater from shallow surficial contamination previously detected in this area.

#### • Sewer Line Data Gap Investigation:

- 1) potential soil contamination adjacent to the sewer line in the vicinity of the lint trap may be a continuing source contamination to groundwater and soil vapor that is migrating from the Site.
- 2) the extent of PCE migration as soil vapor along sewer line (acting as a potential preferential pathway) along Bartels Place and Pine Street, both inside the pipe and in the bedding materials surrounding the sewer pipe.

#### 2.0 SCOPE OF WORK

The SRI fieldwork was conducted in accordance with the specifications presented in the SRI FAP (MACTEC, 2015). Analyses were performed by, TestAmerica Laboratories (TestAmerica), of Amherst, New York, a NYSDOH approved laboratory, in compliance with the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

Field investigations conducted under the SRI were carried out in October 2015. General activities, including health and safety, decontamination and sampling are described in the following subsections. A summary of the SRI field investigation program is presented in Table 2.1. Figures 2.1A and 2.1B show the SRI sampling locations. Photos taken during the SRI are provided in Appendix A and field data records FDRs documenting SRI sampling activities are included in Appendix B.

#### 2.1 HEALTH AND SAFETY

The SRI fieldwork was conducted in compliance with the Site specific Health and Safety Plan in Level D personal protection equipment (MACTEC, 2012). Daily health and safety meetings were conducted prior to the commencement of fieldwork each day.

#### 2.1.1 Air Monitoring

Direct push investigations were conducted within the interior of the Site building using a Geoprobe® rig. While conducting the interior direct push investigations, the exhaust from the Geoprobe® rig was vented to the exterior air using three-inch flexible steel piping. The air inside the Site building from approximately five ft above ground surface was continuously monitored using a four gas meter personal monitoring device (VRAE model 7800) to evaluate conditions within the breathing zone. Atmospheric conditions including oxygen, the lower explosive limit, methane and carbon monoxide were monitored. Breathing zone atmospheric conditions within the Site building remained generally consistent with exterior atmospheric conditions; therefore, no mitigation measures were warranted, with respect to operating the drill rig inside the Site building. Four-gas meter readings were recorded by field personnel either in the daily log book or on FDRs with the associated investigation.

## 2.2 GEOPHYSICAL SURVEYS

Geophysical surveys conducted at the Site are listed on Table 2.1 and had one or more of the following objectives:

- To screen proposed subsurface investigation locations for the presences of utilities or other subsurface structures;
- To identify potential preferential pathways as a result of the physical conditions within the sanitary sewer system

#### 2.2.1 Subsurface Utility Clearance and Sanitray Sewer Line Inspection

A geophysical survey was conducted at the Site, along Bartels Place and Pine Street to evaluate the location and condition of the sanitary sewer system in preparation of the field sampling activities. The survey was conducted by New York Leak Detection of Jamesville, New York. Piping integrity was evaluated by using a downhole camera to view current conditions of the interior of the pipes. The camera was electromagnetically located from the surface of the street in conjunction with a calibrated distance counter on the feeding mechanism. Piping potentially containing a compromised integrity (containing holes, scarring or ruts), therefore having the potential to release source material that may have been discharged through the sanitary sewer system into the surrounding soil was described in the daily field notes and marked on the ground surface. Possible lateral pipe connections to adjacent structures were also identified and marked on the ground surface.

In the event the downhole camera was unable to be advanced due to bends in the pipe or obstructions a traceable rodder was fed through the trunk line and electromagnetically located from the surface to give the horizontal centerline and approximate depth to the bottom of the sewer pipe.

#### 2.3 SOIL SAMPLING

Approximately 55 soil samples were collected during the SRI and were analyzed for volatile organic compounds (VOCs) by method 8260 to evaluate potential source areas and the extent of contamination.

Soil samples were collected, identified in Table 2.1, by the following methods:

- Direct Push:
  - Aztech Technologies, Inc. (Aztech) used a track-mounted direct-push Geoprobe® 6610 DT drill rig.
- Hand Sampling:
  - o Geoprobe® hand tools; and,
  - o Stainless steel spoon.
- Monitoring Well Installation:
  - o Hollow Stem Auger Overburden wells
    - Aztech used a track-mounted direct-push Geoprobe® 6610 DT drill rig.
  - o Rotary Wash Bedrock well
    - Aztech used a track-mounted direct-push Geoprobe® 6610 DT drill rig.

Soils were screened for the presence of VOCs using a photoionization detector (PID) with an 11.7 eV lamp. Soil description, classification, VOC headspace reading, and observations were recorded on a FDR, included in Appendix B.

## 2.4 SLUDGE SAMPLING

During the Site Building data gap investigation, sludge and fibers were observed in the slab floor drain/trench in the vicinity of the former dry-cleaning machine. Four grab samples (DC-1 through DC-4) were collected from the bottom of the channel for VOC analysis. During the SRI sanitary sewer line survey sludge, potentially related to Site operations, was observed in the manhole downgradient from site on Bartels Place (MH-01) (Figure 2.1A). A sample was collected from the bottom of the manhole using a stainless steel spoon for VOC analysis to evaluate the potential impacts that sludge may be contributing to the subsurface environment.

#### 2.5 MONITORING WELL INSTALLATION AND GROUNDWATER SAMPLING

Monitoring wells were installed and groundwater samples were collected to evaluate the extent of contamination in groundwater in the vicinity of 1) the former dry cleaning machine 2) a potential source of 1,1,1-TCA upgradient (north) of the lint trap and 3) the MNR railroad tracks. Sampling was

conducted in October 2015, as detailed in Table 2.1. A total of three wells were installed in and near the building and two groundwater grab samples were collected adjacent to the MNR railroad tracks. An additional four existing wells were also samples to compare potential fluctuations in contaminant levels from previous sampling events. The existing wells sampled were PZ-22, PZ-33, PZ-34, and PZ-35.

#### 2.5.1 Monitoring Well Installation

To characterize groundwater quality and provide data to evaluate groundwater flow direction, three groundwater monitoring wells were installed as part of the SRI. Upon completion of well installations, the newly installed monitoring wells were developed by over-purging using a peristaltic pump. Monitoring well construction details and groundwater elevation measurements for wells evaluated during the RI and SRI are presented in Table 2.2 and Table 2.3, respectively. Monitoring well diagrams and development FDRs are included in Appendix B.

#### 2.5.2 Groundwater Sampling

Groundwater was sampled following low-flow sampling procedures and was documented on FDRs (Appendix B). Low-flow groundwater samples were collected from the following types of wells at the Site:

- Microwells
  - Locations identified with the prefix of PZ or MW;
  - o Constructed of either <sup>3</sup>/<sub>4</sub>- inch or one-inch polyvinyl chloride (PVC); and,
  - Installed in overburden or highly weathered bedrock.

In addition to low-flow sampling, two groundwater grab samples were also collected at the Site. The following types of groundwater grab samples included:

• Direct push drill rig samples using a temporary one-inch PVC monitoring well.

The groundwater samples, both using low-flow sampling techniques and grab samples are identified on Table 2.1. Groundwater samples were collected and submitted to TestAmerica for VOC analysis by method 8260.

#### 2.6 SOIL VAPOR SAMPLING

VOCs have the potential to partition from soil and groundwater to soil vapor and may migrate through the soil column. Soil vapor can be drawn into structures through openings and cracks in foundations and floor slabs and along preferential pathways created by underground utilities. To evaluate this potential, indoor air sampling and exterior soil vapor grab sampling was conducted in the vicinity and downgradient of the Site. A summary of the soil vapor and indoor air sampling program is included in Table 2.1.

#### 2.6.1 Indoor Air Sampling

Indoor Air sample screening was conducted at two residential structures (Structures 1 and 10) in the vicinity of the Site on October 27, 2015 (Figure 2.1A). Indoor air sample screening locations were selected based on field observations, including near the sanitary sewer lines in each structure. The samples were collected consistent with the Hapsite GC/MS SOP provided in the SRI FAP (MACTEC, 2015).

#### 2.6.2 Exterior Soil Vapor Grab Sampling

To evaluate soil vapor concentrations potentially migrating hydraulically downgradient of the site along the sanitary sewer line, 16 soil vapor grab samples were collected along Bartels Place (SVG-BP02-03 through SVG-BP18-03). A further eight soil vapor grab samples were collected on Pine Street (SVG-PS06-03 through SVG-PS14-01). Nine sewer line air samples were collected from manholes and storm sewer catch basins on Bartels Place and Pine Street. A summary of the soil vapor grab samples and the sewer line air samples is included in Table 2.1. The sample locations in the vicinity of the Site on Bartels Place and downgradient on Pine Street are shown on Figures 2.1A and 2.1B, respectively.

Soil vapor grab sampling points were advanced using hammer drill and an auger bit to between 1 and 6 ft below ground surface (bgs) based on the depth of the sewer at the sample location and field conditions. Sample collection was completed in accordance with the methods outlined in the SRI FAP (MACTEC, 2015). Prior to sample collection the percentages of oxygen and carbon dioxide (using an RKI Eagle Gas Portable monitoring device) in both soil vapor and ambient air were compared, verifying the collection of soil vapor and not ambient air. Soil vapor and sewer air samples were analyzed onsite

using an onsite GC/MS (Hapsite). A summary of soil vapor and air sample observations are documented on a FDR which is included in Appendix B.

#### 2.7 INVESTIGATION DERIVED WASTES

Investigation derived waste (soil and water) generated during installation, development and sampling of monitoring wells was collected in 55-gallon drums. Investigation derived waste (IDW) water with minimal suspended particulate was and treated through an inline Filter Specialists, Inc. X100 bag filter using a 0.25 micron filter, prior to treatment with a granular activated carbon unit and prior to discharge.

Soils generated during drilling activities were screened using a PID and containerized in 55-gallon drums if readings greater than five parts per million were observed. Containerized soil and groundwater were transported under waste manifests and disposed at NYS approved facilities by Clean Venture, Inc. through Global Remediation of Taunton, Massachusetts. Manifests for IDW generated as part of the SRI are included in Appendix C.

#### 2.8 ELEVATION SURVEYS

Surveying was performed for newly installed monitoring wells, soil borings, and select sewer line features (e.g. manhole covers) by a licensed surveyor, Prudent Engineering from Syracuse, New York. Horizontal and vertical locations were provided to MACTEC and entered into a database for use with geographic information system software. Horizontal locations were tied to the NYS Plane Coordinate System using North American Datum of 1983, and measured to an accuracy of 0.1 ft. Vertical elevations of groundwater monitoring wells were tied to mean sea level, using National Geodetic Vertical Datum of 1988, and measured to an accuracy of 0.01 ft. Results of the monitoring well elevation surveys are provided in Appendix D.

Sample locations that were not surveyed include the indoor air, soil vapor, and sewer air sampling points. These locations were surveyed using a Trimble Global Positioning System, or measured relative to fixed structures and approximately plotted using aerial photographs by MACTEC field personnel.

#### 3.0 PHYSICAL SETTING

The physical characteristics of the Site and study area, including topography, climate, surface water, groundwater hydrology and geology, are described in the RI Report.

## 3.1 SUPPLEMENTAL REMEDIAL INVESTIGATION PHYSICAL SETTING OBSERVATIONS

Based on field observations during the SRI geologic, topographic and surface water hydrology characteristics are consistent with those described in the RI Report.

Groundwater hydrology at the Site was evaluated during the SRI through a round of groundwater elevation measurements collected from the newly installed SRI wells and 30 other wells installed during previous investigations. Figure 3.1 presents the interpreted overburden groundwater contours from the synoptic water levels collected in October 2015. Figure 3.2 presents the interpreted bedrock groundwater contours from the same event. Overburden and bedrock groundwater in the vicinity of the Site exhibited similar directional flow paths consistent with those observed during the course of the RI.

## 4.0 NATURE AND EXTENT OF CONTAMINATION

This section presents the results of soil, groundwater, soil vapor, and indoor air samples collected during the SRI. Laboratory results were reviewed and evaluated against data quality objectives. To determine whether the laboratory data met the project specific criteria for data quality and DUSRs were prepared. The DUSRs were prepared for each batch of samples analyzed in accordance with the "Guidance for the Development of Data Usability Reports" (NYSDEC, 2010) and are included as an appendix to this Report (Appendix E). The data presented in this report meets the data quality objectives for this SRI.

Analytical Results were compared to the following SCGs:

- Groundwater analytical results were compared to the NYS Class GA Groundwater Quality Standards from 6 NYCRR Parts 700-705 (NYS, 1999b), as well as to guidance values from the NYSDEC Technical and Operational Guidance Series 1.1.1 (NYSDEC, 1998), as appropriate.
- Soil analytical results were compared the NYSDEC Cleanup Objectives included in 6 NYCRR Subpart 375-6 Remedial Program Soil Cleanup Objectives for Protection of Groundwater, Residential, Commercial and Industrial use scenarios (NYS, 2006).
- Soil vapor and indoor air were evaluated using the air guidelines provided in the NYSDOH guidance document titled "Guidance for Evaluating Soil Vapor Intrusion in the State of New York," (the NYSDOH Guidance) dated October 2006 (NYSDOH, 2006). Background Soil and groundwater samples were collected from a location upgradient of the Site for comparison to onsite samples.

Applicable notes for each of the sample results tables are presented in Table 4.1.

As discussed in Section 1.5 and the RI, AOCs have been defined for the Site including: the Site, the MNR Property and the sanitary sewer line. The Site, MNR Property, and soil samples for the sanitary sewer all include source areas identified in the RI and are discussed together below. The source areas contained chlorinated solvents, more specifically PCE and TCE; therefore, the discussion of results will primarily focus on PCE and TCE.

## 4.1 SOIL/BEDROCK SAMPLE RESULTS

A total of 55 soil/bedrock samples were collected as part of the SRI from eight locations on Site, 10 locations on MNR property, and one location upgradient of the site for background comparison. Five

sludge samples were collected from four locations on Site within a floor drain/trench and one location downgradient of the Site within a sanitary sewer structure. Sample results show VOCs (primarily PCE and TCE) are present exceeding Soil Cleanup Objectives (SCOs) in surface (0-2 ft bgs), and subsurface soil (greater than 2 ft bgs) on and in the vicinity of the Site. Based on the objectives of the SRI, soil sample results are organized and tabulated by AOC and soil type. The background sample results based on soil type are discussed with the Site results. Soil sampling results are presented in the following tables and figures:

Table No.	Title
4.2	Site Surface Soil VOC Results
4.3	Site Subsurface Soil VOC Results
4.4	Railroad Property Surface Soil VOC Results
4.5	Railroad Property Subsurface VOC Results
4.6	Sludge – VOC Results

Figure No.	Title
4.1	RI & SRI PCE Soil Results

# 4.1.1 Site and Railroad Property Surface Soil Sample Results

Surface soil was collected from two locations for VOC analysis from the vicinity of the Site. A review of the Site surface soil results collected during the SRI indicate the following findings:

- Four VOC compounds were detected in onsite surface samples;
- PCE was detected at concentrations exceeding the Protection of Groundwater SCO in 1 sample (SS-501) and TCE in one sample (SS-504);
  - Exceedances for Protection of Groundwater were associated with separate AOCs and are consistent with the sample results from the RI in the vicinity of these locations;
- Concentrations of contaminants of concern (COCs) were not detected in excess of Commercial or Industrial SCOs in Site surface soils.

A background surface soil sample was not collected as part of this investigation.

Surface soil was collected from nine locations on MNR property for VOC analysis. A review of the MNR surface soil results indicate the following findings:

- Ten VOCs were detected;
- PCE was detected at concentrations exceeding the protection of groundwater SCO in 5 samples from 5 locations;
- The Residential SCO was also exceeded for PCE in three samples;
- The Protection of Groundwater and Residential SCO exceedances are consistent with those observed in RI samples collected in the vicinity of the SRI sample points;
- No sample results exceeded the Commercial and Industrial SCOs.

#### 4.1.2 Site and Railroad Subsurface Soil Sample Results

Eighteen subsurface samples were collected on the Site at depths ranging in depths from 2 to 16 ft bgs from eight locations for VOC analysis. Three subsurface samples were collected at one location upgradient of the Site for VOC analysis. Soil samples were collected from varying depths to evaluate vertical extent of contamination. A review of the Site and background subsurface soil results indicate the following:

- cis-1,2-dichloroethene (cis-1,2-DCE) and PCE were detected in samples from the vicinity of the potential drycleaner; concentrations did not exceed the SCOs;
- Samples from location GS-504 were collected to evaluate a potential source of 1,1,1-TCA upgradient of the lint trap. 1,1,1-TCA was detected, however, concentrations did not exceed the SCOs; and.
- Sample locations GS-506, GS-507 and GS-508 were collected near the sanitary sewer line leaving the lint trap to evaluate the potential presence of source material in the bedding material. Samples from 2-3 ft bgs, which represent the bottom of the sanitary sewer line did not have concentrations exceeding the SCOs. Samples collected near and below the groundwater table have concentrations of PCE exceeding the Industrial SCO.

The subsurface soil sample results collected during the SRI were consistent with the samples collected during the RI. The majority of the subsurface samples exceeding the SCOs on Site were located in native materials (sand and highly weathered bedrock) either adjacent to areas interpreted to contain source materials, or from soils hydraulically downgradient from interpreted source areas, suggesting the contamination is likely due to groundwater migration from source areas (lint trap (Table 4.3; Figure 4.1)).

Areas with exceedances of SCOs in the subsurface for TCE and vinyl chloride (VC) were generally colocated, further indicating that biodegradation of chlorinated solvents via reductive dechlorination is occurring.

Twenty-one subsurface samples were collected from 10 locations on MNR property for VOC analysis. A review of MNR subsurface soil results indicate the following:

• PCE was detected at concentrations exceeding the protection of groundwater SCO at two locations (GS-301 and GS-401) both in the 5-6 ft bgs interval.

Subsurface exceedances of PCE property generally correspond with surface disposal areas (western debris pile, northwestern debris pile and along the MNR tracks (Figure 4.1)) and are consistent with the RI results.

The distribution of contaminants both above and within the groundwater table (Table 4.5) is consistent with what may result from disposing source materials on the ground surface (not containing an impervious material). Precipitation and surficial overland run-off from higher topographical areas would be the main transport mechanism for migration of contamination to deeper soils and thus groundwater.

## 4.1.3 Sludge Sample Results

Five sludge samples were collected and analyzed for VOCs during the SRI field activities. One sample was collected from the sanitary sewer manhole (MH-001) downgradient from the Site. Four samples (DC-1 through DC-4) were collected from the bottom of a drainage channel inside the building in the vicinity of the old dry cleaner. A review of the data from these samples indicate the following:

- Detected PCE, TCE, and cis-1,2-DCE concentrations did not exceed SCOs;
- VC was detected above SCOs (Protection of Groundwater) at 0.14 milligram per kilogram (mg/kg), in the sanitary sewer sample.

## 4.2 GROUNDWATER SAMPLE RESULTS

Groundwater samples were collected from seven monitoring wells at the Site, one monitoring well upgradient of the Site, and from two grab sample locations on the Railroad property adjacent to the Site.

Groundwater sampling locations are shown on Figure 2.1A. Groundwater results are presented in the following tables and figures:

Table No.	Title
4.7	Site and Railroad Property Groundwater VOC Results
Figure No.	Title
4.2	RI & SRI PCE Concentrations in Overburden Groundwater
4.3	RI & SRI PCE Concentrations in Bedrock Groundwater
4.4	RI & SRI 1,1,1-TCA Concentrations in Overburden Groundwater
4.5	RI & SRI 1,1,1-TCA Concentrations in Bedrock Groundwater

## 4.2.1 Site Groundwater Sample Results

Seven groundwater samples were collected from seven locations on Site for VOC analysis. One additional background sample was collected upgradient of the Site for VOC analysis for comparison to the onsite results. A review of the Site groundwater results indicate the following findings:

- PCE was detected in seven samples at concentrations exceeding the GA Standard (5 µg/l);
  - The highest concentration of PCE detected in Site groundwater was interpreted to be located adjacent to the potential source area beneath the lint trap at a concentration of 17,000  $\mu$ g/l (PZ-34);
- TCE concentrations were detected in six samples exceeding the GA Standard (5  $\mu$ g/l);
  - $\circ$  The highest concentration of TCE detected in Site groundwater was interpreted to be located adjacent to the potential source area beneath the lint trap at a concentration of 13,000 µg/l (PZ-34);
- 1,1,1-TCA concentrations were detected in four samples exceeding the GA standard (5  $\mu g/l$ );
  - $\circ$  The highest concentration of 1,1,1-TCA was detected in the upgradient background sample (MW-505) at a concentration of 910 µg/l and generally decreased hydraulically downgradient across the Site.

In general contaminant concentrations observed on Site during the SRI did not deviate significantly from the relative locations and concentrations observed during the RI. The impacts of contaminants in bedrock in the vicinity of the former dry cleaning unit could not be assessed due to field limitations on the bedrock well installation. The 1,1,1-TCA concentration observed in the upgradient sample at MW-505 further indicates that an upgradient source is contributing to the concentrations observed on Site.

#### 4.2.2 Metro North Railroad Groundwater Sample Results

Two groundwater grab samples were collected from two locations on the MNR property for VOC analysis. A review of the MNR groundwater results indicate the following findings:

- PCE was detected in both samples at concentrations exceeding the GA Standard;
- TCE was detected in one sample at concentrations exceeding the GA Standard.

In general the contaminant concentrations observed in groundwater on the MNR are consistent with the RI results. The observed contaminants on the MNR property generally correspond with the surface disposal areas (western debris pile, northwestern debris pile and along the MNR tracks (Figure 4.1)).

#### 4.2.3 Extent of Groundwater Contamination

Figures 4.2 and 4.3 presents the extent of PCE contamination in groundwater based on the RI and SRI. As shown on these figures, Site related contamination was detected in groundwater over 1,900 ft downgradient of the Site. Figures 4.4 and 4.5 present the extent of 1,1,1-TCA contamination in groundwater based on the RI and SRI data. As shown on these figures the 1,1,1-TCA originates upgradient of the Site.

#### 4.3 INDOOR AIR AND SOIL VAPOR SAMPLING

The two primary Site related chlorinated solvents detected in shallow groundwater emanating from the Site are PCE and TCE. Indoor air and soil vapor sampling was conducted to evaluate if the VOCs detected at the Site and in groundwater downgradient from the Site are migrating into overlying residential structures via vapor intrusion with the sanitary sewer acting as a preferential pathway. The indoor air and soil vapor sampling locations are shown on Figure 2.1. Air and vapor results are presented in the following tables and figures:

Table No. Title

4.8

Hapsite Air and Vapor VOC Results

Figure No.	Title
4.6A	PCE Concentrations in Site Vicinity Sewer Soil Vapor and Air
4.6B	PCE Concentrations in Downgradient Sewer Soil Vapor and Air

#### 4.3.1 Indoor Air Sample Results

Seventeen indoor air samples were collected from two off-site structures (Structures 1 and 10) and analyzed for VOCs using the onsite HAPSITE. Results for the two structures are discussed separately for the evaluation the effectiveness of previous mitigation measures at these locations.

#### Structure 1

- PCE was detected at a concentration of 9 micrograms per cubic centimeter (ug/cm<sup>3</sup>) in one sample collected from a storage cabinet.
- PCE and TCE were not detected in the breathing zone sample or in other samples collected throughout the structure.

Based on these concentration results, the mitigation methods utilized at this location appear to be working successfully.

#### Structure 10

- PCE was detected in eleven samples, with the highest concentration at 705 ug/cm<sup>3</sup> in Structure 10.
- TCE was detected in 10 samples, with the highest at 419 ug/cm<sup>3</sup>.
- PCE and TCE were detected at concentrations of 59 ug/cm<sup>3</sup> and 28 ug/cm<sup>3</sup>, respectively, in the initial breathing zone sample (IAS-ST10-01).

The highest concentrations of PCE (705 ug/cm<sup>3</sup>) and TCE (419 ug/cm<sup>3</sup>) in Structure 10 were observed in a sample collected above the sanitary sewer sealed with a Dranjer<sup>TM</sup> (air tight floor drain). Subsequently, the cap was sealed with poly sheeting and tape and retested four hours later. Following the sealing of sewer, the PCE and TCE concentrations above the Dranjer<sup>TM</sup> had decreased to 123 ug/cm<sup>3</sup> and 84 ug/cm<sup>3</sup> in Structure 10, respectively; however, concentrations in a sample from the breathing zone were essentially unchanged with PCE and TCE concentrations of 72 ug/cm<sup>3</sup> and 53 ug/cm<sup>3</sup>, respectively. Based on the indoor air results from Structure 10, the Dranjer<sup>™</sup> sewer cap is potentially contributing to indoor air concentrations of PCE and TCE. Additional mitigation measures relating to the sewer cap and the sanitary sewer at the structure are warranted.

## 4.3.2 Sanitary Sewer Air and Soil Vapor Sample Results

Eighteen samples (2 sewer air and 16 soil vapor) were collected along the sanitary sewer on Bartels Place. One sewer air sample was collected upgradient of the Site on Realyea Place. Fourteen samples (6 sewer air and 8 soil vapor) were collected along the sanitary sewer downgradient of the Site along Pine Street.

- PCE was detected in 21 samples collected from the sanitary sewer air/soil vapor sample locations with the highest concentration of 173,771 ug/cm<sup>3</sup> immediately adjacent to the sewer exit from the lint trap;
  - this sample was collected from a Geoprobe® boring that extended deeper than the sanitary sewer bedding materials and intersected the lint trap source area materials, potentially misrepresenting the soil vapor along the sewer system;
  - the highest PCE concentration observed downgradient of the Site was detected in a storm water catch basin located on Pine Street (SA-PS08-06) with a concentration of 187 ug/cm<sup>3</sup>; and,
  - the highest PCE concentration observed away from the lint trap and associated with the sanitary sewer hydraulically downgradient of the Site was 109 ug/cm<sup>3</sup> at SVG-BP07-03 along Bartels Place.
- TCE was detected in 17 samples collected with the highest concentration of 18,774 ug/cm<sup>3</sup> immediately adjacent to the sewer exit from the lint trap;
  - the highest TCE concentration detected away from the lint trap was 250 ug/cm<sup>3</sup> at the upgradient sewer sample from the manhole on Realyea Place, suggesting an offsite source is contributing to TCE concentrations in the sanitary sewer.

The highest PCE soil vapor concentration along the sanitary sewer (SVG-BP07-03) was observed to be a small isolated area as samples immediately upgradient (SVG-BP16-03) and downgradient (SVG-BP17-03) were both non-detect in concentration. This location was associated with a potential lateral connection to an adjacent structure identified during the closed circuit television inspection of the sewer.

The bottom of the storm water catch basin (SVG-PS08-06) with the elevated PCE concentrations on Pine Street was estimated to be 6 ft bgs. During the RI, groundwater in this area was measured at approximately 7 ft bgs, on average. The PCE vapor concentrations observed in the storm sewer at this

depth are likely the result of volatilization of contaminants from groundwater migrating through the vadose zone and into the sewer piping. For the purpose of the SRI, the sanitary sewer is not contributing to the PCE concentrations observed in the storm sewer downgradient of the Site.

#### 4.3.3 Extent of Soil Vapor Contamination Along Sanitary Sewer

In general, soil vapor concentrations were highest immediately adjacent to the Site where the sanitary sewer exited the lint trap and decreased downgradient of the Site. The soil vapor results adjacent to the Site are believed to be the result of the borings intersecting the lint trap source materials at a depth greater than 7 ft bgs and are unrelated to the sanitary sewer bedding materials. Based on the sewer soil vapor and air results for PCE and TCE, the sanitary sewer does not currently appear to be acting as a preferential migration pathway for Site contaminants as soil vapor through the bedding materials and/or inside the sewer pipe.

The indoor air concentrations from Structures 10 indicate a potential entry point for vapor from the sanitary sewer based on the pre/post-cap sealing. However the sanitary sewer soil vapor concentrations, do not indicate a source area continuing to feed these indoor air concentrations. Further investigation into the sanitary sewer lateral and soil vapor between the sewer and the property may be warranted.

#### 5.0 CONTAMINANT FATE AND TRANSPORT

This section presents an assessment of contaminant movement and disposition within the environment.

#### 5.1 CONCEPTUAL SITE MODEL UPDATE

A CSM for the Site was first presented in the FAP (MACTEC, 2012) and updated with the RI. No significant revisions were required to the CSM presented in the RI based on the SRI data.

Based on detected concentrations, PCE may be present at the Site as a DNAPL (detected in the vicinity of the lint trap in soil at 21,000 mg/kg and in groundwater at 170,000  $\mu$ g/l). PCE and its breakdown products have migrated from waste disposal areas (lint trap and debris piles) into soil and overburden groundwater, and then into the bedrock groundwater. Site related contaminants have been detected at concentrations above applicable SCGs in overburden and bedrock groundwater at and downgradient of the Site. Further discussion can be found in Section 5 of the RI Report. The following sections provide relevant updated information for the CSM.

#### 5.1.1 Contaminants of Concern

The primary Site-related COCs are PCE and its breakdown products (TCE, cis-1,2- DCE, VC). PCE has historically been used at the Site for dry cleaning operations, its use was purportedly discontinued in the 1980's. 1,1,1-TCA and its breakdown product 1,1-dichloroethane have also been detected on Site; however based on data collected in the SRI the source of 1,1,1-TCA appears to be the result of an upgradient source.

During the RI, 1,1,1-TCA was primarily detected in groundwater upgradient from identified Site-related COC source areas along the southern and eastern edge of the Site. 1,1,1-TCA was not detected in samples collected during the RI from upgradient wells (MW-26 and MW-26B) on Centre Avenue. SRI sample results indicated that 1,1,1-TCA concentrations were highest (910  $\mu$ g/l) at monitoring well MW-505 located in the sidewalk on Relyea Place and generally decreased hydraulically downgradient across the Site (570  $\mu$ g/l to not-detected). This location is immediately upgradient of the Site and downgradient of current and former industrial facilities located on Relyea Place. The decreasing concentration of

1,1,1-TCA from off-site hydraulically upgradient to across the Site and the lack of an identified 1,1,1-TCA source area in the RI report suggest an upgradient source for 1,1,1-TCA detections on the Site.

#### 5.1.2 Source Areas and Points of Entry

#### Site Building

Low level site related contaminants were detected in the vicinity of the former dry-cleaning machine, recently identified by the Site Owner. However, soil and groundwater results do not suggest that there is an additional source of contamination in this area.

#### MNR Property

PCE contamination is present in surface soil along the MNR tracks exceeding the Protection of Groundwater SCO in 5 of 9 locations, and was detected as high as 14 mg/kg. Migration of contaminants through precipitation (both infiltration and erosion of soil with overland flow) likely mobilized the surficial contamination in the debris piles. PCE is present in subsurface soils above the water table (approximately seven ft bgs) at a concentrations as high as 2.6 mg/kg (SS-301). Based upon the SRI results the vertical and lateral extent of contaminated soils on the MNR property has been delineated.

In general the contaminant concentrations observed in groundwater on the MNR are consistent with the RI results. PCE was detected above GA standard in both groundwater samples at a concentration as high as 500  $\mu$ g/l. The observed contaminants on the MNR property generally correspond with the surface disposal areas (western debris pile, northwestern debris pile and along the MNR tracks (Figure 4.1)).

#### Sanitary Sewer Bedding Material

PCE contamination was not observed exceeding the Protection of Groundwater SCO in the two soil samples collected adjacent to the sanitary sewer bedding materials in the vicinity of the lint trap. These samples were collected at a depth of 2 to 3 ft bgs which are consistent with the depth of the bottom of the pipe at 2 ft bgs in this area. Deeper samples in the same borings did detect PCE above SCOs, however these results are likely related to the downward migration of contaminants from the lint trap rather than from the sanitary sewer bedding materials.

The bedding materials of the sanitary sewer in the vicinity of the lint trap are not considered a contributing source area for contaminants.

## 5.2 CONTAMINANT MIGRATION

Based on the results from the RI the sewer line in the vicinity of the site was identified as a potential migration pathway for soil vapor originating from contaminated Site soil and groundwater. Potential migration pathways included both the bedding materials and transport within the sewer pipe. Based on the SRI soil vapor results for PCE and TCE, the sanitary sewer does not appear to be acting as a preferential migration pathway for Site contaminants through either the bedding materials or through the pipe. Concentrations were generally observed to be low or non-detected within and around the pipe, and the higher concentrations were observed to be isolated point samples. No concentration trends were observed downgradient of the Site to suggest that this is a preferential pathway.

Based on the sewer vapor results for PCE and TCE, the storm water sewer system downgradient of Site may be acting as migration pathway for Site contaminants in vapor volatilizing from groundwater.

The indoor air results for PCE and TCE from Structure 10 suggest that vapors are entering the structure through the sewer line. However, it is unclear how the contaminants are migrating from the onsite source areas.

#### 6.0 QUALITATIVE EXPOSURE ASSESSMENT

#### 6.1 INTRODUCTION

A Qualitative Exposure Assessment for soil, groundwater and soil vapor at the Site was presented in the RI Report. The Qualitative Exposure Assessment was performed in accordance with NYSDEC DER-10 Technical Guidance (NYSDEC, 2010), which indicates that the assessment should evaluate the mechanisms or exposure pathways by which humans and the environment may be potentially exposed to contamination associated with the Site. Based on the data generated during the SRI there are no changes to the soil and groundwater pathways. The soil vapor pathway is modified as follows:

#### 6.2 SANITARY AND STORM SEWER LINE VAPOR INTRUSION

One identified source area at the Site (lint trap) is directly connected to the Westchester County sanitary sewer line. Vapor sample results from samples collected during the RI from two residential sanitary sewer cleanouts hydraulically downgradient from the Site, suggested that the sanitary sewer line may be acting as a transport mechanism for contaminated vapor to enter residential dwellings.

Based on the soil vapor results collected during the SRI, the sanitary sewer does not currently appear to be acting as a preferential migration pathway for Site contaminants through either the bedding materials or through the pipe as soil vapor. Vapor results from the vicinity of the sanitary sewer cleanout in one structure suggest that the lateral into that structure may be acting as a transport mechanism for contaminated vapor. These vapors are not sufficiently found in the sanitary sewer or in an adjacent structure and could be originating from between the sewer line and the residential structure. Further delineation along the lateral may be warranted to determine the transport mechanism for vapors entering the lateral and into the residential structure.

Based on the soil vapor results collected during the SRI suggest that contaminants may be volatizing from groundwater and migrating in the vapor phase through the downgradient storm water.

Direct inhalation of contaminated vapors in the sanitary sewer near the Site and in the storm water sewer downgradient of the Site is a complete pathway for Westchester County Department of Environmental Facilities employees entering the subgrade sewer system for routine maintenance or cleaning.
# 7.0 SUMMARY AND CONCLUSIONS

## 7.1 SUMMARY

The Site is located at 10 Bartels Place in New Rochelle, Westchester County, New York (Figure 1.1). It is 0.42 acres in size and resides on a slightly sloping irregular shaped parcel. The main Site feature includes a six-sided building which occupies the majority of the property and a small parking area located to the south and southwest of the building. The surrounding area is urban with a mix of commercial and residential structures.

The Site began operations in 1950 as a uniform and industrial clothing cleaning facility for heavily soiled clothing from auto body and gasoline dispensing businesses. In 1980, Workingman's Closet, a direct factory sales division of Industrial Overall which sells new and reclaimed work clothes, was opened. The Site reportedly operated as a dry cleaning laundering facility for a short time during the 1980's. Current operations at the Site include, laundering linens and uniforms for restaurant and other businesses and retail uniform sales.

The SRI field investigation was completed at the Site in October 2015, and consisted of:

- Soil sampling (surface and subsurface), both on the Site and on the MNR property;
- Monitoring well installation;
- Groundwater sampling and groundwater elevation measurements from monitoring wells;
- Indoor air sampling from two residential structures located in the vicinity of the Site; and,
- Soil vapor sampling along and inside the sanitary sewer in the vicinity and downgradient of Site.

# 7.2 CONCLUSIONS

Results of this investigation indicates:

- The former dry-cleaning machine location, newly identified by the Site owner, is not an additional source of contamination to soil and shallow groundwater in this area of the Site;
- The source of 1,1,1-TCA in groundwater appears to be the result of an upgradient source;

- The observed contaminants on the MNR property generally correspond with the surface disposal areas (western debris pile, northwestern debris pile and along the MNR tracks), and the extent of the soil contamination has be vertically and laterally delineated;
- No soil contamination was observed in the sanitary sewer bedding materials in the vicinity of the lint trap source area.
- The sanitary sewer line is not acting as a preferential pathway for contaminants originating at the lint trap to migrate and enter into nearby structures as soil vapor.
- Volatilization of contaminants from groundwater into the storm water sewer pipe downgradient of the Site may be occurring.
- The Qualitative Exposure Assessment indicated ecological receptors are not present; however; completed exposure pathways exist for:
  - Soil vapor entering residential structures in the vicinity of the Site.
  - If sub-surface work were to occur in the vicinity of the identified contaminated soil, groundwater or soil vapor, direct exposure could occur.

# 7.3 SRI DATA GAPS

A review of the data generated during the SRI identified the following data gaps:

• The source of and migration pathway for contaminated vapors entering a residential structure through the sanitary sewer line should be investigated.

# 7.4 **RECOMMENDATIONS**

The draft RI and FS reports should be updated based on the results of this investigation. Additionally, based on the findings of the SRI MACTEC recommends that a pre-design investigation be conducted to address the data gap concerning soil vapor infiltration through the residential sanitary sewer line.

## 8.0 **REFERENCES**

- MACTEC, 2015. Supplemental Remedial Investigation Field Activities Plan (FAP) Industrial Overall Uniform Corporation; Site Number 360109. Prepared for New York State Department of Environmental Conservation, Albany, New York. October 13, 2015.
- MACTEC, 2012. Final Field Activities Plan Remedial Investigation Industrial Overall Service Corporation. Prepared for New York State Department of Environmental Conservation, Albany, New York. March 2012.
- MACTEC, 2016. Remedial Investigation Report Industrial Overall Services. November 2016
- New York State (NYS), 2006. New York Codes, Rules, and Regulations, Title 6, Part 375-Environmental Remediation Programs. December, 2006.
- NYS, 1999a. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999.
- NYS, 1999b. New York Codes, Rules, and Regulations, Title 6, Part 700-705 Water Quality Regulations Surface Water and Groundwater Classifications and Standards. Amended August 1999.
- New York State Department of Environmental Conservation (NYSDEC), 2011. New York State Department of Environmental Conservation, *Work Assignment Issuance/Notice to Proceed* for *Industrial Overall Service Corporation* (NYSDEC Site number 360109); December 13, 2011.

NYSDEC, 2010. DER-10, Technical Guidance for Site Investigation and Remediation. May 3, 2010.

NYSDEC, 2005. "Analytical Services Protocols"; 6/05 Edition; June 2005.

- NYSDEC, 1998. Division of Water Technical and Operational Guidance Series (1.1.1 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. October 1998 (revised).
- New York State Department of Health, 2006 and 2007. Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York. October 2006, as amended June 25, 2007.

# FIGURES



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MACTEC

PCE in Groundwater:  $oldsymbol{\circ}$ < 5 µg/L 5 - 100 µg/L 0 100 - 1,000 µg/L 0 1,000 - 10,000 µg/L • > 10,000 µg/L igodol0 Non-Detect 140 70 Feet SUPPLEMENTAL RI INDUSTRIAL OVERALL SERVICES NEW ROCHELLE, NEW YORK



Interpreted Area of PCE Detected in Groundwater at Concentrations exceeding 1,000  $\mu g/L$ Interpreted Area of PCE Detected in Groundwater at Concentrations exceeding 5  $\mu$ g/L

--- Property Line

PCE = Tetrachloroethene

Results Shown in  $\mu$ g/L from 2012-2015

 $\mu$ g/L = micrograms per Liter

MW-26 = Groundwater Sampling Location

<u>*MW-6*</u> = PCE Results Shown from December 2008

MW-10 = Well Decommissioned in 2015

Checked/Date: NV 12/31/15 **RI & SRI PCE CONCENTRATIONS IN** 

Prepared/Date: BRP 12/31/15

OVERBURDEN GROUNDWATER Project 3612112221

Figure 4.2



# Legend

PCE in Groundwater:	Interpreted Area of at Concentrations	PCE Detected in Groundwater exceeding 10,000 μg/L			A Company
<ul> <li>5 - 100 μg/L</li> <li>100 - 1,000 μg/L</li> </ul>	Interpreted Area of at Concentrations	PCE Detected in Groundwater exceeding 1,000 µg/L			
<ul> <li>1,000 - 10,000 μg/L</li> <li>10,000 μg/L</li> </ul>	Interpreted Area of at Concentrations	PCE Detected in Groundwater exceeding 5 μg/L	All X and	1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
> 10,000 μg/L	Property Line			ADDE NO PRAC	
O Non-Detect	PCE = Tetrachloroethene			the shall be a second	
	Results Shown in µa/L fro	om 2012-2015			
	µg/L = micrograms per Li	iter		and a standard	P. Star Pr
Ν	MW-26B = Groundwater	Sampling Location	March Ala		
0 70 140 Feet			04 A 147	A 13 Man	Prepared/Date: BRP 12/31/15 Checked/Date: NV 12/31/15
SUPPLEME	ENTAL RI			RI & SRI PCE CON	CENTRATIONS IN
INDUSTRIAL OVER	RALL SERVICES			BEDROCK GRO	OUNDWATER
NEW ROCHELLE	E, NEW YORK			Project 3612112221	Figure 4.3



#### Legend

1,1,1-TCA in Groundwater:

- < 5 μg/L
- Ο 5 100 µg/L
- 100 1,000 μg/L

70

- O Non-Detect
- Interpreted Area of 1,1,1-TCA Detected in Groundwater at Concentrations exceeding 100 μg/L Interpreted Area of 1,1,1-TCA Detected in Groundwater at Concentrations exceeding 5 μg/L
- 1,1,1-TCA = 1,1,1-Trichloroethane
- Results Shown in  $\mu$ g/L from 2012-2015
- µg/L = micrograms per Liter
- MW-26 = Groundwater Sampling Location
- $\underline{\text{MW-10}}$  = Well Decommissioned in 2015

Prepared/Date: BRP 01/22/16 Checked/Date: NV 01/22/16

SUPPLEMENTAL RI INDUSTRIAL OVERALL SERVICES NEW ROCHELLE, NEW YORK

140

Feet



RI & SRI 1,1,1-TCA CONCENTRATIONS IN OVERBURDEN GROUNDWATER Project 3612112221 Figure 4.4









# **TABLES**

Activity	Date	Activity Sample Location	Rationale	Paramters Analyzed	Relevant Appendix/Reference	
MetroNorth Property Data G	ap					
Direct Push Soil Borings	October 22, 2015	SS-301, SS-400 through SS-408	To evaluate the extent of soil contamination along the MNR tracks.	VOCs and % moisture	Appendix B.4	
Direct Push Direct Push Groundwater Grab Sampling	October 22, 2015	GW-301 and GW-408	To evaluate if contaminants are migrating to groundwater from this area.	VOCs	Appendix B.3	
Site Building Data Gap						
Subsurface Soil Sampling During Monitoring Well Installation	October 17, 2015	GS-501	To evaluate potential contamination in soil in the vicinity of the former dry-cleaning machine which was recently identified by the Site Owner.		Appendix B.1	
Montoring wen instanation	October 18, 2015	GS-504 and GS-505	To evaluate a potential source of 1,1,1-TCA upgradient (north) of the lint trap.	VOCs and % moisture		
Hand Probe Soil Sampling	October 17-26, 2015	GS-502, GS-503	To evaluate potential contamination in soil in the vicinity of the former dry-cleaning machine which was recently identified by the Site Owner.			
Groundwater Monitoring Well Installation and Development	October 17-19, 2015	MW-501	To evaluate potential contamination in shallow groundwater in the vicinity of the former dry- cleaning machine which was recently identified by the Site Owner.	NA	Appendix B.2	
	October 18-26, 2015	MW-504 and MW-505	To evaluate a potential source of 1,1,1-TCA upgradient (north) of the lint trap.			
Monitoring Well Groundwater	October 27, 2015	MW-501	To evaluate potential contamination in shallow groundwater in the vicinity of the former dry- cleaning machine which was recently identified by the Site Owner.	VOCs	Appendix B.3	
Sampling	October 27, 2015	MW-504 and MW-505	To evaluate a potential source of 1,1,1-TCA upgradient (north) of the lint trap.	VOCs	Appendix B.3	
	October 17-19, 2015	PZ-22, PZ-33, PZ-34, and PZ-35	Current groundwater concentrations for comparison of results from new wells	VOCS	Appendix B.3	
Synoptic Groundwater Elevation Survey (from select monitoring wells in the vicinty of the Site)	October 26, 2015	<ul> <li>MW-21, MW-22, MW-22B, MW-23, MW-24,</li> <li>MW-24B, MW-25, MW-25B, MW-26, MW-26B, MW-28B, BR-101A (1,2), BR-101B (3,4), BR-101C (5,6), BR-101D (7), BR-102A (1,2), BR-102B (3,4), BR-102C (5,6,7), PZ-15,</li> <li>PZ-19, PZ-20, PZ-21, PZ-22, PZ-23, PZ-28, PZ 33, PZ-34, PZ-35, PZ-36, PZ-38, PZ-39, MW-501, MW-504, MW-505</li> </ul>	To evaluate groundwater flow and contaminant distribution in the vicinity of the Site with the addition of the SRI wells	NA	Table 2.3	

# Table 2.1: Summary of SRI Field Investigation Activities

Activity	Date	Activity Sample Location	Rationale	Paramters Analyzed	Relevant Appendix/Reference	
Sewer Line Data Gap						
Private Utility Locator	October 20-21, 2015	Bartels Place and Pine St	To locate the center and depth of the sanitary sewer for the grab soil vapor sampling on Bartels Place and Pine Street	NA	NA	
Direct Push Soil Borings	October 21, 2015	GS-506, GS-507, GS-508	To evaluate soil contamination adjacent to the sewer line in the vicinity of the lint trap which could be a continuing source contamination to groundwater and soil vapor which is migrating from the Site.	VOCs and % moisture	Appendix B.1	
Exterial Soil Vapor Grab Sampling	October 26-28, 2015	Bartels Place, Pine St, and Realyea Place	To evaluate the extent of PCE migration as soil vapor along sewer line (a potential preferential pathway) along Bartels Place and Pine Street, both inside the pipe and in the bedding materials surrounding the sewer pipe.	VOCs	Appendix B.4	
Indoor Air Sampling	oor Air Sampling October 27, 2015 Structure 1 and Structure 10		To evaluate the extent of PCE migration into nearby structures via the sanitary sewer and to evaluate previously implemented mitigation measures.	VOCs	Table 4.13	
Investigation Derived Waste	Management					
IDW Transport and Disposal	October 29, 2015	Site Building and MNR Property	Management of waste generated during the SRI.	NA	Appendix C	
Elevation Surveys						
Site Survey	October 26, 2015	SRI Locations	To aid in interpreting groundwater flow direction and producing a Tecplot 3D model.	NA	Appendix D	

## Table 2.1: Summary of SRI Field Investigation Activities

#### Notes:

BR = Bedrock	BP = Bartels Place
GS = Geoprobe soil sample	MNR = Metro North Railroad
GW = groundwater	PS = Pine Street
MW = monitoring well	RP = Realyea Place
PZ = piezometer sample	SRI = Supplemental Remedial Investigation
SA = sewer air sample	NA = not applicable
SS = surface soil sample	IDW = investigation derived waste
SVG = exterior soil vapor grab sample	VOCs = volatile organic compounds

PCE = Tetrachloroethene 1,1,1-TCA = 1,1,1-Trichloroethane

					Analysis	VOCs	VOC
					Media	Soil	Water
					Method	5035A/8260C	8260C
					container	2X40ml	3X40ml
					Preservative	methanol	HCL, 4°C
					units	mg/kg (ppm)	ug/L (ppb)
					Detection limit needed to meet	0.05 (1)	0.5 (1)
					Validation Level	Cat	Δ
	T	<u> </u>	<del>т                                    </del>		validation Lever	Cat	A
Evaluation Objectives	Methodology	Loc I.D.	Media	Sample I.D.	Sample Rational	# of Sa	mples
			Soil	360109-SS-301	Extent of soil contamination	1	ļ
		SS-301	Soil	360109-SS-301	Extent of soil contamination	1	
			Soil	360109-SS-500	Extent of soil contamination	1	
			Soil	360109-SS-400	Extent of soil contamination	1	
		SS-400	Soil	360109-SS-400	Extent of soil contamination	1	
			Soil	360109-SS-400	Extent of soil contamination	1	
			Soil	360109-SS-401	Extent of soil contamination	1	
		SS-401	Soil	360109-SS-401	Extent of soil contamination	1	
			Soil	360109-SS-401	Extent of soil contamination	1	
	Direct Push Soil		Soil	360109-SS-402	Extent of soil contamination	1	
5 1 1 2	<u>Sampling</u> - Up tp ten soil borings will be advanced	SS-402	Soil	360109-SS-402	Extent of soil contamination	1	
	to a depth of		Soil	360109-SS-402	Extent of soil contamination	1	
	approximately 12 feet. Up		Soil	360109-SS-403	Extent of soil contamination	1	
	collected from each	SS-403	Soil	360109-SS-403	Extent of soil contamination	1	
MNR Data Gap	boring. Samples will be collected when there is an		Soil	360109-SS-403	Extent of soil contamination	1	
To evaluate:	indication of waste (e.g.		Soil	360109-SS-404	Extent of soil contamination	1	
contamination along	visual, PID or olfatory), if	SS-404	Soil	360109-SS-404	Extent of soil contamination	1	
the RR tracks, and	samples will be collected		Soil	360109-SS-404	Extent of soil contamination	1	
migrating to	at: 1-2 feet bgs, 6-8 feet		Soil	360109-SS-405	Extent of soil contamination	1	
groundwater from this	the boring.	SS-405	Soil	360109-SS-405	Extent of soil contamination	1	
arca.			Soil	360109-SS-405	Extent of soil contamination	1	
			Soil	360109-SS-406	Extent of soil contamination	1	
		SS-406	Soil	360109-SS-406	Extent of soil contamination	1	
			Soil	360109-SS-406	Extent of soil contamination	1	
			Soil	360109-SS-407	Extent of soil contamination	1	
		SS-407	Soil	360109-SS-407	Extent of soil contamination	1	
			Soil	360109-SS-407	Extent of soil contamination	1	
			Soil	360109-SS-408	Extent of soil contamination	1	
		SS-408	Soil	360109-SS-408	Extent of soil contamination	1	
			Soil	360109-SS-408	Extent of soil contamination	1	
	Groundwater grab samples will be collected	GW-301	water	360109-GW-301	Groundwater concentration of PCE at the location of the highest soil sample results from previous investigation.		1
	from two soil borings.	GW-408	water	360109-GW-406	Groundwater concentration of PCE downgradient of area of known contamination		1

					Analysis	VOCs	VOC
					Media	Soil	Water
					Method	5035A/8260C	8260C
					container	2X40ml	3X40ml
					Preservative	methanol	HCL, 4°C
					units	mg/kg (ppm)	ug/L (ppb)
					Detection limit needed to meet		
					objective	0.05 (1)	0.5 (1)
					Validation Level	Cat	A
						# .60.	
Evaluation Objectives	Methodology	Loc I.D.	Media	Sample I.D.	Sample Rational	# 01 Sa	mpies
					Potential contamination near		
		1	Soil	360109-GS-500	former dry cleaner	1	
		<b>GG 5</b> 00			Potential contamination near		
		GS-500	Soil	360109-GS-500	former dry cleaner	1	
		1			Potential contamination near		
		1	Soil	360109-GS-500	former dry cleaner	1	
					Potential contamination near		
		1	Soil	360109-GS-501	former dry cleaner	1	
		00.501			Potential contamination near		
		GS-501	Soil	360109-GS-501	former dry cleaner	1	
		1			Potential contamination near		
		1	Soil	360109-GS-501	former dry cleaner	1	
					Potential contamination near		
		1	Soil	360109-GS-502	former dry cleaner	1	
		GG 500			Potential contamination near		
	Direct Push Soil	GS-502	Soil	360109-GS-502	former dry cleaner	1	
	Sampling - Collect direct	1			Potential contamination near		
	push samples from 5	1	Soil	360109-GS-502	former dry cleaner	1	
	borings within Site				Potential contamination near		
	building near potential	1	Soil	360109-GS-503	former dry cleaner	1	
Puilding Data Can	source areas. Advance 1	~~~~			Potential contamination near		
Building Data Gap	boring outside of building	GS-503	Soil	360109-GS-503	former dry cleaner	1	
1) potential	6	1			Potential contamination near		
		1	Soil	360109-GS-503	former dry cleaner	1	
contamination in soil					Evaluate potential source of 1,1,1		
and shallow		1	Soil	360109-GS-504	TCA contamination	1	
groundwater in the					Evaluate potential source of 1,1,1		
vicinity of the former		GS-504	Soil	360109-GS-504	TCA contamination	1	
dry-cleaning machine					Evaluate potential source of 1,1,1		
which was recently			Soil	360109-GS-504	TCA contamination	1	
identified by the Site					Evaluate potential source of 1,1,1		
Owner, and;		1	Soil	360109-GS-505	TCA contamination	1	
2) a potential source		~~~~			Evaluate potential source of 1,1,1		
of 1,1,1-TCA		GS-505	Soil	360109-GS-505	TCA contamination	1	
upgradient (north) of		1			Evaluate potential source of 1,1,1		
the lint trap.		1	Soil	360109-GS-505	TCA contamination	1	
		MW-500	Method         5035A/8260C           acotainer         2X40ml           Preservatve         methanol           antis         mg/kg (ppm)         u           Oc I.D.         Media         Sample 1.D.         Sample Rational         # of Sample           Soil         360109-GS-500         Potential contamination near         1         Potential contamination near         1           GS-500         Soil         360109-GS-500         Potential contamination near         1         Potential contamination near         1           GS-501         Soil         360109-GS-500         former dry cleaner         1         Potential contamination near         1           GS-501         Soil         360109-GS-501         former dry cleaner         1         Potential contamination near         1           GS-501         Soil         360109-GS-502         former dry cleaner         1         Potential contamination near         1           GS-502         Soil         360109-GS-502         former dry cleaner         1         Potential contamination near         1           GS-502         Soil         360109-GS-502         former dry cleaner         1         Potential contamination near         1           GS-503         Soil         36010	1			
	Low flow groundwater				Evaluate potential overburden		
	sampling - will be conducted	MW-502	water	360109-MW-502	groundwater contamination near		1
	at 4 existing wells and 4				the former dry cleaner.		
	newly installed wells.				Evaluate potential source of 111	1	
		MW-504	water	360109-MW-504	TCA in overburden groundwater.		1
	Water levels will be						
	measured in the following				Evaluate potential source of 111		
	<u>wens.</u> MW-21_MW-22_MW-22B	MW-505	water	360109-MW-505	TCA in bedrock groundwater.		1
	MW-23 MW-24 MW-24B				Current groundwater		
	MW-25, MW-25B, MW-26,	PZ-33	water	360109-PZ-33	concentrations for comparison of		1
	MW-26B, MW-28B, BR-				results from new wells		1
	101A (1,2), BR-101B (3,4),				Current groundwater	1	
	BR-101C (5,6), BR-101D	PZ-34	water	360109-PZ-34	concentrations for comparison to		1
	(7), BR-102A (1,2), BR-			· · · · · · · · · · · · · · · · · · ·	results from new wells		-
	102B (3,4), BR-102C (5,6,7),				Current groundwater	h	
	PZ-15, PZ-19, PZ-20, PZ-21,	PZ-35	water	360109-PZ-35	concentrations for comparison of		1
	PZ-22, PZ-23, PZ-28, PZ-33,				results from new wells		-
	PZ-34, PZ-35, PZ-36, PZ-38,				Current groundwater		
	FZ-39, MW-300, MW-302, MW-504 MW-505	PZ-22	water	360109-PZ-22	concentrations for comparison of		1
	ww-504, MW-505		utor	200107 IL 22_	results from new wells		

				Analysis	VOCs	VOC	
					Media	Soil	Water
					Method	5035A/8260C	8260C
					container	2X40ml	3X40ml
					Preservative	methanol	HCL, 4°C
					units	mg/kg (ppm)	ug/L (ppb)
					Detection limit needed to meet	0.05 (1)	0.5 (1)
					Validation Level	Cat	A
Evaluation Objectives	Methodology	Loc I.D.	Media	Sample I.D.	Sample Rational	# of Sa	mples
Sewer Line Data Gap to evaluate:		HS-506	Soil	360109-HS-506	Evaluate potential soil contamination in the vicinity of the sewer line adjacent to the lint trap.	1	
adjacent to the sewer line in the vicinity of the lint trap which	Soil sampling- three soil samples will be collected	HS-507	Soil	360109-HS-507	Evaluate potential soil contamination in the vicinity of the sewer line adjacent to the lint trap.	1	
source containing source containing to groundwater and soil vapor which is migrating from the Site, and; 2) the extent of PCE migration as soil vapor along sewer line (a potential preferential pathway) along Bartels Place and Pine Street, both inside the pipe and in the bedding materials surrounding the sewer pipe.	surounding the sewer line in the side walk adjacent to the lint trap. Samples will be collected by clearing soils (with air knife, shop vac, hand aguer, hand geoprobe) to a depth approximately 1 foot above the sewer line. Sample will be collected with either a hand auger or hand geoprobe.	HS-508	Soil	360109-HS-506	Evaluate potential soil contamination in the vicinity of the sewer line adjacent to the lint trap.	1	

#### NOTES:

VOCs - volatile organic compounds

DL- Detection limit

bgs - below ground surface

DP- direct pus

Gs- geoprobe sample

XD - duplicate

MS - matrix spike

MD - matrix spike duplicate

#### Detection limits should be low enough to achieve the following comparisons:

\* -Soil analytical results will be compared to the 6 NYCRR Part 375 Soil Cleanup Objectives for Protection of Groundwater, and Commercial Use Scenarios.

\*\* -Water analytical results will be compared to The NYS Class GA Groundwater Quality Standards from 6 NYCRR Parts 700-705.

(1)- 0.02 ppb vinyl chloride, 1,2 dichloroethane

# Data Quality Objectives vs. Detection Limits

Media	DQO	Method	EPA Method #	Standard DL	Contaminants that
Soil	SCO Unrestricted - 6 NYCRR Part 375	VOC	5035A/8260C	0.05 ppm	0.02 vinyl
Sediment	SGV - NYSDEC Screening and Assessment of Contaminated Sediment. June 24, 2014	VOC	5035A/8260C	0.05 ppb	
Groundwater	Class GA - Groundwater Quality Standards from 6 NYCRR Parts 700-705	VOC	8260C	0.5 ppb	
Surface Water	Surface Water Quality Standards from 6 NYCRR Parts 700-705	VOC	8260C	0.05 ppb	

# won't meet the DQO at standard DL

chloride, 1,2 dichloroethane

Location ID	Northing	Easting	Ground Elevation (ft msl)	Casing Elevation (ft msl)	Riser Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Surface Elevation (ft msl)	Screening Interval (ft bgs)	Well Type	Boring Depth (ft bgs)
MW-1	756093.4	688953.9	55.17	55.17	54.92	>14	<41.2	5-14	OB	14
MW-1B	756096.4	688958.3	55.04	55.04	54.76	22	33	32.5-42.5	BR	45
MW-2	756155.4	689012.1	57.74	57.74	57.36	>17	<40.7	8-17	OB	17
MW-3	755966.4	688553.5	59.36	59.36	59.43	7.5	52.0	4-12	OB/BR	12
MW-4	755923.6	688923.4	54.67	54.67	54.21	>19	<36.7	9-19	OB	19
MW-5	755820.1	688716.4	53.62	53.62	53.24	>18	<35.5	8-18	OB	18
MW-7	756161.6	688952.1	55.20	55.20	54.99	>14	<41.2	5-14	OB	14
MW-8	755992.4	688944.1	55.69	55.69	55.27	>14	<41.7	4-14	OB	14
MW-9	756164.1	689030.9	58.54	58.54	58.15	>16	<42.5	6-14	OB	16
MW-10	756307.5	688960.6	65.70	65.70	65.45	10.4	55.3	5-10	OB	12.2
MW-11	756336.5	689040.8	65.02	65.02	64.72	>20	<47.6	8-18	OB	20
MW-12	756428.6	689104.1	62.59	62.59	62.37	>15	<44	3.5-13.5	OB	15
MW-13	756448.8	689240.6	66.31	66.31	65.89	>15	<51.3	5-15	OB	15
MW-15	756194.0	689260.0	69.31	69.31	69.11	19.8	49.5	6.8-16.3	OB	24
MW-16	756172.9	689099.9	60.13	60.13	59.78	>16.3	<43.8	5.1-14.6	OB	16.3
MW-21	756608.5	689508.1	88.50	88.50	88.04	20	68.5	12.4-22.4	OB	24
MW-22	756477.6	689462.5	83.64	83.64	83.46	14.5	69.1	13.4-22.8	OB/BR	22.8
MW-22B	756474.7	689464.2	84.02	84.02	83.54	17	67	30-40	BR	45
MW-23	756464.3	689329.3	72.69	72.69	72.45	>20	<52.7	8.9-18.9	OB	20
MW-24	756555.1	689362.3	76.25	76.25	76.12	>25	<51.3	14.7-24.2	OB	25
MW-24B	756551.9	689362.1	76.14	76.14	75.83	24	52.1	33-43	BR	44
MW-25	756652.2	689387.5	79.21	79.21	78.81	14	65.2	8.7-18.2	OB/BR	19
MW-25B	756654.2	689380.3	79.30	79.30	79.10	17	62.3	26.8-36.8	BR	37
MW-26	756593.6	689701.0	95.98	95.98	95.61	15	81.0	5.3-10.3	OB	10.3
MW-26B	756593.6	689701.0	95.98	95.98	95.57	15	81.0	18-28	BR	30
MW-27B <sup>1</sup>	756634.2	689586.4	91.46	91.46	91.14	20	71.5	20-63	BR/OH	63
MW-27BA (1,2)	756634.2	689586.4	91.46	91.46	91.22	20	71.5	29.9-30.4	BR	63
MW-27BB (3,4)	756634.2	689586.4	91.46	91.46	91.22	20	71.5	39.5-40	BR	63
MW-27BC (5,6,7)	756634.2	689586.4	91.46	91.46	91.22	20	71.5	55-56	BR	63
MW-28B	755295.0	688427.7	39.32	39.32	39.04	16.0	23.3	22.4-27.4	BR	28.5
MW-29BA (1,2)	756648.0	689310.3	78.52	78.52	78.03	32.0	46.5	23.6-24.1	OB	75.0
MW-29BB (3,4)	756648.0	689310.3	78.52	78.52	78.03	32.0	46.5	44.3-44.8	BR	75.0
MW-29BC (5,6,7)	756648.0	689310.3	78.52	78.52	78.03	32.0	46.5	60.4-62.5	BR	75.0
MW-30BA (1,2)	756584.0	689330.8	75.24	75.24	74.66	24.0	51.2	16.2-16.7	OB	70.0
MW-30BB (3,4)	756584.0	689330.8	75.24	75.24	74.66	24.0	51.2	29.5-30.0	BR	70.0
MW-30BC (5,6,7)	756584.0	689330.8	75.24	75.24	74.66	24.0	51.2	56.6-58.3	BR	70.0
BR-101A (1,2)	756520.9	689349.5	75.29	75.29	75.03	22.0	53.3	39.8-40.2	BR	100.0
BR-101B (3,4)	756520.9	689349.5	75.29	75.29	75.03	22.0	53.3	54-54.4	BR	100.0
BR-101C (5,6)	756520.9	689349.5	75.29	75.29	75.03	22.0	53.3	67.7-68.1	BR	100.0
BR-101D (7)	756520.9	689349.5	75.29	75.29	75.03	22.0	53.3	80-80.2	BR	100.0
BR-102A (1,2)	756466.2	689344.0	74.03	74.03	73.84	22.0	52.0	35-35.5	BR	100.0
BR-102B (3,4)	756466.2	689344.0	74.03	74.03	73.84	22.0	52.0	60-60.5	BR	100.0
BR-102C (5,6,7)	756466.2	689344.0	74.03	74.03	73.84	22.0	52.0	88-89	BR	100.0
MW-26CLIFF	754815.2	688205.2	23.83	23.83	23.51	UNK	UNK	UNK	UNK	19.7
MW-COSTCO1	752366.3	687352.2	13.57	13.57	13.17	UNK	UNK	UNK	UNK	20.7

Table 2.2: Summary of Monitoring Well Construction and Elevation Data

Location ID	Northing	Easting	Ground Elevation (ft msl)	Casing Elevation (ft msl)	Riser Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Surface Elevation (ft msl)	Screening Interval (ft bgs)	Well Type	Boring Depth (ft bgs)
MW-COSTCO2	752358.7	687346.5	13.52	13.52	13.28	UNK	UNK	UNK	UNK	23.0

#### Table 2.2: Summary of Monitoring Well Construction and Elevation Data

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Page 3	of

Location ID	Northing	Easting	Ground Elevation (ft msl)	Casing Elevation (ft msl)	Riser Elevation (ft msl)	Depth to Bedrock (ft bgs)	Bedrock Surface Elevation (ft msl)	Screening Interval (ft bgs)	Well Type	Boring Depth (ft bgs)
MW-501 <sup>2</sup>	756616.8	689402.4	76.44	76.44	76.27	UNK	UNK	0-2.8	OB	2.8
MW-504 <sup>2</sup>	756565.8	689465.1	76.49	76.49	76.30	14.8	61.7	4.5-14.5	OB	18.2
MW-505 <sup>2</sup>	756556.9	689491.6	87.13	87.13	NM	15.5	71.6	21-26	BR	26.5
PZ-12	755659.9	688672.9	47.66	47.66	47.35	UNK	UNK	10.5-20.1	OB	20.5
PZ-14	755293.8	688419.9	39.69	39.69	39.35	>20	<19.7	10-19.6	OB	20.0
PZ-15	756643.1	689442.7	76.59	76.59	76.27	>4.5	<72.1	0.5-3.7	OB	4.5
PZ-19	756605.6	689352.7	76.74	76.74	76.52	>14.2	<62.5	3.7-13.7	OB	14.2
PZ-20	756585.4	689421.2	76.49	76.49	76.25	>10.0	<66.5	4.1-9.1	OB	10.0
PZ-21	756526.8	689369.6	76.41	76.41	75.97	23.5	52.9	12.8-22.8	OB	24
PZ-22	756584.7	689359.1	76.59	76.59	76.26	>21.5	<55.1	11.0-21.0	OB	21.5
PZ-23	756648.7	689427.4	76.57	76.57	76.31	2.6	74.0	7.6-12.6	OB/BR	13.5
PZ-24	754200.4	688043.8	22.43	22.43	22.06	22.0	0.4	10.1-21.1	OB	22.5
PZ-28	756597.1	689425.7	76.49	76.49	76.17	2.2	74.3	4.9-9.9	OB/BR	10.7
PZ-29	756687.2	689235.3	78.30	78.30	78.08	UNK	UNK	7-12	OB	12.0
PZ-33	756536.7	689440.2	76.71	76.71	76.35	12.0	64.7	13-18	BR	18.0
PZ-34	756526.1	689402.6	76.82	76.82	76.59	UNK	UNK	4.5-9.5	OB	10.0
PZ-35	756528.6	689395.4	76.86	76.86	76.62	18.0	58.9	27-32	BR	32.0
PZ-36	756541.0	689380.0	76.78	76.78	76.45	24.7	52.1	31-36	BR	31.7
PZ-38	756511.7	689398.1	78.76	78.76	78.51	24.3	54.5	26-31	BR	31.5
PZ-39	756511.6	689394.9	78.32	78.32	78.06	UNK	UNK	11.6-21.6	OB	21.8
Burling Brook	752327.4	687360.7	NA	NA	14.59	NA	NA	NA	NA	NA
SP-002	756580.3	689289.3	72.66	72.66	NA	UNK	UNK	NA	OB	5.9

# Table 2.2: Summary of Monitoring Well Construction and Elevation Data

Notes:

MW = monitoring well

PZ = one-inch microwell

ft bgs = feet below ground surface

msl = mean sea level

Wells installed in 2012 were surveyed by Lu Engineers

Wells installed in 2013-2014 were surveyed by Prudent Engineering

Northing/Easting = North American Datum 83/96 - NYSPCS EAST (US survey ft); Elevations = North American Vertical Datum 88 (US survey ft)

Data presented on table reflects most recent survey of data point.

<sup>1</sup>MW-27B was converted into a multi-channel well in December, 2013

<sup>2</sup> One-inch microwell

OH = open hole

NA = not applicable OB = overburden well

BR = bedrock well UNK = unknown

Created by: NWV 12/30/2015

NM = not measured

Location ID	Casing Elevation (ft msl)	Riser Elevation (ft msl)	Bottom of Well (ft TOR)	Depth to GW October 2015 (ft TOR)	GW Elevation (October 2015) (ft msl)
MW-21	88.50	88.04	22.9	10.70	77.34
MW-22	83.64	83.46	23.3	10.99	72.47
MW-22B	84.02	83.54	39.9	9.82	73.72
MW-23	72.69	72.45	18.6	7.97	64.48
<b>MW-24</b>	76.25	76.12	24.5	8.71	67.41
MW-24B	76.14	75.83	42.9	7.62	68.21
MW-25	79.21	78.81	18.3	7.49	71.32
MW-25B	79.30	79.10	36.5	8.45	70.65
MW-26	95.98	95.61	10.3	6.57	89.04
MW-26B	95.98	95.57	27.7	13.84	81.73
MW-28B	39.32	39.04	27.5	NM	NM
BR-101A (1,2)	75.29	75.03	40.2	8.42	66.61
BR-101B (3,4)	75.29	75.03	54.4	8.40	66.63
BR-101C (5,6)	75.29	75.03	68.1	7.67	67.36
<b>BR-101D</b> (7)	75.29	75.03	80.2	8.49	66.54
BR-102A (1,2)	74.03	73.84	35.5	8.45	65.39
BR-102B (3,4)	74.03	73.84	60.5	8.37	65.47
BR-102C (5,6,7)	74.03	73.84	89.0	6.95	66.89
PZ-15	76.59	76.27	3.5	1.27	75.00
PZ-19	76.74	76.52	13.9	8.84	67.68
PZ-20	76.49	76.25	9.4	3.06	73.19
PZ-21	76.41	75.97	22.6	8.56	67.41
PZ-22	76.59	76.26	20.7	8.65	67.61
PZ-23	76.57	76.31	12.7	1.56	74.75
PZ-28	76.49	76.17	9.9	1.70	74.47
PZ-33	76.71	76.35	18.0	3.53	72.82
PZ-34	76.82	76.59	9.50	7.34	69.25
PZ-35	76.86	76.62	32.0	7.90	68.72
PZ-36	76.78	76.45	36.0	7.99	68.46
PZ-38	78.76	78.51	31.0	10.05	68.46 Created by: N

Created by: NWV 12/30/2015 Checked by: JMF 1/6/2016

Location ID	Casing Elevation (ft msl)	Riser Elevation (ft msl)	Bottom of Well (ft TOR)	Depth to GW October 2015 (ft TOR)	GW Elevation (October 2015) (ft msl)
PZ-39	78.32	78.06	21.6	9.78	68.28
MW-501 <sup>1</sup>	76.44	76.27	2.3	1.54	74.73
<b>MW-504</b> <sup>1</sup>	76.49	76.30	14.1	1.35	74.95
MW-505 <sup>1</sup>	87.13	NM	24.9	1.19	NA

# Table 2.3: Summary of SRI Groundwater Elevation Data

Notes:

MW = monitoring well

GW = groundwater

PZ = one-inch microwell

ft TOR = feet below top of riser

ft msl = feet above mean sea level

NA = not applicable

NM = not measured

<sup>1</sup> Monitoring well installed as a one-inch microwell

# Table 4.1: SRI Sample Results Tables Notes

#### **General Notes:**

ND- non detect ft bgs - feet below ground surface ft msl - feet above mean sea level Bold result - analyte detected FS - field sample FD - field duplicate mg/kg - milligram per kilogram (ppm) ug/kg- micrograms per kilogram (ppb) ug/l - micrograms per liter (ppb) mg/l - milligrams per liter (ppm) ug/m<sup>3</sup> - micrograms per cubic meter NA - not applicable NS - No Standard MNR - Metro North Railroad NYSDOH - New York State Department of Health 111-TCA - 1,1,1 Trichloroethane

## **Analytical Parameters**

VOC - volatile organic compound SVOC - semi-volatile organic compound TPH - total petroleum hydrocarbons

### **Qualifiers:**

U - Not detected greater than the Reporting LimitJ - estimated valueD - Result is reported from a dilution

#### Soil/Bedrock Notes:

SCO- NYSDEC Part 375 Remedial Program Soil Cleanup Objective P of G -Protection of GW RES- Residential SCO COMM-Commercial SCO IND- Industrial SCO Grey highlighted cells indicate an exceedance of the Protection of Groundwater SCO Yellow highlighted cells indicate an exceedance of the Residential SCO Orange highlighted cells indicate an exceedance of the Commercial SCO Red highlighted cells indicate an exceedance of the Industrial SCO

#### **Groundwater Notes:**

Class GA standards and guidance values from Technical Operational Guidance Series 1.1.1 Red highlighted cells indicate an exceedance of the Class GA standards

## Air and Vapor Notes:

SA - Sewer Air Sample SVG - Sewer Vapor Grab Sample

	Site Building- Potential Former Dry- cleaning Machine Location GS-501	Site Building- 111-TCA Plume GS-504				
	10/17/2015	10/18/2015				
	360109-GS-501001	360109-GS-504001				
Annrovim	1.5 - 1.5	1.2 - 1.3 \18.2				
Approxima	ile Grou	nuwai		(It bgs) c Code	I.J FS	>10.2 FS
	İ	S		<u>c</u> Coue	15	15
Parameter	P of G	RES	COMM	IND		
Site Related Contaminants of C	oncern					
1,1,1-Trichloroethane	0.68	100	500	1,000	0.048 U	0.11
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.048 U	0.032 U
Tetrachloroethene	1.3	5.5	150 300		3.3 J	0.15
Trichloroethene	0.47	10	10 200 4		0.048 U	2.8
Vinyl chloride	0.02	0.21	13	27	0.048 U	0.032 U
Other VOCs			-			
1,1-Dichloroethane	0.27	19	240	480	0.048 U	0.032 U
1,1-Dichloroethene	0.33	100	500	1,000	0.048 U	0.077
1,2-Dichlorobenzene	1.1	100	500	1,000	0.048 U	0.032 U
1,4-Dichlorobenzene	1.8	9.8	130	250	0.048 U	0.032 U
Acetic acid, methyl ester	NS	NS	NS	NS	0.048 U	0.032 U
Acetone	0.05	100	500	1,000	0.24 U	0.16 U
Benzene	0.06	2.9	44	89	0.048 U	0.032 U
Chloroform	0.37	10	350	700	0.048 U	0.032 U
Cyclohexane	NS	NS	NS	NS	0.048 U	0.032 U
Ethylbenzene	1	30	390	780	0.048 U	0.032 U
Isopropylbenzene	NS	NS	NS	NS	0.048 U	0.032 U
Methyl cyclohexane	NS	NS	NS	NS	0.048 U	0.032 U
Styrene	NS	NS	NS	NS	0.048 U	0.032 U
Toluene	0.7	100	500	1,000	0.048 U	0.032 U
trans-1,2-Dichloroethene	0.19	100	500	1,000	0.048 U	0.032 U
Xylenes, Total	1.6	100	500	1,000	0.097 U	0.063 U

# Table 4.2 Site Surface Soil VOC Results

**Notes: See Table 4.1** Results are reported in milligrams per kilogram (mg/kg)

# Table 4.3 Site Subsurface Soil VOC Results

			A	Area of C	Concern		Site Build	ling - Potential Dry	v-cleaning Machine	e Location		Site Building - I	111-TCA Plume		Background	
				L	ocation	GS-500	GS-500	GS-500	GS-502	GS-503	GS-503	GS-504	GS-504	GS-505	GS-505	GS-505
				Samp	ole Date	10/17/2015	10/17/2015	10/17/2015	10/17/2015	10/26/2015	10/26/2015	10/18/2015	10/18/2015	10/18/2015	10/18/2015	10/18/2015
				Sar	nple ID	360109-GS-500003	360109-GS-500007	360109-GS-500008	360109-GS-502003	360109-GS-503003	360109-GS-503006	360109-GS-504005	360109-GS-504008	360109-GS-505003	360109-GS-505009	360109-GS-505012
			Soi	il/Bedroc	ck Type	Sand	Sand	Bedrock	Fill	Sand	Sand	Sand	Sand	Sand	Sand	Sand
		1	Sampl	le Depth	(ft bgs)	3 - 3.4	6.5 - 6.8	7.5 - 7.8	2.8 - 2.8	3.1 - 3.1	6.2 - 6.2	4.8 - 4.8	7.8 - 8	3.2 - 3.5	8.8 - 9	12 - 12.4
Арј	proximate G	oun	dwate	er Depth	(ft bgs)	NM	NM	NM	>2.8	NM	NM	>18.2	>18.2	>26.5	>26.5	>26.5
				Q	c Code	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
			S	CO												
Parameter	P of	G	RES	COMM	IND											
Site Related Contaminants of	Concern															
1,1,1-Trichloroethane	0.6	8	100	500	1,000	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.11	0.19	0.038 U	0.039 U	0.074
Cis-1,2-Dichloroethene	0.2	5	59	500	1,000	0.031 U	0.013 J	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Tetrachloroethene	1.3	;	5.5	150	300	0.028 J	0.03 U	0.036 U	0.046 J	0.044 U	0.029 J	<b>0.0046</b> J	<u>0.0053</u> J	0.038 U	0.039 U	0.039 U
Trichloroethene	0.4	7	10	200	400	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.97	1.2	0.038 U	0.039 U	0.42
Vinyl chloride	0.0	2	0.21	13	27	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.038 U 0.039 U	
Other VOCs																
1,1-Dichloroethane	0.2	7	19	240	480	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
1,1-Dichloroethene	0.3	3	100	500	1,000	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.035	0.16	0.038 U	0.039 U	0.021 J
1,2-Dichlorobenzene	1.1		100	500	1,000	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
1,4-Dichlorobenzene	1.8	3	9.8	130	250	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Acetic acid, methyl ester	NS		NS	NS	NS	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Acetone	0.0	5	100	500	1,000	0.15 U	0.15 U	0.18 U	0.26 U	0.22 U	0.22 U	0.16 U	0.16 U	0.19 U	0.19 U	0.19 U
Benzene	0.0	6	2.9	44	89	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Chloroform	0.3	7	10	350	700	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Cyclohexane	NS		NS	NS	NS	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Ethylbenzene	1		30	390	780	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Isopropylbenzene	NS		NS	NS	NS	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Methyl cyclohexane	NS NS NS NS		NS	0.031 U	0.094	0.026 J	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U		
Styrene	NS		NS	NS	NS	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Toluene	0.7	'	100	500	1,000	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
trans-1,2-Dichloroethene	0.1	9	100	500	1,000	0.031 U	0.03 U	0.036 U	0.051 U	0.044 U	0.044 U	0.031 U	0.031 U	0.038 U	0.039 U	0.039 U
Xylenes, Total	1.6	5	100	500	1,000	0.061 U	0.059 U	0.072 U	0.1 U	0.087 U	0.088 U	0.063 U	0.063 U	0.076 U	0.078 U	0.078 U

# Notes: See Table 4.1

		A	Area of C	Concern	Sidewalk South of the Building - Vicinity of the Sanitary Sewer									
			L	ocation	GS-506	GS-506	GS-506	GS-506	GS-507	GS-507	GS-507	GS-508		
			Samp	ole Date	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015		
			Sai	nple ID	360109-GS-506003	360109-GS-506011D	360109-GS-506011	360109-GS-506016	360109-GS-507003	360109-GS-507009	360109-GS-507012	360109-GS-508013		
		So	il/Bedroo	ek Type	Silty Sand	Sand	Sand	Sand	Silty Sand	Sand	Sand	Sand		
		Samp	le Depth	(ft bgs)	2 - 3	10 - 11	10 - 11	15 - 16	2 - 3	8 - 9	11 - 12	12 - 13		
Approxim	ate Grou	ndwate	er Depth	(ft bgs)	11.5	11.5	11.5	11.5	9	9	9	11		
			Q	<b>)c Code</b>	FS	FD	FS	FS	FS	FS	FS	FS		
		S	CO											
Parameter	P of G	RES	COMM	IND										
Site Related Contaminants of Concer	n			-										
1,1,1-Trichloroethane	0.68	100	500	1,000	0.043 U	0.032 J	0.033 J	0.052 UJ	0.046 U	<u>0.027</u> U	0.041 UJ	0.034 U		
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.043 U	62	87	4.9 J	0.046 U	0.33	11	0.014 J		
Tetrachloroethene	1.3	5.5	150	300	0.043 U	330	250	390	0.18	0.039	0.041 UJ	0.034 U		
Trichloroethene	0.47 10 200 400					250	300	<u> </u>	<b>0.034</b> J	0.015 J	0.041 UJ	0.034 U		
Vinyl chloride	0.02	0.21	13	27	0.043 U	<mark>0.91</mark> J	<mark>1.8</mark> J	0.024 J	0.046 U	0.44	<mark>1.8</mark> J	0.015 J		
Other VOCs														
1,1-Dichloroethane	0.27	19	240	480	0.043 U	0.031 J	0.032 J	0.052 UJ	0.046 U	0.027 U	0.014 J	0.034 U		
1,1-Dichloroethene	0.33	100	500	1,000	0.043 U	0.13 J	0.15 J	0.052 UJ	0.046 U	0.027 U	0.08 J	0.034 U		
1,2-Dichlorobenzene	1.1	100	500	1,000	0.043 U	0.18 J	<b>0.24</b> J	0.15 J	0.046 U	0.027 U	<b>0.26</b> J	0.034 U		
1,4-Dichlorobenzene	1.8	9.8	130	250	0.043 U	0.25 J	0.32 J	0.25 J	0.046 U	0.034	<b>0.24</b> J	0.034 U		
Acetic acid, methyl ester	NS	NS	NS	NS	0.043 U	0.037 UJ	0.03 UJ	0.052 UJ	0.046 U	0.027 U	0.041 UJ	0.034 U		
Acetone	0.05	100	500	1,000	0.22 U	0.19 UJ	0.15 UJ	0.26 UJ	0.23 U	0.14 U	0.2 UJ	0.17 U		
Benzene	0.06	2.9	44	89	0.043 U	0.037 UJ	0.03 UJ	0.052 UJ	0.046 U	0.027 U	0.041 UJ	0.034 U		
Chloroform	0.37	10	350	700	0.043 U	0.037 UJ	0.03 UJ	0.052 UJ	0.046 U	0.027 U	0.041 UJ	0.034 U		
Cyclohexane	NS	NS	NS	NS	0.043 U	0.54 J	<u>0.48</u> J	0.52 J	0.046 U	0.027 U	0.041 UJ	0.034 U		
Ethylbenzene	1	30	390	780	0.043 U	8	8.7	3.8 J	0.046 U	0.91	6.6	0.034 U		
Isopropylbenzene	NS	NS	NS	NS	0.043 U	0.83 J	1.1 J	0.79 J	0.046 U	0.077	0.79 J	0.034 U		
Methyl cyclohexane	NS	NS	NS	NS	0.043 U	3.3 J	2.7 J	4.8 J	0.046 U	2.1	8.4	0.034 U		
Styrene	NS	NS	NS	NS	0.043 U	0.037 UJ	0.03 UJ	0.052 UJ	0.046 U	0.027 U	0.041 UJ	0.034 U		
Toluene	0.7  100  500  1,					<u>0.18</u> J	<u>0.24</u> J	0.27 J	0.046 U	0.58	2.2 J	0.034 U		
trans-1,2-Dichloroethene	0.19	100	500	1,000	0.043 U	0.24 J	0.24 J	0.063 J	0.046 U	0.0093 J	<b>0.12</b> J	0.034 U		
Xylenes, Total	1.6	100	500	1,000	0.086 U	0.097 J	<b>0.27</b> J	<b>0.89</b> J	0.092 U	0.88	1.4 J	0.068 U		

# Table 4.3 Site Subsurface Soil VOC Results

Notes: See Table 4.1

			L	ocation	SS-400	SS-401	SS-402	SS-403	SS-404	SS-405	SS-406	SS-407	SS-408
			Samp	ole Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
			Sai	mple ID	360109-SS-400000	360109-SS-401000	360109-SS-402000	360109-SS-403000	360109-SS-404000	360109-SS-405000	360109-SS-406000	360109-SS-407000	360109-SS-408000
		So	il/Bedroo	ck Type	Sand								
		Samp	le Depth	(ft bgs)	0 - 3	0 - 4	0 - 1	0 - 2	0 - 1	0 - 2	0 - 1	0 - 1	0 - 2
Approxima	indwate	er Depth	(ft bgs)	10.3	>15	11.4	10.6	11.9	11.3	11.1	11.7	12.2	
			0	)c Code	FS								
		S	CO										
Parameter	P of G	RES	COMM	IND									
Site Related Contaminants of C	Concern			-			-						-
1,1,1-Trichloroethane	0.68	100	500	1,000	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Tetrachloroethene	1.3	5.5	150	300	4.3	4.4	14	0.63	6.3	5.6	0.54	1.1	0.4
Trichloroethene	0.47	10	200	400	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Vinyl chloride	0.02	0.21	13	27	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Other VOCs	-												-
1,1-Dichloroethane	0.27	19	240	480	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
1,1-Dichloroethene	0.33	100	500	1,000	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
1,2-Dichlorobenzene	1.1	100	500	1,000	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
1,4-Dichlorobenzene	1.8	9.8	130	250	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Acetic acid, methyl ester	NS	NS	NS	NS	0.2	0.15	0.073 U	0.043 U	0.28	0.08 U	0.061	<u>0.089</u> U	0.051 U
Acetone	0.05	100	500	1,000	0.25 U	0.28 U	0.37 U	0.22 U	0.35 U	0.4 U	0.24 U	0.51	0.25 U
Benzene	0.06	2.9	44	89	0.051 U	0.056 U	0.073 U	0.043 U	0.036 J	0.08 U	0.011 J	0.34	0.051 U
Chloroform	0.37	10	350	700	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Cyclohexane	NS	NS	NS	NS	0.033 J	0.056 U	0.081	0.043 U	0.17	0.08 U	0.048 U	1.2	0.051 U
Ethylbenzene	1	30	390	780	0.051 U	0.056 U	0.073 U	0.043 U	0.043 J	0.08 U	0.048 U	0.31	0.051 U
Isopropylbenzene	NS	NS	NS	NS	0.051 U	0.056 U	0.073 U	0.043 U	0.033 J	0.08 U	0.048 U	0.16	0.051 U
Methyl cyclohexane	Iethyl cyclohexane NS NS NS N		NS	0.099	0.056 U	0.26	0.043 U	0.53	0.19	0.11	4.1	0.027 J	
Styrene	NS NS NS N		NS	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U	
Toluene	0.7	100	500	1,000	0.038 J	0.056 U	0.039 J	0.043 U	0.16	0.023 J	0.048	1.4	0.051 U
trans-1,2-Dichloroethene	0.19	100	500	1,000	0.051 U	0.056 U	0.073 U	0.043 U	0.07 U	0.08 U	0.048 U	0.089 U	0.051 U
Xylenes, Total	1.6	100	500	1,000	<b>0.092</b> J	0.11 U	<b>0.079</b> J	0.087 U	0.36	0.16 U	<b>0.08</b> J	2.9	0.1 U

# Table 4.4 Railroad Surface Soil VOC Results

Notes: See Table 4.1

-301	SS-301	SS-301	SS-400	SS-400	SS
2/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/2

# Table 4.5 Railroad Subsurface Soil VOC Results

			Ι	Location	SS-301	SS-301	SS-301	SS-301	SS-400	SS-400	SS-401	SS-401	SS-402	SS-402	SS-403
			Sam	ple Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
			Sa	mple ID	360109-SS-301006E	360109-SS-301006	360109-SS-301010	360109-SS-301012	360109-SS-400005	360109-SS-400012	360109-SS-401006	360109-SS-401011	360109-SS-402006	360109-SS-402011	360109-SS-403006
		Se	oil/Bedro	ck Type	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand	Sand
		Samp	ole Depth	ı (ft bgs)	5 - 6	5 - 6	9 - 10	11 - 12	4 - 5	11 - 12	5 - 6	10 - 11	5 - 6	10 - 11	5 - 6
Approx	kimate Grou	indwat	er Depth	n (ft bgs)	10	10	10	10	10.3	10.3	>15	>15	11.4	11.4	10.6
			(	Qc Code	FD	FS									
		S	SCO												
Parameter	P of G	RES	COMM	IND											
Site Related Contaminants of	of Concern														
1,1,1-Trichloroethane	1,1-Trichloroethane 0.68 100 500 1,0					0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.045 U	0.052 U	0.045 U	0.06	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Tetrachloroethene	1.3	5.5	150	300	2.6	3	0.095	0.29	0.6	0.062	1.9	0.008 U	0.036 J	0.061	0.3
Trichloroethene	0.47	10	200	400	0.047	0.055	0.045 U	0.02 J	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Vinyl chloride	0.02	0.21	13	27	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Other VOCs															
1,1-Dichloroethane	0.27	19	240	480	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
1,1-Dichloroethene	0.33	100	500	1,000	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
1,2-Dichlorobenzene	1.1	100	500	1,000	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
1,4-Dichlorobenzene	1.8	9.8	130	250	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Acetic acid, methyl ester	NS	NS	NS	NS	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Acetone	0.05	100	500	1,000	0.23 U	0.26 U	0.23 U	0.24 U	0.25 U	0.21 U	0.24 U	0.007 J	0.23 U	0.021	0.22 U
Benzene	0.06	2.9	44	89	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Chloroform	0.37	10	350	700	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Cyclohexane	NS	NS	NS	NS	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Ethylbenzene	1	30	390	780	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Isopropylbenzene	NS	NS	NS	NS	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Methyl cyclohexane	NS	NS	NS	NS	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Styrene	NS	NS	NS	NS	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Toluene	0.7	100	500	1,000	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
trans-1,2-Dichloroethene	0.19	100	500	1,000	0.045 U	0.052 U	0.045 U	0.047 U	0.049 U	0.042 U	0.047 U	0.0044 U	0.045 U	0.004 U	0.044 U
Xylenes, Total	1.6	100	500	1,000	0.091 U	0.1 U	0.09 U	0.095 U	0.099 U	0.084 U	0.095 U	0.0089 U	0.091 U	0.0081 U	0.088 U

Notes: See Table 4.1

Table 4.5 Railroad Subsurface Soil VOC Results

			Ι	ocation	SS-403	SS-404	SS-404	SS-405	SS-405	SS-406	SS-406	SS-407	SS-407	SS-407	SS-408	SS-408
			Sam	ple Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
			Sa	mple ID	360109-SS-403012	360109-SS-404006	360109-SS-404011	360109-SS-405008	360109-SS-405012	360109-SS-406006	360109-SS-406011	360109-SS-407006	360109-SS-407006D	360109-SS-407012	360109-SS-408007	360109-SS-408011
		So	il/Bedro	ck Type	Sand	Sand	Sand	Sand								
		Samp	le Depth	(ft bgs)	11 - 12	5 - 6	10 - 11	7 - 8	11 - 12	5 - 6	10 - 11	5 - 6	5 - 6	11 - 12	6 - 7	10 - 11
Approx	imate Gro	undwat	er Depth	(ft bgs)	10.6	11.9	11.9	11.3	11.3	11.1	11.1	11.7	11.7	11.7	12.2	12.2
			(	Qc Code	FS	FD	FS	FS	FS	FS						
		S	CO													
Parameter	P of G	RES	COMM	IND												
Site Related Contaminants o																
1,1,1-Trichloroethane	0.68	100	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.065 J	0.045 U	0.046 U
Tetrachloroethene	1.3	5.5	150	300	0.015 J	0.16	0.88	0.22	0.27	0.38	0.75	0.048 U	0.052 U	0.035 J	0.27	0.49
Trichloroethene	0.47	10	200	400	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.033 J	0.045 U	0.046 U
Vinyl chloride	0.02	0.21	13	27	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Other VOCs																
1,1-Dichloroethane	0.27	19	240	480	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
1,1-Dichloroethene	0.33	100	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
1,2-Dichlorobenzene	1.1	100	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
1,4-Dichlorobenzene	1.8	9.8	130	250	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Acetic acid, methyl ester	NS	NS	NS	NS	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.2	0.045 U	0.046 U
Acetone	0.05	100	500	1,000	0.25 U	0.25 U	0.23 U	0.25 U	0.22 U	0.27 U	0.29 U	0.24 U	0.26 U	0.33 U	0.23 U	0.23 U
Benzene	0.06	2.9	44	89	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Chloroform	0.37	10	350	700	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Cyclohexane	NS	NS	NS	NS	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Ethylbenzene	1	30	390	780	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Isopropylbenzene	NS	NS	NS	NS	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Methyl cyclohexane	NS	NS	NS	NS	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Styrene	NS	NS	NS	NS	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Toluene	0.7	100	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
trans-1,2-Dichloroethene	0.19	100	500	1,000	0.05 U	0.049 U	0.046 U	0.05 U	0.044 U	0.054 U	0.057 U	0.048 U	0.052 U	0.066 U	0.045 U	0.046 U
Xylenes, Total	1.6	100	500	1,000	0.1 U	0.099 U	0.093 U	0.1 U	0.089 U	0.11 U	0.11 U	0.096 U	0.1 U	0.13 U	0.091 U	0.092 U

Notes: See Table 4.1
Styrene Toluene

Cyclohexane

Ethylbenzene

Xylenes, Total

Isopropylbenzene

Methyl cyclohexane

Table 4.6 Sludge VOC Results												
			Area of C	oncern		Site Bı	uilding		Off-Site			
			L	ocation	DC-1	DC-2	DC-3	DC-4	MH-001			
			Samp	le Date	10/18/2015	10/18/2015	10/18/2015	10/18/2015	10/20/2015			
			Sar	nple ID	360109-DC001	360109-DC002	360109-DC003	360109-DC004	360109-MH001010			
	Sample Depth (ft bgs					0.5 - 0.6	0.5 - 0.6	0.6 - 0.7	9 - 10			
	Qc Code				FS	FS	FS	FS	FS			
		S	CO									
Parameter	P of G	RES	COMM	IND								
Site Related Contaminants o	f Concern											
1,1,1-Trichloroethane	0.68	100	500	1,000	0.055 U	0.12 U	0.13 U	0.12 U	0.092 J			
Cis-1,2-Dichloroethene	0.25	59	500	1,000	0.055 U	0.12 U	0.13 U	0.12 U	<b>0.1</b> J			
Tetrachloroethene	1.3	5.5	150	300	1.2	0.27	0.38	0.12 U	0.15 U			
Trichloroethene	0.47	10	200	400	0.055 U	0.12 U	0.13 U	0.12 U	<u>0.15</u> U			
Vinyl chloride	0.02	0.21	13	27	0.055 U	0.12 U	0.13 U	0.12 U	0.14 J			
Other VOCs												
1,1-Dichloroethane	0.27	19	240	480	0.055 U	0.12 U	0.13 U	0.12 U	0.18			
1,1-Dichloroethene	0.33	100	500	1,000	0.055 U	0.12 U	0.13 U	0.12 U	0.15 U			
1,2-Dichlorobenzene	1.1	100	500	1,000	0.055 U	0.12 U	0.13 U	0.12 U	0.15 U			
1,4-Dichlorobenzene	1.8	9.8	130	250	0.055 U	0.12 U	0.13 U	0.12 U	0.15 U			
Acetic acid, methyl ester	NS	NS	NS	NS	0.064	0.12 U	1.3	0.14	0.7			
Acetone	0.05	100	500	1,000	0.27 U	0.6 U	0.65 U	0.61 U	0.81			
Benzene	0.06	2.9	44	89	0.055 U	0.12 U	0.13 U	0.12 U	0.15 U			
Chloroform	0.37	10	350	700	0.055 U	0.12 U	0.13 U	0.12 U	0.15 U			

0.13 U

0.26 U

0.12 U

0.24 U

0.15 U

0.15 U

0.15 U

0.15 U

0.15 U

0.29 U

0.038 J

0.098 J

0.12 U

0.12 U

0.12 U

0.12 U

0.12 U

0.18 J

0.16

0.051 J

### T-H-ACCH-L-WOCD----H

#### Notes: See Table 4.1

trans-1,2-Dichloroethene

Results are reported in milligrams per kilogram (mg/kg)

NS

1

NS

NS

NS

0.7

0.19

1.6

NS

30

NS

NS

NS

100

100

100

NS

390

NS

NS

NS

500

500

500

NS

780

NS

NS

NS

1,000

1,000

1,000

0.055 U

0.11 U

Area	of Concern			Site Bi	Background	Parking lot - Site	Rail	road			
	Location	MW-501	MW-504	PZ-33	PZ-34	PZ-34	PZ-35	MW-505	PZ-22	GW-301	GW-408
S	Sample Date	10/27/2015	10/27/2015	10/18/2015	10/17/2015	10/17/2015	10/17/2015	10/27/2015	10/18/2015	10/22/2015	10/22/2015
	Sample ID	360109-MW-50102	360109-MW-50410	360109-PZ-3315	360109-PZ-3409	360109-PZ-3409D	360109-PZ-3527	360109-MW-50522	360109-PZ-2216	360109-GW-30114	360109-GW-40815
Screen Inter	rval (ft bgs)	0 - 2	4 - 14	14 - 15	8 - 9	8 - 9	26 - 27	15 - 25	15 - 16	13 - 14	14 - 15
	Aquifer	Overburden	Overburden	Highly Weathered	Overburden/Highly	Overburden/Highly	Weathered BR	Overburden/Highly	Overburden	Overburden	Overburden
<i></i>				BR	Weathered BR	Weathered BR		Weathered BR		~ .	~ .
Sam	nple method	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Low flow	Grab	Grab
-	Qc Code	FS	FS	FS	FS	FD	FS	FS	FS	FS	FS
Paramter	GA GW										
Site Related Contaminants of Conta	ncern										
1,1,1-Trichloroethane	5	1 U	160	570	200 U	200 U	17	910	50 U	1 U	1 U
Cis-1,2-Dichloroethene	5	1 U	100 U	1 U	27000	25000	29	100 U	50 U	110	1 U
Tetrachloroethene	5	11	100 U	130	17000	16000	2900	100 U	<b>5700</b> J	500	5.6
Trichloroethene	5	1 U	2400	2000	13000	12000	28	5700	50 U	33	<b>0.5</b> J
Vinyl chloride	2	1 U	100 U	1 U	1600	1500	1 U	100 U	50 U	1 U	1 U
Other VOCs											
1,1,2-Trichloro-1,2,2-Trifluoroetha	5	1 U	100 U	2.2	200 U	200 U	1 U	100 U	50 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	100 U	1 U	200 UJ	<b>320</b> J	36	100 U	50 U	1 U	1 U
1,1-Dichloroethane	5	1 U	<b>56</b> J	29	200 U	200 U	3.5	100 U	50 U	1 U	1 U
1,1-Dichloroethene	5	1 U	180	890	200 U	200 U	32	460	50 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	100 U	2	200 U	200 U	0.25 J	100 U	50 U	1 U	1 U
Acetone	50	10 U	1000 U	10 U	2000 U	2000 U	10 U	1000 U	500 U	10 U	11 J
Chloroform	7	1 U	100 U	2.8	200 U	200 U	1 U	100 U	50 U	1	1 U
Methyl cyclohexane	NS	1 U	100 U	<b>0.21</b> J	200 U	200 U	<b>0.21</b> J	100 U	50 U	1 U	1 U
Methyl Tertbutyl Ether	NS	1 U	100 U	1 U	200 U	200 U	<b>0.21</b> J	100 U	50 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	100 U	1 U	200 U	200 U	1 U	100 U	50 U	3.6	1 U

# Table 4.7 Site and Railroad Property Groundwater VOC Results

Notes: See Table 4A

Results reported in micrograms per liter (ug/L)

Area	Location ID	Matrix	Date Sampled	Time Sampled	Date Analyzed	Time Analyzed	Analyte	Result	DF			
Structures 1 and	10 Indoor Air Sa	mpling										
							Vinyl Chloride	2.6 U	1			
	IAS-ST1-01	IA	10/27/2015	9:24	10/27/2015	9:24	Trichloroethene	5.4 U	1	Sewer cleanout area		
							Tetrachloroethene	6.8 U	1	1		
							Vinyl Chloride	2.6 U	1			
	IAS-ST1-02	IA	10/27/2015	9:33	10/27/2015	9:33	Trichloroethene	5.4 U	1	East corner		
							Tetrachloroethene	6.8 U	1	1		
							Vinyl Chloride	2.6 U	1			
	IAS-ST1-03	IA	10/27/2015	9:42	10/27/2015	9:42	Trichloroethene	5 U	1	East corner at washing machine drain int		
Characterize 1							Tetrachloroethene	7 U	1			
Structure I							Vinyl Chloride	2.6 U	1			
	IAS-ST1-04	IA	10/27/2015	9:51	10/27/2015	9:51	Trichloroethene	5 U	1	South side under staircase, paint storage		
							Tetrachloroethene	7 U	1	7		
							Vinyl Chloride	2.6 U	1			
	IAS-ST1-05	IA	10/27/2015	10:00	10/27/2015	10:00	Trichloroethene	5 U	1	East end, tool storage cabinet		
			Tetrachloroethene		9	1	1					
				Vinyl Chloride 2.6		2.6 U	1					
	IAS-ST1-06	IA	10/27/2015	10:13	10/27/2015	10:13	Trichloroethene	5 U	1	Hallway, First floor by door		
							Tetrachloroethene	7 U	1			
							Vinvl Chloride	9.2	1			
	IAS-ST10-01	IA	10/27/2015	10:20	10/27/2015	10:20	Trichloroethene	28	1	West end basement indoor air (breathing		
							Tetrachloroethene	59	1			
							Vinvl Chloride	130.6	1			
	IAS-ST10-02	IA	10/27/2015	10:35	10/27/2015	10:35	Trichloroethene	419	1	West end basement, 6 inches above Dran		
							Tetrachloroethene	705	1			
							Vinvl Chloride	4.4	1			
	IAS-ST10-03	IA	10/27/2015	10:45	10/27/2015	10:45	Trichloroethene	16	1	Floor by sewer lines junction, bottom of		
							Tetrachloroethene	33	1			
							Vinvl Chloride	13.1	1			
	IAS-ST10-04	IA	10/27/2015	10:58	10/27/2015	10:58	Trichloroethene	54	1	Floor at sewer pipe next to chimney, cent		
							Tetrachloroethene	102	1			
							Vinvl Chloride	6.9	1			
Structure10	IAS-ST10-05	IA	10/27/2015	11:15	10/27/2015	11:15	Trichloroethene	21	1	Furnace room		
							Tetrachloroethene	44	1	1		
							Vinvl Chloride	25.1	1			
	IAS-ST10-06	IA	10/27/2015	11:32	10/27/2015	11:32	Trichloroethene	124	1	Storage space under staircase		
							Tetrachloroethene	217	1			
							Vinyl Chloride	3.3	1			
	IAS-ST10-07	IA	10/27/2015	11:47	10/27/2015	11:47	Trichloroethene	15	1	West wall approx 1.25 feet up from floor		
							Tetrachloroethene	28	1			
							Vinvl Chloride	3.8	1			
	IAS-ST10-08	IA	10/27/2015	11:55	10/27/2015	11:58	Trichloroethene	16	1	West wall, mid-length, behind dry wall		
							Tetrachloroethene	30	1	1		
		1					Vinyl Chloride	2.6 U	1			
	IAS-ST10-09	IA	10/27/2015	11:25	10/27/2015	12:45	Trichloroethene	5 U	1	Sewer pipe penetration, southwest corner		
							Tetrachloroethene	10	1			

# Table 4.8: Hapsite Air and Vapor VOC Results

Comments
into sewer
ge closet
ing zone)
ranjer
of stairs west end
center of building, next to water heater
oor, southern third of length
11
ner

Area	Location ID	Matrix	Date Sampled	Time Sampled	Date Analyzed	Time Analyzed	Analyte	Result		DF	Comments				
Structures 1 and	10 Indoor Air Sa	mpling													
							Vinyl Chloride	23.6		1					
	IAS-ST10-01	IA	10/27/2015	15:04	10/27/2015	16:40	Trichloroethene	53		1	Resample -west end basement indoor air (breathing zone)				
Gr ( 10							Tetrachloroethene	72		1					
Structure10							Vinyl Chloride	16.4		1					
	IAS-ST10-02	IA	10/27/2015	15:05	10/27/2015	16:48	Trichloroethene	84		1	West end basement, 6 inches above Dranjer sealed with poly sheeting				
							Tetrachloroethene	123		1					
Sewer Air and Va	por Sampling														
							Vinyl Chloride	2.6	U	1					
	SVG-BP02-03	SVG	10/26/2015	15:37	10/26/2015	17:17	Trichloroethene	28		1	Industrial Overall Soil Vapor point in sidewalk				
							Tetrachloroethene	33		1					
							Vinyl Chloride	54		1					
Industrial Overall	SVG-BP03-03	SVG	10/26/2015	16:00	10/26/2015	16:58	Trichloroethene	70		1	Industrial Overall Soil Vapor point in sidewalk				
							Tetrachloroethene	181		1					
							Vinyl Chloride	1280	U	500					
	SVG-BP04-03	SVG	10/26/2015	16:10	10/26/2015	18:23	Trichloroethene	18,774		500	Industrial Overall Soil Vapor point in sidewalk				
							Tetrachloroethene	173,771		500					
							Vinyl Chloride	2.6	U	1					
Realyea Place	RP-01	SA	10/26/2015	14:00	10/26/2015	15:06	Trichloroethene	250		1	Upgradient sample from manhole at intersection of Relyea and Bartels Place				
							Tetrachloroethene	22		1					
							Vinyl Chloride	16		1					
	BP-01	SA	10/26/2015	14:17	10/26/2015	15:29	Trichloroethene	66		1	Bartels Place manhole (MH-01) in front of Bulfamante				
							Tetrachloroethene	35		1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP05-03	SVG	10/27/2015	10:18	10/27/2015	13:24	Trichloroethene	5	U	1	Eastern most point on sewer line (8.8 ft west of connection to main line)				
							Tetrachloroethene	7	U	1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP06-03	SVG	10/27/2015	10:48	10/27/2015	13:33	Trichloroethene	5	U	1	42.4 ft west of building tie in, associated with potential lateral (PL-02)				
							Tetrachloroethene	7	U	1					
						14:21	Vinyl Chloride	1043.6		50					
	SVG-BP07-03	SVG	10/27/2015	11:05	10/27/2015	12.41	Trichloroethene	161		1	60.9 ft west of building tie in, associated with potential lateral (PL-03)				
						15.41	Tetrachloroethene	109		1					
							Vinyl Chloride	102.1		1					
	SVG-BP08-03	SVG	10/27/2015	11:17	10/27/2015	14:37	Trichloroethene	8		1	108.1 ft west of building tie in, potential lateral (PL-05) to 25 Bartels Place				
							Tetrachloroethene	17		1					
							Vinyl Chloride	5.7		1					
Bartels Place	SVG-BP09-03	SVG	10/27/2015	11:27	10/27/2015	14:48	Trichloroethene	10		1	111.2 ft west of building tie in, potential lateral (PL-05) to 16 Bartels Place				
							Tetrachloroethene	19		1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP10-03	SVG	10/27/2015	11:45	10/27/2015	14:58	Trichloroethene	5	U	1	155.7 ft west of building tie in, NE side of MH-01				
							Tetrachloroethene	7	U	1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP11-03	SVG	10/27/2015	11:57	10/27/2015	15:10	Trichloroethene	5	U	1	155.7 ft west of building tie in, NW side of MH-01				
							Tetrachloroethene	7	U	1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP12-03	SVG	10/27/2015	12:10	10/27/2015	15:50	Trichloroethene	5	U	1	155.7 ft west of building tie in, SW side of MH-01				
							Tetrachloroethene	7	U	1					
							Vinyl Chloride	2.6	U	1					
	SVG-BP13-03	SVG	10/27/2015	12:28	10/27/2015	15:58	Trichloroethene	5	U	1	188.7 ft west of building tie in, in front of 29 Bartels Place				
							Tetrachloroethene	7	U	1					
							Vinyl Chloride	7.5		1					
	SVG-BP14-03	SVG	10/27/2015	14:04	10/27/2015	16:08	Trichloroethene	18		1	218.7 ft west of building tie in, in front of 31 Bartels place				
							Tetrachloroethene	33		1					

# Table 4.8: Hapsite Air and Vapor VOC Results

Area	Location ID	Matrix	Date Sampled	Time Sampled	Date Analyzed	Time Analyzed	Analyte	Result		DF	DF Comments			
Sewer Air and Va	apor Sampling													
							Vinyl Chloride	2.6 U	U	1				
	SVG-BP15-03	SVG		14:23	10/27/2015	16:15	Trichloroethene	5 1	U	1	Storm sewer at end of Bartels Place adjacent to MNR Property			
			10/27/2015				Tetrachloroethene	80		1				
							Vinyl Chloride	2.6 U	U	1				
Bartels Place	SVG-BP16-03	SVG		15:33	10/27/2015	16:23	Trichloroethene	5 1	U	1	Sample 7 ft east of BP-07, Industrial overall side of sewer line			
			10/27/2015				Tetrachloroethene	7 1	U	1				
							Vinyl Chloride	2.6 U	U	1				
	SVG-BP17-03	SVG		15:48	10/27/2015	16:31	Trichloroethene	5 1	U	1	16 ft west of BP-07 between 21 and 23 Bartles Place			
			10/27/2015				Tetrachloroethene	7 1	U	1				
		<i>~</i> .				1.5.10	Vinyl Chloride	3.2		1				
	SA-PS01-10	SA	10/26/2015	14:35	10/26/2015	15:40	Trichloroethene	11		1	Pine Street manhole (MH-03) immediately adjacent to Pearlgreen Parking lot			
							Tetrachloroethene	35		1				
		<u> </u>			100010	1.5.51	Vinyl Chloride	2.6	U	1				
	SA-PS02-11	SA	10/26/2015	14:45	10/26/2015	15:51	Trichloroethene	12		1	Pine Street manhole (MH-04) at turn of the sewer line			
							Tetrachloroethene	39		1				
	CA DC02 09	S 4	10/26/2015	15.00	10/26/2015	15.50	Vinyl Chloride	2.6	U	1	Un an diant hadronound commission manhale outside 25 Dine Street			
	SA-P505-08	SA	10/20/2013	15:00	10/20/2013	15:59	Trichloroethene	5.4 0	U	1	Opgradient background sample at mannole outside 55 Pine Street			
							I etrachloroethene	17	TT	1				
	SA DS04 10	5.4	10/26/2015	15:07	10/26/2015	16.09	Trichloroothono	2.0		1	Ding Street menhole (MII 05) in front of 21 Ding St			
	SA-F504-10	SA	10/20/2013	15.07	10/20/2013	10.08	Trichloroethene	3.4 0	0	1	r ne sueet mannole (MH-05) in nont of 21 r ne st			
							Vinyl Chlorida	22		1				
	SA-PS05-12	SΔ	10/26/2015	15.15	10/26/2015	16:40	Trichloroothono	<u> </u>		1	Pine Street manhole (MH-06) in front of 12 Pine St			
	SA-1 505-12	ЪЛ	10/20/2013	15.15	10/20/2015	16:40	Tetrachloroethene	15		1	The Street mannole (MIT-00) in none of 12 The St			
						10.40	Vinyl Chloride	26 1	II	1				
	SVG-PS06-06	SVG	10/28/2015	11.30	10/28/2015	13.15	Trichloroethene	86		1	Adjacent to brick wall for Pearlgreen Property			
	510150000	5,0	10/20/2015	11.50	10/20/2015	15.15	Tetrachloroethene	67		1	rajacent to onek wan for realization rioperty			
							Vinyl Chloride	26 1	U	1				
	SVG-PS07-03	SVG	10/28/2015	11:53	10/28/2015	13:23	Trichloroethene	16	<u> </u>	1	4 ft south of manhole MH-04			
							Tetrachloroethene	26		1				
Pine Street							Vinyl Chloride	27.9		1				
	SA-PS08-06	SA	10/28/2015	12:20	10/28/2015	13:36	Trichloroethene	39		1	Stormwater Catch Basin on Pine Street			
							Tetrachloroethene	187		1				
							Vinyl Chloride	2.6	U	1				
	SVG-PS09-03	SVG	10/28/2015	12:29	10/28/2015	13:44	Trichloroethene	23		1	53.4 ft south of MH-04; associated with potential lateral PL-01			
							Tetrachloroethene	24		1				
							Vinyl Chloride	2.6 U	U	1				
	SVG-PS10-03	SVG	10/28/2015	12:50	10/28/2015	13:53	Trichloroethene	5 1	U	1	129.4 ft south of MH-04, associated with potential pipe break (PB-02)			
							Tetrachloroethene	8		1				
							Vinyl Chloride	2.6 U	U	1				
	SVG-PS11-02	SVG	10/28/2015	13:05	10/28/2015	14:01	Trichloroethene	5 1	U	1	172.1 ft south of MH-04, located just north of manhole MH-05			
							Tetrachloroethene	7 1	U	1				
							Vinyl Chloride	2.6 U	U	1				
	SVG-PS12-01	SVG	10/28/2015	13:40	10/28/2015	14:35	Trichloroethene	5 1	U	1	209.2 ft south of MH-04			
							Tetrachloroethene	7 1	U	1				
							Vinyl Chloride	2.6 1	U	1				
	SVG-PS13-01	SVG	10/28/2015	14:05	10/28/2015	14:44	Trichloroethene	64		1	264.7 ft south of MH-04; adjacent to MH-06			
							Tetrachloroethene	48		1				
			10/20/2017		10/00/2017		Vinyl Chloride	2.6	U	1				
	SVG-PS14-01	SVG	10/28/2015	14:15	10/28/2015	14:52	Trichloroethene	5 1	U	1	313.5 ft south of MH-04			
							Tetrachloroethene	7 1	U	1				

# Table 4.8: Hapsite Air and Vapor VOC Results

Notes: See Table 4.1

				Frequency of		Frequency of		Frequency of		
				Exceeding		Exceeding		Exceeding		Frequency of
	Frequency of	Range of Detected	Protection of	Protection of	Residential	Residential	Commercial	Commercial	Industrial	Exceeding
Contaminants of Concern	Detection	Concentrations	Groundwater	Groundwater	SCG (1)	SCG	SCG (1)	SCG	SCG (1)	Industrial SCG
Volatile Organics (mg/kg)	•			•						
1,1,1-Trichloroethane	5 / 43	0.00095 - 0.11	0.68	0 / 5	100	0 / 5	500	0 / 5	1000	0 / 5
Cis-1,2-Dichloroethene	9 / 43	0.00079 - 0.62	0.25	1 / 9	59	0 / 9	500	0 / 9	1000	0 / 9
Tetrachloroethene	37 / 43	0.019 - 83	1.3	23 / 37	5.5	12 / 37	150	0 / 37	300	0 / 37
Frichloroethene	25 / 43	0.0015 - 2.8	0.47	6 / 25	10	0 / 25	200	0 / 25	400	0 / 25
1,1-Dichloroethene	1 / 43	0.077 - 0.077	0.33	0 / 1	100	0 / 1	500	0 / 1	1000	0 / 1
Acetic acid, methyl ester	6 / 43	0.046 - 0.11	0	0 / 6	0	0 / 6	0	0 / 6	0	0 / 6
Acetone	1 / 32	0.0038 - 0.0038	0.05	0 / 1	100	0 / 1	500	0 / 1	1000	0 / 1
Chloroform	1 / 43	0.035 - 0.035	0.37	0 / 1	10	0 / 1	350	0 / 1	700	0 / 1
Cyclohexane	1 / 43	0.64 - 0.64	0	0 / 1	0	0 / 1	0	0 / 1	0	0 / 1
Ethyl benzene	1 / 43	0.048 - 0.048	1	0 / 1	30	0 / 1	390	0 / 1	780	0 / 1
sopropylbenzene	3 / 43	0.017 - 0.28	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Methyl cyclohexane	3 / 43	0.022 - 5	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Methylene chloride	5 / 43	0.036 - 0.13	0.05	3 / 5	51	0 / 5	500	0 / 5	1000	0 / 5
Foluene	2 / 43	0.03 - 0.037	0.7	0 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
rans-1,2-Dichloroethene	1 / 43	0.018 - 0.018	0.19	0 / 1	100	0 / 1	500	0 / 1	1000	0 / 1
Xylene, o	2 / 39	0.031 - 0.84	0.26	1 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Xylenes (m&p)	2 / 39	0.099 - 0.19	0.26	0 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Xylenes, Total	2 / 43	0.13 - 1	0.26	1 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Fotal Metals (mg/kg)										
Aluminum	3 / 3	4300 - 9960	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Arsenic	3 / 3	0.81 - 6.4	13	0 / 3	16	0 / 3	16	0 / 3	16	0 / 3
Barium	3 / 3	52.2 - 71.7	350	0 / 3	350	0 / 3	400	0 / 3	10000	0 / 3
Beryllium	1 / 3	0.011 - 0.011	7.2	0 / 1	14	0 / 1	590	0 / 1	2700	0 / 1
Cadmium	3 / 3	0.057 - 0.064	2.5	0 / 3	2.5	0 / 3	9.3	0 / 3	60	0 / 3
Calcium	3 / 3	394 - 8240	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Chromium	3 / 3	8.2 - 17	1	3 / 3	22	0 / 3	400	0 / 3	800	0 / 3
Cobalt	3 / 3	5.3 - 33.2	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Copper	3 / 3	16.6 - 20.3	50	0 / 3	270	0 / 3	270	0 / 3	10000	0 / 3
ron	3 / 3	10300 - 12400	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Lead	3 / 3	2.8 - 45.8	63	0 / 3	400	0 / 3	1000	0 / 3	3900	0 / 3
Magnesium	3 / 3	1730 - 2790	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Manganese	3 / 3	112 - 505	1600	0 / 3	2000	0 / 3	10000	0 / 3	10000	0 / 3
Mercury	2 / 3	0.017 - 0.068	0.18	0 / 2	0.81	0 / 2	2.8	0 / 2	5.7	0 / 2
Nickel	3 / 3	10.8 - 17.5	30	0 / 3	140	0 / 3	310	0 / 3	10000	0 / 3
Potassium	3 / 3	1110 - 2350	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Selenium	1 / 3	1.2 - 1.2	3.9	0 / 1	36	0 / 1	1500	0 / 1	6800	0 / 1
Sodium	3 / 3	117 - 195	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Thallium	3 / 3	0.28 - 0.54	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Vanadium	3 / 3	12.4 - 17.5	0	0 / 3	0	0 / 3	0	0 / 3	0	0 / 3
Zinc	3 / 3	181 - 254	109	0 / 3	2200	0 / 3	10000	0 / 3	10000	0 / 3

#### Table 5.1: RI & SRI Site Surficial Soil Summary of Statistics

1 - SCG = standards, criteria and guidance values; 6 NYCRR Part 375 Surface soils represent samples collected from 0.2 - 2 feet bgs

Xylene, o

Xylenes (m&p)

Xylenes, Total

				Frequency of		Frequency of		Frequency of		Frequency of
	Frequency of	Range of Detected	Protection of	Exceeding Protection of	Residential	Exceeding	Commercial	Commercial	Industrial	Exceeding
Contaminants	Detection	Concentrations	Groundwater	Groundwater	SCG (1)	SCG	SCG (1)	SCG	SCG (1)	SCG
Volatile Organics (mg/kg)	1									
1,1,1-Trichloroethane	3 / 89	0.061 - 0.061	0.68	0 / 3	100	0 / 3	500	0 / 3	1000	0 / 3
Cis-1,2-Dichloroethene	14 / 89	1 - 1	0.25	6 / 14	59	0 / 14	500	0 / 14	1000	0 / 14
Tetrachloroethene	83 / 89	190 - 190	1.3	44 / 83	5.5	34 / 83	150	2 / 83	300	0 / 83
Trichloroethene	26 / 89	3 - 3	0.47	14 / 26	10	0 / 26	200	0 / 26	400	0 / 26
1,2,3-Trichlorobenzene	1 / 65	0.048 - 0.048		0 / 1		0 / 1		0 / 1		0 / 1
1,2,4-Trichlorobenzene	1 / 89	0.039 - 0.039		0 / 1		0 / 1		0 / 1		0 / 1
1,4-Dichlorobenzene	1 / 89	0.043 - 0.043	1.8	0 / 1	9.8	0 / 1	130	0 / 1	250	0 / 1
Acetic acid, methyl ester	27 / 89	2.3 - 2.3		0 / 27		0 / 27		0 / 27		0 / 27
Acetone	2 / 87	0.51 - 0.51	0.05	2 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Benzene	5 / 89	0.34 - 0.34	0.06	2 / 5	2.9	0 / 5	44	0 / 5	89	0 / 5
Bromoform	5 / 89	0.026 - 0.026		0 / 5		0 / 5		0 / 5		0 / 5
Chloroform	3 / 89	2.2 - 2.2	0.37	1 / 3	10	0 / 3	350	0 / 3	700	0 / 3
Cyclohexane	5 / 89	1.2 - 1.2		0 / 5		0 / 5		0 / 5		0 / 5
Ethyl benzene	5 / 89	0.31 - 0.31	1	0 / 5	30	0 / 5	390	0 / 5	780	0 / 5
Isopropylbenzene	4 / 89	0.16 - 0.16		0 / 4		0 / 4		0 / 4		0 / 4
Methyl cyclohexane	10 / 89	4.1 - 4.1		0 / 10		0 / 10		0 / 10		0 / 10
Methylene chloride	11 / 89	0.17 - 0.17	0.05	6 / 11	51	0 / 11	500	0 / 11	1000	0 / 11
Toluene	16 / 89	1.6 - 1.6	0.7	2 / 16	100	0 / 16	500	0 / 16	1000	0 / 16
Trichlorofluoromethane	1 / 89	0.065 - 0.065		0 / 1		0 / 1		0 / 1		0 / 1

100

100

100

0 / 5

0 / 6

0 / 12

500

500

500

0 / 5

0 / 6

0 / 12

1000

1000

1000

0 / 5

0 / 6

0 / 12

#### Table 5.2: RI & SRI Railroad Surficial Soil Summary of Statistics

1 - SCG = standards, criteria and guidance values; 6 NYCRR Part 375 Surface soils represent samples collected from 0 - 2 feet bgs

5 / 65

6 / 65

12 / 89

0.15 - 0.15

0.44 - 0.44

2.9 - 2.9

0 / 5

0 / 6

2 / 12

1.6

1.6

1.6

Contaminants	Frequency of Detection	Range of Detected Concentrations	Protection of Groundwater	Frequency of Exceeding Protection of Groundwater	Residential SCG (1)	Frequency of Exceeding Residential SCG	Commercial SCG (1)	Frequency of Exceeding Commercial SCG	Industrial SCG (1)	Frequency of Exceeding Industrial SCG
Volatile Organics (mg/kg)										
1.1.1-Trichloroethane	14 / 127	0.0011 - 2.5	0.68	1 / 127	100	0 / 127	500	0 / 127	1000	0 / 127
Cis-1.2-Dichloroethene	33 / 127	0.0007 - 1100	0.25	18 / 127	59	6 / 127	500	1 / 127	1000	1 / 127
Tetrachloroethene	86 / 127	0.0008 - 21000	1.3	26 / 127	5.5	15 / 127	150	10 / 127	300	7 / 127
Trichloroethene	51 / 127	0.0006 - 1200	0.47	18 / 127	10	8 / 127	200	7 / 127	400	4 / 127
Vinvl chloride	15 / 127	0.015 - 36	0.02	13 / 127	0.21	10 / 127	13	1 / 127	27	1 / 127
1.1-Dichloroethane	7 / 127	0.0006 - 0.032	0.27	0 / 127	19	0 / 127	240	0 / 127	480	0 / 127
1.1-Dichloroethene	14 / 127	0.0085 - 0.22	0.33	0 / 127	100	0 / 127	500	0 / 127	1000	0 / 127
1.2-Dichlorobenzene	4 / 127	0.15 - 0.26	1.1	0 / 127	100	0 / 127	500	0 / 127	1000	0 / 127
1.4-Dichlorobenzene	8 / 127	0.034 - 0.78	1.8	0 / 127	9.8	0 / 127	130	0 / 127	250	0 / 127
Acetic acid, methyl ester	10 / 127	0.034 - 0.16		0 / 127		0 / 127		0 / 127		0 / 127
Acetone	4 / 99	0.0018 - 0.16	0.05	1 / 99	100	0 / 99	500	0 / 99	1000	0 / 99
Benzene	1 / 127	0.098 - 0.098	0.06	1 / 127	2.9	0 / 127	44	0 / 127	89	0 / 127
Carbon disulfide	1 / 127	0.0052 - 0.005		0 / 127		0 / 127		0 / 127		0 / 127
Chloroform	0 / 127	0 - 0		0 / 127		0 / 127		0 / 127		0 / 127
Cvclohexane	5 / 127	0.048 - 0.52		0 / 127		0 / 127		0 / 127		0 / 127
Ethyl benzene	16 / 127	0.1 - 93	1	10 / 127	30	$\frac{3}{127}$	390	0 / 127	780	0 / 127
Isopropylbenzene	10 / 127	0.077 - 1.1		0 / 127		0 / 127		0 / 127		0 / 127
Methyl cyclohexane	14 / 127	0.026 - 40		0 / 127		0 / 127		0 / 127		0 / 127
Methylene chloride	10 / 127	0.011 - 0.053	0.05	1 / 127	51	0 / 127	500	0 / 127	1000	0 / 127
Toluene	10 / 127 17 / 127	0.033 - 520	0.7	8 / 127	100	$\frac{2}{2}$ / 127	500	1 / 127	1000	0 / 127
trans-1.2-Dichloroethene	10 / 127	0.0093 - 0.41	0.19	3 / 127	100	0 / 127	500	0 / 127	1000	0 / 127
Xvlene o	2 / 71	0.13 - 0.62	1.6	0 / 71	100	0 / 71	500	0 / 71	1000	0 / 71
Xylenes (m&p)	$\frac{2}{2}$ / 71	0.33 - 1.3	1.6	0 / 71	100	0 / 71	500	0 / 71	1000	0 / 71
Xylenes, Total	19 / 127	0.092 - 360	1.6	10 / 127	100	5 / 127	500	0 / 127	1000	0 / 127
Semivolatile Organics (mg/kg)	-, -,					<b>, , , ,</b>		• , , , , , , , , , , , , , , , , , , ,		• ,
2-Methylnaphthalene	2 / 3	15 - 26		0 / 3		0 / 3		0 / 3		0 / 3
Acenaphthene	$\frac{2}{2}$ / 3	0.084 - 0.22	98	0/3	100	0/3	500	0/3	1000	0/3
Acenaphthylene	$\frac{1}{1}$ / 3	0.17 - 0.17	107	0 / 3	100	0/3	500	0 / 3	1000	0/3
Anthracene	$\frac{1}{2}$ / 3	0.081 - 0.19	1000	0 / 3	100	0/3	500	0 / 3	1000	0/3
Benzo(a)anthracene	$\frac{2}{2}$ / 3	0.17 - 0.35	1	0 / 3	1	0/3	56	0 / 3	11	0/3
Benzo(a)pyrene	$\frac{2}{2}$ / 3	0.11 - 0.21	22	0 / 3	1	0/3	1	0 / 3	11	0 / 3
Benzo(h)fluoranthene	$\frac{2}{2}$ / 3	0.16 - 0.32	17	0 / 3	1	0/3	5.6	0 / 3	11	0/3
Benzo(k)fluoranthene	$\frac{1}{1}$ / 3	0.18 - 0.18	1.7	0 / 3	1	0/3	56	0 / 3	110	0 / 3
Bis(2-Ethylhexyl)phthalate	$\frac{1}{2}$ / 3	0.10 0.10		0 / 3		0/3		0 / 3		0/3
Chrysene	2/3	0.18 - 0.42	1	0 / 3	1	0 / 3	56	0 / 3	110	0 / 3
Dibenzofuran	$\frac{2}{1}$ / 3	0.12 - 0.12	210	0 / 3	14	0 / 3	350	0 / 3	1000	0 / 3
Di-n-butylphthalate	2/3	0.088 - 0.11		0 / 3		0 / 3		0 / 3		0/3
Fluoranthene	2/3	0.46 - 1.1	1000	0/3	100	0/3	500	0 / 3	1000	0/3
Fluorene	$\frac{2}{3}/3$	0.13 - 1.4	386	0 / 3	100	0 / 3	500	0/3	1000	0 / 3

#### Table 5.3: RI & SRI Site Subsurface Soil and Bedrock Summary of Statistics

				Frequency of Exceeding		Frequency of Exceeding		Frequency of Exceeding		Frequency of
	Frequency of	<b>Range of Detected</b>	Protection of	Protection of	Residential	Residential	Commercial	Commercial	Industrial	Exceeding
Contaminants	Detection	Concentrations	Groundwater	Groundwater	SCG (1)	SCG	SCG (1)	SCG	SCG (1)	Industrial SCG
Semivolatile Organics (mg/kg)										
Naphthalene	2 / 3	0.77 - 1.1	12	0 / 3	100	0 / 3	500	0 / 3	1000	0 / 3
Phenanthrene	3 / 3	0.37 - 2	1000	0 / 3	100	0 / 3	500	0 / 3	1000	0 / 3
Pyrene	3 / 3	0.38 - 0.71	1000	0 / 3	100	0 / 3	500	0 / 3	1000	0 / 3
Total Metals (mg/kg)										
Arsenic	1 / 2	8 - 8	16	0 / 2	16	0 / 2	16	0 / 2	16	0 / 2
Barium	2 / 2	49.4 - 760	820	0 / 2	350	1 / 2	400	1 / 2	10000	0 / 2
Cadmium	2 / 2	0.25 - 37.8	7.5	1 / 2	2.5	1 / 2	9.3	1 / 2	60	0 / 2
Chromium	2 / 2	18.9 - 162	19	1 / 2	22	1 / 2	400	0 / 2	800	0 / 2
Lead	2 / 2	1.9 - 2580	450	1 / 2	400	1 / 2	1000	1 / 2	3900	0 / 2
Mercury	1 / 2	0.079 - 0.079	0.73	0 / 2	0.81	0 / 2	2.8	0 / 2	5.7	0 / 2
Selenium	1 / 2	1 - 1	4	0 / 2	36	0 / 2	1500	0 / 2	6800	0 / 2
Silver	2 / 2	0.94 - 10.7	8.3	1 / 2	36	0 / 2	1500	0 / 2	6800	0 / 2
TPH (mg/kg)										
Kerosene (C9-C22)	2 / 2	1600 - 2700		0 / 2		0 / 2		0 / 2		0 / 2
Total Petroleum Hydrocarbons	2 / 2	3100 - 4400		0 / 2		0 / 2		0 / 2		0 / 2

#### Table 5.3: RI & SRI Site Subsurface Soil and Bedrock Summary of Statistics

1 - SCG = standards, criteria and guidance values; 6 NYCRR Part 375

Subsurface soils represent samples collected greater than 2 feet bgs

				Frequency of		Frequency of		Frequency of		
				Exceeding		Exceeding		Exceeding		Frequency of
	Frequency of	Range of Detected	Protection of	Protection of	Residential	Residential	Commercial	Commercial	Industrial	Exceeding
Contaminants	Detection	Concentrations	Groundwater	Groundwater	SCG (1)	SCG	SCG (1)	SCG	SCG (1)	Industrial SCG
Volatile Organics (mg/kg)										
1,1,1-Trichloroethane	8 / 117	0.049 - 0.049	0.68	1 / 8	100	0 / 8	500	0 / 8	1000	0 / 8
Cis-1,2-Dichloroethene	14 / 117	0.0014 - 0.0014	0.25	6 / 14	59	0 / 14	500	0 / 14	1000	0 / 14
Tetrachloroethene	90 / 117	0.0023 - 0.0023	1.3	41 / 90	5.5	28 / 90	150	4 / 90	300	1 / 90
Trichloroethene	30 / 117	0.0008 - 0.0008	0.47	10 / 30	10	1 / 30	200	0 / 30	400	0 / 30
1,1,2-Trichloroethane	1 / 117	0.3 - 0.3		0 / 1		0 / 1		0 / 1		0 / 1
4-Methyl-2-pentanone	1 / 117	0.74 - 0.74		0 / 1		0 / 1		0 / 1		0 / 1
Acetic acid, methyl ester	36 / 117	0.028 - 0.028		0 / 36		0 / 36		0 / 36		0 / 36
Acetone	4 / 106	0.007 - 0.007	0.05	2 / 4	100	0 / 4	500	0 / 4	1000	0 / 4
Bromoform	5 / 117	0.016 - 0.016		0 / 5		0 / 5		0 / 5		0 / 5
Chloroform	8 / 117	0.057 - 0.057	0.37	1 / 8	10	0 / 8	350	0 / 8	700	0 / 8
Ethyl benzene	2 / 117	0.025 - 0.025	1	0 / 2	30	0 / 2	390	0 / 2	780	0 / 2
Isopropylbenzene	1 / 117	0.072 - 0.072		0 / 1		0 / 1		0 / 1		0 / 1
Methyl cyclohexane	4 / 117	0.067 - 0.067		0 / 4		0 / 4		0 / 4		0 / 4
Methylene chloride	10 / 117	0.031 - 0.031	0.05	6 / 10	51	0 / 10	500	0 / 10	1000	0 / 10
Toluene	11 / 117	0.035 - 0.035	0.7	3 / 11	100	0 / 11	500	0 / 11	1000	0 / 11
Xylene, o	2 / 89	0.093 - 0.093	1.6	0 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Xylenes (m&p)	2 / 89	0.23 - 0.23	1.6	1 / 2	100	0 / 2	500	0 / 2	1000	0 / 2
Xylenes, Total	2 / 117	0.32 - 0.32	1.6	1 / 2	100	0 / 2	500	0 / 2	1000	0 / 2

### Table 5.4: RI & SRI Railroad Subsurface Soil Summary of Statistics

1 - SCG = standards, criteria and guidance values; 6 NYCRR Part 375 Subsurface soils represent samples collected greater than 2 feet bgs

Contaminants of Concern	Frequ Dete	ency of ection	Range of Detected Concentrations	GW A	Frequency of Exceeding GW A	
Volatile Organics (mg/L)						
1,1,1-Trichloroethane	30	/ 83	0.0027 - 0.73	0.005	25 / 30	
Cis-1,2-Dichloroethene	46	/ 83	0.00093 - 52	0.005	34 / 46	
Tetrachloroethene	78	/ 83	0.001 - 170	0.005	69 / 78	
Trichloroethene	69	/ 83	0.0011 - 40	0.005	63 / 69	
Vinyl chloride	9	/ 82	0.00086 - 1.8	0.002	8 / 9	
1,1,2-Trichloro-1,2,2-Trifluoroethane	1	/ 81	0.0022 - 0.0022	0.005	0 / 1	
1,1,2-Trichloroethane	6	/ 83	0.00045 - 0.036	0.001	4 / 6	
1,1-Dichloroethane	25	/ 83	0.00055 - 0.16	0.005	16 / 25	
1,1-Dichloroethene	30	/ 83	0.00072 - 1.7	0.005	25 / 30	
1,2-Dichloroethane	8	/ 83	0.00025 - 0.014	0.0006	6 / 8	
Acetone	3	/ 62	0.002 - 0.004		0 / 3	
Benzene	2	/ 81	0.00057 - 0.0014	0.001	1 / 2	
Bromodichloromethane	1	/ 81	0.002 - 0.002		0 / 1	
Carbon disulfide	2	/ 81	0.00053 - 0.0024		0 / 2	
Chloroethane	1	/ 82	0.003 - 0.003	0.005	0 / 1	
Chloroform	21	/ 83	0.00063 - 0.025	0.007	1 / 21	
Chloromethane	1	/ 81	0.00065 - 0.00065	0.005	0 / 1	
Cyclohexane	3	/ 81	0.0022 - 0.037		0 / 3	
Ethylbenzene	1	/ 81	0.00059 - 0.00059	0.005	0 / 1	
Isopropylbenzene	6	/ 81	0.00053 - 0.009	0.005	2 / 6	
Methyl cyclohexane	7	/ 82	0.00021 - 0.045		0 / 7	
Methyl Tertbutyl Ether	1	/ 81	0.00021 - 0.00021		0 / 1	
Methylene chloride	9	/ 81	0.012 - 0.65	0.005	9 / 9	
Toluene	3	/ 81	0.0006 - 5	0.005	1 / 3	
trans-1,2-Dichloroethene	4	/ 82	0.0018 - 0.011	0.005	2 / 4	
Xylenes (m&p)	1	/ 37	0.0023 - 0.0023	0.005	0 / 1	
Xylenes, Total	3	/ 81	0.002 - 2.7	0.005	1 / 3	
Total Metals (mg/L)						
Arsenic	1	/ 6	0.0015 - 0.0015	0.025	0 / 1	
Barium	6	/ 6	0.168 - 0.339	1	0 / 6	
Cadmium	1	/ 6	0.0024 - 0.0024	0.005	0 / 1	
Chromium	5	/ 6	0.0007 - 0.0039	0.05	0 / 5	
Iron	2	/ 2	0.462 - 0.54	0.3	2 / 2	
Lead	6	/ 6	0.0042 - 0.0078	0.025	0 / 6	
Manganese	2	/ 2	0.9 - 1.67	0.3	2 / 2	
Selenium	1	/ 6	0.0017 - 0.0017	0.01	0 / 1	
Silver	2	/ 6	0.00065 - 0.00069	0.05	0 / 2	
TPH (mg/L)	-			-		
Extractable Petroleum Hydrocarbons, Total	1	/ 1	0.61 - 0.61		0 / 1	

### Table 5.5: RI & SRI Site Groundwater Summary of Statistics

Notes: See Table 4A

Contaminants of Concern	Frequency of Detection	Range of Detected Concentrations	GA	Frequency of Exceeding GA
Volatile Organics (mg/L)				
1,1,1-Trichloroethane	1 / 24	0.00057 - 0.00057	0.005	0 / 1
Cis-1,2-Dichloroethene	14 / 24	0.00067 - 0.13	0.005	6 / 14
Tetrachloroethene	24 / 24	0.0017 - 3.6	0.005	20 / 24
Trichloroethene	16 / 24	0.0005 - 1.8	0.005	9 / 16
Acetone	1 / 19	0.011 - 0.011		0 / 1
Chloroform	3 / 24	0.00072 - 0.001	0.007	0 / 3
Chloromethane	1 / 24	0.00068 - 0.00068	0.005	0 / 1
trans-1,2-Dichloroethene	1 / 24	0.0036 - 0.0036	0.005	0 / 1
Xylene, o	1 / 17	0.00055 - 0.00055	0.005	0 / 1
Xylenes (m&p)	1 / 17	0.0011 - 0.0011	0.005	0 / 1
Xylenes, Total	1 / 24	0.0016 - 0.0016	0.005	0 / 1
Volatile Gases (mg/L)	• · · · · · ·			
Carbon Dioxide	1 / 1	7.67 - 7.67		0 / 1
Total Metals (mg/L)				
Barium	4 / 4	0.148 - 0.299	1	0 / 4
Iron	1 / 1	0.0425 - 0.0425	0.3	0 / 1
Lead	4 / 4	0.0115 - 0.0159	0.025	0 / 4
Manganese	1 / 1	2.13 - 2.13	0.3	1 / 1
Silver	2 / 4	0.00065 - 0.0012	0.05	0 / 2

# Table 5.6: RI & SRI Railroad Groundwater Summary Statistics

Notes: See Table 4A

### APPENDIX A

### SITE PHOTOGRAPHS

Appendix A – Drilling Activities					
Client: NYSDEC	Project Number:	36121112221.06.01			
<i>Site Name:</i> Industrial Overall S	Service Site Location:	New Rochelle, New York.			
Photographer:Brandon ShawDate:October, 2015Photograph:1					
Direction: NA					
<b>Description:</b> Location of Former Dry Cleaning Unit Inside Site Building.					
<i>Photographer:</i> Brandon Shaw					
Date: October, 2015					
Photograph: 2					
<i>Direction:</i> NA					
<b>Description:</b> Drilling GS-501 Inside Site Building					

Appendix A – Drilling Activities					
Client: NYSDEC		Project Number:	36121112221.06.01		
Site Name: Industrial	Overall Service	Site Location:	New Rochelle, New York.		
<i>Photographer:</i> Brandon Shaw					
Date: October, 2015					
Photograph: 3			WORK		
Direction: Southwest			AHEAD		
Description:					
Drilling GS- 505/MW-505					
East side of Site Building					
<i>Photographer:</i> Brandon Shaw	she				
Date: October, 2015					
Photograph: 4					
Direction: North		HAN			
Description:					
Drilling GS-505/MW- 505 East side of Site Building					

Appendix A – Drilling Activities					
<i>Client:</i> NYSDEC	Project Number:	36121112221.06.01			
Site Name: Industrial Overa	Il Service <i>Site Location:</i>	New Rochelle, New York.			
<i>Photographer:</i> Brandon Shaw					
Date: October, 2015					
Photograph: 5					
<i>Direction:</i> Northwest					
<i>Description:</i> Coring sidewalk on South Side of Site Building		the second secon			
Photographer: Brandon Shaw Date: October, 2015					
<b>Photograph:</b> 6					
Direction: East	- 536				
<i>Description:</i> Sanitary Sewer Bedding Sample Locations on South Side of the Site Building					



Appendix A – Sanitary Sewer Inspection						
Client: NYSDEC	<b>Project Number:</b> 36121112221.06.01					
Site Name: Industrial Overall Service	ce <i>Site Location:</i> New Rochelle, New York.					
Photographer:         Nate Vogan         Date:         October, 2015         Photograph:       1	16:04:19 10-20-15 0.78m					
Direction:						
Description:						
Sludge Observed in Sanitary Sewer Line Exiting the Site						
Photographer: Nate Vogan						
Date: October, 2015	16:41:02 10-20-15 26					
Photograph: 2						
Direction:						
NA						
Description:						
Potential Lateral Observed (Left)						
Located Towards 21 Bartels Place	G					

Appendix A – Sanitary Sewer Inspection					
Client: NYSDEC		Project Number:	36121112221.06.01		
<i>Site Name:</i> Industrial	Overall Service	Site Location:	New Rochelle, New York.		
<i>Photographer:</i> Nate Vogan					
Date: October, 2015					
<b>Photograph:</b> 3					
<i>Direction:</i> NA					
Description:					
Manhole on Bartels Place (MH-01)			1. 18. MA		
Observed Fibers on Walls					
<i>Photographer:</i> Nate Vogan		12122			
Date: October, 2015		MAC	Res Internet		
Photograph: 4					
<i>Direction:</i> NA					
Description:		IN TO BE			
Manhole with Gray Water and No Sludge/Fibers at End of Columbus Ave					



Ар	Appendix A – Soil Vapor and Indoor Air Sampling							
Client: NYSDEC		Project Number:	36121112221.06.01					
<i>Site Name:</i> Industrial	Overall Service	Site Location:	New Rochelle, New York.					
<ul> <li><i>Photographer:</i> NWV</li> <li><i>Date:</i> October, 2015</li> <li><i>Photograph:</i> 1</li> </ul>								
Direction: West								
Description: Installation of Soil Vapor Sampling Point Near Manhole (MH-01) on Bartels Place	A S	2.						
Photographer:								
Date: October, 2015								
<b>Photograph:</b> 2								
<i>Direction:</i> NA								
<i>Description:</i> Soil Vapor Sampling Setup Bartels Place								

Appendix A – Soil Vapor and Indoor Air Sampling						
<i>Client:</i> NYSDEC		Project Number:	36121112221.06.01			
Site Name: Industrial	Overall Service	Site Location:	New Rochelle, New York.			
<i>Photographer:</i> Nate Vogan						
Date: October, 2015						
<b>Photograph:</b> 3						
<i>Direction:</i> Northwest						
Description:						
Storm Sewer Catch Basin on Pine Street						
(SA-PS08-06)						
<i>Photographer:</i> Nate Vogan	UNITED S					
Date: October, 2015						
Photograph: <sup>4</sup>						
<i>Direction:</i> East						
Description:		0 05 0'7'0				
Soil Vapor Points Associated with Identified Sanitary Sewer Laterals		3				
Bartels Place						



### **APPENDIX B**

### FIELD DATA RECORDS



	SOIL BORING LOG	
	Project Name: Industrial Overall - Supplemental RI	Boring ID:
MACIEC	Project Location: New Rochelle, New York	45-504 Page No /
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of
Boring Location: 1 MIDE STRE BIMLDING	Refusal Depth: Z, & W/S Total Depth: Z, & W/S	Bore Hole ID/OD:
Weather: 60'F (JUNIM)	Soil Drilled: 2.8 Huy Method: MAMD 7222 LS	Casing Size:
Subcontractor: Aztech Technologies	Protection Level: D	Sampler:
Driller: BOB KAMMON	Date Started: 047.17, 2015 Date Completed: 047 17,2015	Sampler ID/OD: 4
Rig Type/Model: ### LEPPROBE MANDIE	Logged By: BAS Checked By: AC 11/3/2015	· / · · · · · · · · · · · · · · · · · ·
Reference Elevation:	Water Level: 72.8 800 Time: 17.50	
bin ) are etc. / to bin ) for the second sec		dnor
o Depth (fee Sample Nuu Penetrati( Recovery ( PID Heads) Reading (p	Sample Description and Classification	S S S S S S S S S S S S S S S S S S S
A/	0-015' CONVIDETE & ALLARECATE	PLAIDING
	0.5- : RICONIN TO LT BROWN F/C SAND &	FLODE
· L.O. 1	WROTEL, WELL IMANEN BRICK OPENERNT	
	Quel Stanta M Drugs	c. /
	T' ", MOIST, NI, DENSE)	514
SI NA	F.11 ?	A CONTENTED SOIL
		SAMPLE P2.7' Men
1720		300104-45502003
		C172.
	BUTHAL BOST BLO WILLIAND TOPIS:	
<u>9</u>	VILEY NOT PEDROCK	
5		
10	07	
NOTES: MONTUPING BREATHING ZON 02:21.0 LU: P LEL: P H2S:4	SE VI 4-LATS METER '	SOIL BORING LOC

							SOIL BORING LOG			
- AMM	ΤΝ /Ι	· ^	$\mathbf{C}$	┑┍╌┰╌┑╵			Project Name: Industrial Overall - Supplemental RI	Boring I	D:	
	IVI	A	IC		El		Project Location: New Rochelle, New York	Page No	43-304	
511 (	Congress	Street,	Portland	d Maine 04	4101		Project No.: 3612112221.06 Client: NYSDEC	of: 2		
Boring Lo	ocation:	ASTER	N STIDE	OF STE 1	BLALDIN	h	Refusal Depth: 18.2'365 Total Depth: 18.2'	Bore Ho	le [19/OD: 2.5''	
Weather:	40F	<u>su</u>	INNY	1 1 1			Soil Drilled: 14.8 Method: 31 PECT Plural	Casing S	Size: -	
Driller	actor:	Azte	ch Tech 1 Anna a	nnologies	3		Date Started: art 16 2 a.C. Date Completed: Outstor	Sampler:	1800 2 Er	
Rig Type	Model:	2	###	Lak 10	DT		Logged By: BAS Checked By: Hun 1121	Sampler	10D. 2.3	
Reference	e Elevatio	n:					Water Level: Time:			
Sam	ple Infori	natior	1	Mor	nitoring					
Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks	
0.0				101			Q-0,4 ( DNDETE & HUI, OF TATE & FLOOR			
			.  '				a second and the second s	7/5	>	
1				<del>8.5</del> 3:9		Ð	FEW M/C SAND, TRACE GRAVE, POORLY GRADED SP, MDENSE, MULT,	Î	CONTECTED SON VDC SAMPLE-@ 112-115'827	
e1	50			4.3			Fill 2		000845	
@	3.16			5.9				5p/sn		
				u·8						
				8.9				₩		
				10.9					IN PATER SOLLVOL	
5				11.5		R		-	Stupte @ 4,81 412 [ Houto 7- 45 504005] [ C	
				2.8			5-8.5 OLIVE DROWN FIM SAND of SOME SILT & TRACE GRAVEL, DORLY GRADED MDENSE,	501		
4				3.7			MOIST, SP, MORE WRALER P-8'	<sup>-1</sup> /Sh		
7 S2	50	-		5.1			GRANEL, PODELI GRADED, DENSE, NP, MUIST			
@ 0% <sup>C</sup>	4,1			7,8						
8				12.5		Ð		UP	- LOWERTED SOL	
				1.9					VUL CAMPLE @ 81 Mg 3100104-41504008	
Ŷ				L7				Sp	(D090)	
10				2.0						
NOTES:	MONTI L	04N/ 01 721	h 824 1 \$ 2. ZG	еАты И 2 .9	ZUNT	κ υ Γ Γ	N 4-WAS METER (EXHAMINIST IS VENTED OWTHINE EL: Ø 125: Ø	)	SOIL BORING LOG	
*						: .		·		

						SO	L BORING	LOG			
đ		ŇЛ				Project Name:	Industrial Ove	all - Supplemental R		Boring II	D: 115-574
		<b>IVI</b>	A		EC	Project Location:	New Rochelle.	New York		Page No	· 2
	511 Co	ongress S	treet, Port	land Maine 0	4101	Project No.: 36121	12221.06	Client: NYSDE	C	of	2
Borin	ig Loc	cation: <b>\</b>	ITE BV	yuplah (	(EAST)	Refusal Depth: 18,2 Mus- Total Depth: 18,2 Mus			Bore Hol	e ID/OD:	
Weat	her:	4-0 1F	-, SWNN	N		Soil Drilled:	4.8 000	Method: DILEET	plut	Casing S	ize:
Subc	ontrac	tor:	Aztech 7	Technologie:	5		160 11	Protection Level:	D	Sampler:	
Drille	er:	BUB	hamn	6100T		Date Started: 0()	· 18,2015	Date Completed:	1, 18, 2013	Sampler	10/0D: 120
Refer	ype/M	Elevatio		0101/		Water Level	BAS	Time:	· ///	<b></b>	
S	Sampl	e Inforn	nation	Mo	nitoring			11110.	VV(		
E Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		s	ample Descriptic	n and Classification		USCS Group Symbol	Remarks
				0.9		10-14.8 6	AREY TO LT	arefish or W	E, FIM SAND		
						FEW CSAND	, TRACE 4	RAVER/SILT,	PODALY		
	53 (°	5.0		v.7		HAATOED, SP, 14:8-15 BW BEDROCK, F PROPERTIE	VERV DEN Azie to Greg Printe a 37	SE, MONT/1 (7) UNLITE W AZMOST SOIL 1	ND OLON EATYERED	-SP	
15	JA K	)		0.2 0.1 0.1						MEATE	ENED REDUCK
16 17 18	54 C m4)	3.2	1	20. <b>f</b>		IS-18.2 WE OF A M SAND UREY TO IR UNARTZ FIN	ATTHERED # ); WHINED DN STAINED 1 CA; REFULAL	EDROGE, SHINT, BLACK to Me (-17.5-18) 70	Properaties ENISH DE hoey,		
20 NOT	ES:				8	MATALOCIVE	<i>Р</i> КЛ ИЛ-НЦ	~ 1X.L' #WY	e 1501tom of 15	orny	
											SOIL BORING LOG

		Project Name: Industrial Overall	l - Supplemental RI	Boring II	1:45-505
	<b>JIE</b>	Project Location: New Rochelle, New	ew York	Page No.	1
511 Congress Street, Port	land Maine 04101	Project No.: 3612112221.06 C	Client: NYSDEC	of	à
Boring Location:		Refusal Depth: T	Total Depth: 26,5'B65	Bore Hol	e ID/OD: 4-inili × 2.
Weather: 50°F, CL	UN PREEZE	Soil Drilled: 15.5 BGS N	Aethod DIRECT Phrz	Casing Si	$ze: 4^{z}(-12,2')$
Driller: Bry LA	econologies	Pote Started Over 18 2 17	rotection Level: D	Sampler:	5 MacosCon
Rig Type/Model: ###	# leleinor	Logged By: BAS	Checked By:	Sampler,	UD: dis jurh
Reference Elevation:	~~ 10pj	Water Level:	Sime:	1	
Sample Information	Monitoring				
C Depth (feet bgs) Sample Number Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description a	and Classification	USCS Group Symbol	Remarks
	н.а	0-0,5 CONCRETE 4 ARUPE D.5-2,5: BRINN SAND & A -> HAND LE EADED TO	RATE SIDENALK. RANEL - / BAUKS& ASPHALI > 2.5' OLS	50/.	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2:5-5 BRWN PO IRANM	of BROWN MSAND	· /u	F,11
s1 2.5		CARAVEL, FEW F/C S. DROPLY ADJANEN THE NIT	AND; COBBLE (9.5!		
2,5 @ 2.3	3.7	, the provide sense	, ivi, voivest replay	SP	
	3015				COLUCITED SOIL
	son o			40	SAMPLE @ 45-5
	<u> </u>				P 3.2-3.5' Mus
	MA			0	360109-4550500
	33.4			11	C/255
5	38.5				
	37.5	5-10 BRONN TO OLIVE	BROWN ACSAND, SOME		
		MATTER, MOTST, PODENY	WARTIDED, DENSE,		
	30.5	NO DOR, MORE SILT	FROM 9-10' 424	0	
52	42.7		- - -	'V	
@	50.5				
					しいもしたわ 501
118	43.4				VOU SAMPLE C
<sup>y</sup> ''					W-505 69'0
	53.7				260109-61501
					-012
	100.5				(1305
10	255			50/50	_
NOTES:	/ * * * * *	l	······		
					SOIL BORING I

		SOIL DONING LOG	
	TTC	Project Name: Industrial Overall - Supplemental RI	Boring ID: M - 505
	JIEU	Project Location: New Rochelle, New York	Page No. 2
511 Congress Street, Portl	and Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of: Z
ring Location: LASTION	YPE OF SHEBULD	Refusal Depth: Total Depth: 265'B65	Bore Hole ID/OD: 4-IN4-1 + 2.5
eather: 55 FISH	MAININD	Soil Drilled: 15.5' Method: DNLEW PLM-	Casing Size: 4-INCH (-12.2' L
bcontractor: Aztech T	echnologies	Protection Level: D	Sampler: 7 My UNOLORE
Iller: BOB NAM	MON 610 DT	Date Started: 0018, 2018 Date Completed: 00,2115	Sampler JD/OD: 2.5-IN4
ference Elevation:		Logged By: BAS Checked By: Hull 113/15	
Sample Information	Monitoring		
ar ug Dn/ feet	pace		l toul
and Nu Nu	eads (p	Sample Description and Classification	Remarks
cove	Adiin adiin		N N N N N N N N N N N N N N N N N N N
	PII Re		
		HIT K ALLA-MALL CALMA GOND - 4	
	30.5	DEAL HALLS	, , , , , , , , , , , , , , , , , , ,
━╡──-   ───-   ───   ───	·	10° "RATUEL, MOIST, NP, NO ODDR,	
	38.6	th dense to dense;	
			011/sm
2.8	41.5		
- ' <u>3</u>   /			
$\left \binom{\alpha}{2}, \frac{1}{2}\right $	0.7.6		
	7.2		
			COLLECTE) SDIV VOC
	75.3	hat a mart a men all VI ada a Arria such	Sample 2104
10 <sup>-11-1</sup>		MUTCHE CORE HEALSAL PIC. 8 BIS ADVANGING	360169-03503012
		THE THOUS DOWN TO BEDROCK & THEN	Q1325
		WE 20 a 15 - 4 AULTREN (4/4-14/41 10) TD REDUCTAL	
		R122 Mar And Real of the set of t	SAL)
		(12) 9; BELINNING TO PONER PIT ~5/ 10 GNFI	RM BEDRICK & SET HYBRIDWELL
		005 21,2015:	CORE PUN TIMES :
		CORED TAPOUNT 11 BOULDER FROM 12,5-13,5	Say NA
		- WAS NOT ABLE TO ADVAILE CASING DID THAT IN	
		-> Rourient the art (	UDER
7			
		· ENCOUNTERED WEATHEDED BEDDOK	
-		FROM 15:5' to Dess BUT	
		+2TECH HAS NO MOST DONG the	
		thun NUNI BON TRANC	
		TO LITCOLLE , OLLECTITI S ATTEMPTINA	
		IS IN THE MOMPORING WELLIN	
		The Forling	
		"DIIS NOT ENCOUNTER (COMMETTENT).	
		HARDER BEDROCK	
-			
σ			h h
4,5		1 As Bottom of Bonty = 26,5-1	o repuse
<u> </u>			
			SOIL BORING LOG
		- <u></u>	
			和政治的行法行

		M	A		CT.	EC	Project Name: Industrial Overall - Supplemental RI Project Location: New Rochelle. New York	Boring I Page No	D: 45-50k
	511 C	Congress S	treet,	Portla	ind Maine (	4101	Project No.: 3612112221.06 Client: NYSDEC	0	f: <b>Z</b> .
ori	ıg Lo	cation:	sou	TH E	END OF	SITEBULD	Refusal Depth: 19,0' buts Total Depth: 19.0' buts	Bore Ho	ble ID/OD: 2.5-1NU-
Vea	her:	60	213	<u>sun</u>	M		Soil Drilled: 19.0 Mb Method: DIREA Plust	Casing S	Size: NA
	ontra	$\frac{1}{1} \frac{1}{1} \frac{1}$	Azte	ch Te	chnologie	8	Protection Level: D	Sampler	5 MACHOLORE
<u>π</u> iα'	er: Syne/	Model	HIYI	<u>mm</u> ###	Lunr	<b></b> -	Date Started: 00.01 1015 Date Completed: 10124 2015	Sampler	1D/OD: 2.5-INU)
efe	rence	Elevatio	n:	mm	<u>uun n</u>	1	Water Level: 11.5 4 bda Time: 0490		
	Samp	le Inforn	atior	1	Мо	nitoring			
(Sc	н					T			
. Depth (feet by	Sample Numbe	Penetration/ Recovery (feet			PID Headspace Reading (ppm)		Sample Description and Classification	USCS Grou Symbol	Remarks
					Lei		0-0,3 (ONLDETE/ANGREGATE -> SIDEWALK		
<del>.</del>							P.3-0.8 ASPHALT, BALK, BACKFILL	511	
ι							0.8-3 PRONTO ONCE PROVIN CUTUTION	1/1	4/11
							THE GARDE DENSE GRANDD		
		ri					Wenter and well some ist, Moist		
/		5.0					3-5 PRONN F/M SAND, FEW WANKE, TRACE SILF,		
	S1						DRY, MDE ME		AS LE MEUED SDIL
>	@	4,0					, active, NO spore		SAMPLE C'3,2' 1200
	140		•						Chr-586 ASMIMIC BIT
									DET H OF SEVER LINE
								\$P/	760109-45-506003
t							· · ·	I /F	11 APW
			·					1	
5			-		4				
					L.O.1		5-le OLIVE BROWN ELCSAND & MEAVER WELL MRADED, MOIST, SP, MDENSE Le-LIS AS & HALT & CONVERTE -> FILL	SW	É.U
							10.5-8.5 DUVE BRONN F/M SANN FINI / SANN	NA	
		5.0'					TRAVE SILT & F ARAVEL MANAE AND AND IN	·	
	52						Lamo		
	e C	5.0					We DED	So	
	0219	,					8.5-9 WATHERED BEDROCK FRATHMENT		
							9-10 OLME BROWN INTE SAND WI GAME		
							Se product and a start of some still,		-
							a, roomy MADED, DENSE, MONT, VERY	- A DECEMBER OF THE OWNER	
							FAINTODOR		
								Sm	
10							Mar .		
<u> </u>					<u> </u>		· · · ·		
<u>01</u>									SOIL BORING LOG

							SOIL BORING	LOG		
12		ΝЛ	· <b>Л</b>	OT		٦	Project Name: Industrial Ove	rall - Supplemental RI	Boring I	D: 45-506
		IVI	. / ]			1	Project Location: New Rochelle,	New York	Page No	2
Ĺ	511 (	Congress	Street, I	Portland Maine 0	4101		Project No.: 3612112221.06	Client: NYSDEC	0	e 2
Bori	Boring Location: Soluth of SITE BUILDING						Refusal Depth: 19.0	Total Depth: 19,6	Bore Ho	le ID/OD: 2,5-1N(4-1
Wea	ther:	ko j	<u>- SI</u>	MM			Soil Drilled: 9.0	Method: DIPUELT PLOST	Casing S	ize: NA-
Subo	contra	$\frac{\text{ctor:}}{n M}$	Aztec	h Technologies	3		Data Stantade Allt 21 a	Protection Level: D	Sampler	5 MARKOCOKE
Rig"	Tvne/	<u>K/i</u> Model:	<u>FIN</u>	6610 DT			Logged By: BAS	Checked By: All August	Sampler	ID/OD: 2.5-1NLH
Refe	rence	Elevatio	on:				Water Level: ~ 11.5 Mm	Time: 0909		·
	Samp	le Inform	nation	Mor	nitoring					
5 Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)			Sample Description	on and Classification	USCS Group Symbol	Remarks
				4 79.5			10-15 IRMDELENT TO	SILVER TO OLIVE TO		
				463.2		Ś	Salt, poorly arrows this salt, poorly arrows	AND, TEW GRAVEL «TRAKE , MOIST, VERY STRONG MDENSE	Sp	LO LLECTED FOIL VOL SAMPLE ENS-501 10.8-11.2 ( DLS
	53	5.0	/	369						360109-61506011 7 360104-615060160 P 2-30
		•		332						
15				198,5						۰.
				842.		$\mathfrak{D}_{0}$	15-15,8 1221 DECENTION	WENL BAND, POORY	Sp	CO LECTED SOIL 100
				432			15-8-19 BRONN TO O	LIVEBRONN F/M SAND,		Stmple Plus-526 15.5-15.7 " 020
-		Uo		185			FEW MRAVEL, MO.ST	to wet, NT, NOENSC		320109-45526016
	54	En					DENSE, MEATHER	ED BA LODALE P 17,9 (		. @ <del>950</del> 045
	P	D.V/		101			PODDLY GRADED			
	rsaa	26		89,1					S	
	1	5.]		33.5					r	
				22.5						
— .				4.0			a mi unit antisenten antisenten antisenten antisenten antisenten antisenten antisenten antisenten antisenten a	nga na manga ang ang ang ang ang ang ang ang ang		-
•							MACADOLIDE REFUSAL C	19' Why = Bottom of ho	21	
		-			141			J		
20								·		
<u>NOT</u>	<u>ES:</u>									SOIL BORING LOG

					SOIL BODING			
Aller	· •••••	× ~			Project Name:		Boring II	
	$\mathbf{N}\mathbf{I}$	A		$\mathbf{FC}$	Industrial Overal	I - Supplemental RI	Loung II	~US-507
	<b>T A T</b>	TT			Project Location: New Rochelle, N	ew York	Page No.	I
511 0	Congress S	treet, Portla	and Maine 0	4101	Project No.: 3612112221.06 Client: NYSDEC of:			2.
Boring Lo	$\frac{1}{\sqrt{3}}$	OF SHE	PULLON	4	Refusal Depth: NA T	Total Depth: 20	Bore Hol	e ID/OD: 2.5-1N4
weather:	<u>u</u> <u>k</u>	+ JG	INNY		Soli Drillea: 16'	vietnod: DIVEZT PUSH	Casing S	ize: NH
Driller	DAVI LIA	TAAJAR NO	N	3	Date Started: 0/1701 2	Date Completed MT 21 1 AT	Sampler:	3 MACDOLONE
Rig Type	/Model /Model	###	1/100	<u></u>	Logged By: BAS	Theoked But Qay Way was	Sampler	1D/0D; 2.5-INCH
Reference	e Elevatio	n:	Malu		Water Level: and RAA T	Fime: 1020	p	
Sam	ple Inform	nation	Mo	nitoring	(Trace 2010) 11 (11)			
C Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description	and Classification	USCS Group Symbol	Remarks
			11		O-013'- CONLIGATE & AULIP	EAATE -> MDEWATK	$\sim$	
			40)		03-05 MUNITEDMIL		~~	
	5.0 3.7				0.5-2.5 OLIVETO REDDIST TRACE ARATEL, MOISTS 2.5-5 BROWN TO AEDDIS Some + GRAVEL, POOLIN NA, COMPART TO LOUSE,	H BROWN F SILTY SAND, H BROWN FIMSAND WRANED, MOIST TUDRY NP	Smy	/R/1 CONFRIED SDIL SAMPLE NUER DOTTON OF SELECUNE 2.5'-3.0' 23 <u>Blue 109-61507023</u> <u>100955</u>
5			0.3				)/	Pry
			0,5		5.4: SAME AS 25-5 6-6,5 CONTRATES ASOFIAT	17	Sp /	$ F_i  $
			0,9		6.5-9 BROWN TO OHVE WRADED MODILE	BROWN IN SAND, PODELY	H.	í.
S2 @ 050			3.5 7.8		9-10 WREFISH OHIE POTONY READED, MOIST	1 + SAND, FEW STLT	Sp	
			7.8 4.NTD		0 DOR	, .	<b></b>	(), 1, 2, 2, 1, 2, 1, 2, 1, 2, 1, 2, 1, 2, 2, 2, 1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,
			∳			7	50	360109-155075097
10				.			*	Q (0/D)
NOTES:	Ð	B10 MT	it wor	KINA C	and ALLER			SOIL BORING LOG

						SOIL BOBING LOC				
AMA	<u>/</u> та ла	- A				Project Name: Inductrial Quaratta Supplemental BL	Boring I	D: / , 17-1		
2		A		E(	1	Depiered a section and the Depiered and the Market		4)-501		
511	Congress	Street	Portland Maine	04101		Project Location: New Rochelle, New York Project No : 3612112221.06 Client: NVSDEC	Page No	e. 2		
Boring L	ocation:	S 1. F	CITE PL	ALLIN A		Refusal Depth: NA Total Depth: 20	Bore Ho	Of: 2		
Weather: Zate CLANNY						Soil Drilled: 20 Method: DrPUTT PWA	Size: NA			
Subcontr	ractor:	Azte	ch Technologi	es		Protection Level: D	Sampler	S MACHOCARE		
Driller:	RAY	HAN	IN ONP	•		Date Started: 017 21,2015 Date Completed: 016 21,245	Sampler	ID/OD: 2.5-WCH		
Rig Type	e/Model		6610 <b>D</b> T			Logged By: BAS Checked By: Alulfly 11/3/15				
Referenc	ce Elevatio	on:	1 1	•. •		Water Level: 19 Mrs Time: 10300 W		1		
Sam	nple Infori	nation	i Me	onitoring			·			
1 Depth (feet bgs Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks		
			325			10-14,5 WEEPISH OLIVE TO IRADECENT				
			281	_		ARAPED, MEIST, VERY STRENG ODDA,	sp			
	5.0		352			14:5-15 OLIVE BROWN FIM CALIN COMPACT		(OWPOTED SOLVIOL		
12 0			421		(de la constante) (de la const	TO DENSE, MOIST, NP		SAupl # @ 45577		
	19 7.1		139					3760109-63507012		
			149					@1615		
			63.5	-						
15			47.5				59			
			553			15-20 BROWN TO REDDISH BROWN				
						the course is a course				
			39,7			THISTND, FEWSILI, SOME FULATEL,				
			1.2.5	-		(DBALE (QUARTZ) @ 18.5' This. FOOPLY				
						GRADED, NOIST TO UET NO				
<u> </u>	5.0		8.9			INT, DENDE	12			
' 4		7	4.6	l			P			
L P	) ヤ	/								
			3.7							
	''''		1.8							
			0.7							
			0.7							
			0.8							
20			0,8			B. the as the = = = =============================	Anti	ic.O		
NOTES	<u> </u>					UUNOWN ON BURG 200 065 10	yruert	1 JULY		
	<u>.</u>					1907		SOIL BORING LOG		
	•				- 4-1					

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						SOIL BORING	LOG			
	Al Al	ТАЛ	· <b>A</b>	OTT		Project Name: Industrial Overal	il - Supplemental RI	Boring I		
	2	IVI	A	$\mathbf{U}\mathbf{I}$		Project Location: New Rochelle N	Iew Vork	Daga Mo	45-508	
-	511 (	Congress S	Street, P	ortland Maine 041	01	Project No.: 3612112221.06	Client: NYSDEC	r age No.	· 7	
Boring Location: > of SITE BLACO INLY						Refusal Depth: 16,8 Buy	Fotal Depth: 16,8 (m)	Bore Hol	le ID/OD: 2 5-(NZ1)	
Weather: To: F, SUNM						Soil Drilled: 16,8 Mas 1	Method: DIPEET PLAN	Casing Size: NM-		
Subo	contra	ctor:	Aztec	h Technologies		I	Protection Level: D	Sampler: 5' MAUNOCOLE		
Drill	ler:	KAY H	Amu	WND		Date Started: 04 21, 2015 Date Completed: 04 21, 2015 S			1D/OD: 2,51NLA	
Rig' D-f	Type/	Model:	; 	### Ulelodt		Logged By: BAS (	Checked By: 4 and 1 1 3/15			
Refe	Same	Elevatio	n:	Monit	oring	Water Level: ~ II · Mm	Time: 1130° W			
(s					51 II g					
Oepth (feet bg	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description	and Classification	USCS Group Symbol	Remarks	
				L.g.		0-0.3 CONTRACTE STDA	EWALLE	$\otimes$	~	
						1000- UNADED, SP, M	DIST, COMPACT	Sny	RII	
	51 @ [05f	5.0	-			PEW FSAND & FARA WOIST, COMPACT to L	ISTH BROWN, MSAND THEL, NOVELY GRAPED, -0055C, NP			
5				Q.3 0.4 0-7				5p/	F.I.	
				0.3 0.4		5-6 SAMEN 2.5-5 6-6.6 CONCRETE & ASP 6.6-9,5 BRUIN TO 6	41417 UNE B120NN F/C	50/	, Fill	
	S2	<b>F</b> (1)		0.1		SAND WY LITTLE LEADA Mest, NP	EZ, WELL WRADED, COMPAC			
	1040	5.0		0.2		SILT & TW LOADEL, 1 NP(SP) FAINT DUG	FIM SAND M SAME Melst, M DENSE,	รฟ		
				ø.l				<u> </u>	-,	
10				e.2				12		
NOT	TES:	<u>-</u> [	l			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			
	~	7'	50	with st	48-	506			SOIL BORING LOG	
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	SOIL BORING LOG	
	Project Name: Industrial Overall - Supplemental RI	Boring ID:
	Project Location: New Rochelle New York	43-508 Page No 2
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	1  age 140. 2 of: Z
Boring Location: ~ 7' SOUTH of USTOG	Refusal Depth: 11.8 Dus Total Depth: 16.8 M	Bore Hole ID/OD: 2,5-INCH
Weather: 70 4 SUN M	Soil Drilled: 16,8 PLS Method: DIATOT PUSA	Casing Size: NA
Subcontractor: Aztech Technologies	Protection Level: D	Sampler: 5' MATROCODE
Driller: RAY HAMMOND	Date Started: Oct 21, 2015 Date Completed: Oct 21, 2015	Sampler ID/OD: 2.5-1NCr1
Reference Elevation:	Water Level: ~ // */ Time: 1130	
Sample Information Monitoring		
5       Depth (fect bgs)         Sample Number       Penetration/         Penetration/       Recovery (feet)         PID Headspace       PID Headspace         Reading (ppm)       Reading (ppm)	Sample Description and Classification	Contraction of Change C
1.9	10-1315 BRONN TO OHVE'S ROWN TO TAN	
	FICSAND UT SOME WRATEL, COULDERE CO 11, VELL WRADED, NP, MOIST, NDENSE 70 COMPART, V. PAINT DDOR P-13	SW
3.1	13,5-15 BRONN TO OLIVE BROWN FSAND	COLLECTED SOIL
$-C_{4,9}$ 8.9	) HEV MIC SAND, SOME ARAVEL, POUPLY	45-528 @ B.2'sky
0.8	4RADED, MOILT, DENSE,	760109-6550863
e.9		50 ° 1055
15 0.7		
	15-16-18 BROWN TO CLIVE BRANN SA STLETY BAND PEW URALEL, POUPLY GRADED , WET,	
v. 2	LOOSE, NO ODOR	Sp
10.5 G 1.18. 10.1		
1055 5.0	Bottom of bourn = 16.8' BGS Refused with Direct Push	
20 NOTES:		

SOIL BORING LOG
		IVI	<u></u>	L.	E.C.	Project Location: New Rochelle, New York	Page No	<u> 33° 361</u>
2.19 <b>17.18</b> 14	511 C	ongress a	street, Po	rtland Maine (	4101	Project No.: 3612112221.06 Client: NYSDEC	0	ани и и и и и и и и и и и и и и и и и и
Bori	ng Lo	cation:	MA	JR.	an a	Refusal Depth: NA Total Depth: 15-0	Bore Ho	1e ID(OD) 2.35
Weat	ther:	10°	Mc	Techny		Soil Drilled: 15.0 Method: Divect Push	Casing S	ize: NA
Drill	onira	ctor:	Aztech	Technologie	S	Date Started: Ici Date Completed: Ici Date	Sampler	DOD: 15 1A ST
Rig 7	Type//	Model:	#	## 6610		Logged By: WBAS NW Checked By: 1PP 12/21/6	Gampion	
Refe	rence	Elevatio	n:	er wil de worden en enwechen sok in fas	the Orac processor with the State State and	Water Level: NM Time: NA		naman da kana kana kaya yang kana sa kana kana kana kana kana kana k
	Samp	le Inforr	nation	Mo	nitoring		W methods 10.4 millions and 20	n na tin kan din kan kan kan kan kan kan kan kan kan ka
S Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description and Classification	USCS Group Symbol	Remarks
		5-0/ 0.9		0.0		Brownish black to norterate brown; pourly graded soud up gravel, trace 1" angular crushed stam + coal fragment project dense; no starining, no odars	F:11	
	s <b>/</b>							
5		-						
	55%	5.0		0.0		Moderan brown; poor's graded Sand; Arace me subrounded gravel; moist; redum dense	50	Sample at G.O (Dup takin) 360109-55- \$ 301006 - 0 301006 D- 0
10 NOT	'ES:							
								SOIL BORING LOG

and the second s	IN I	NA	Δ		FC	Project Name: Industrial Ov	erall - Supplemental RI	Boring I	D: 55-301
		TAT	T.T.		ĽU	Project Location: New Rochell	e, New York	Page No	. 2
<u> </u>	511 (	Congress &	treet, Por	tland Maine 04	4101	Project No.: 3612112221.06	Client: NYSDEC	0	f: 2
Bori	ing Lo	cation:		12	·····	Refusal Depth: NA	Total Depth: 15.0	Bore Ho	le ID(OD) ), ) 5
wea	uner:	70	M	Clover			Method: Direct With	Casing S	
Deill	ler	<u>cioi.</u>	AZICCII .	recimologies		Date Started: Julaa Let	Date Completed: 1. 1.	Sampler	10/00: 1.5 (1.5 C
Rig	Type/	Model	·	6610		Logged By: MD-BAS- AM	Checked By: Ipp 12 (all 1)	i banipior	
Refe	erence	Elevatio	n:			Water Level; NM	Time: MA	2	
	Samp	le Inforr	nation	Mor	itoring				
5 Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Descript	ion and Classification	) USCS Group Symbol	Remarks
10						- will make and how in	well and the co	(h)	
ĺ	é	5.9				Luche to trare for	found it must .	a ··· <del>smi</del> sm	Jampies ait
	-	5.9				Coline and only	in Junion Juner, Na	u	10.0 and
						JULL MOIST to W	i oanse; no ou	ions,	13.0
	53					no staining			(7) 210109-55-7mlat
	e							4	52/0109-55-301012
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1.7		<u> </u>							
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						and a start of	inster countr		
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<u>NO'</u>	TES:	<u></u>				<u></u>			
									SOIL BORING LOG
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9 4 - 9	201 - 101	Gartine,					/ / P	SOIL BORING LOG		
	er en ser en Ser en ser en		- m	969 ( 18 Marine				Project Name:	Boring II	D:
Æ		N/I	Α				1			55-400
A	劉 .		nden a	Site Man	سر سلاهم <i>الاس</i>	8	A	Project Location: New Rochelle, New York	Page No.	
Dori	211 C ###################################	ongress a	street,	POTIE	na Maine U	4101		Project No.: 3612112221.06 Client: NYSDEC	Dorn Hal	
Weat	her	6au011.	•	Mal	n sala			Soil Drilled: March Method: Draw Resh	Cosing S	170 1.2.25
Subc	ontra	ctor:	Azte	ch Te	chnologies	5		Protection Level: D	Sampler:	5' Macrosole
Drill	er:	Ro	1					Date Started: 10/22/15 Date Completed: 10/22/15	Sampler	ID/OD: 1.5/1.25
Rig 7	[ype/]	Model:	<b></b>	###	6610	0.4		Logged By: BAS MU Checked By: JPP 12/7/15		
Refe	rence	Elevatio	n:					Water Level: NM Time: NA		
	Samp	le Inforr	natior	1	Moi	nitoring				
Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
0.0										11/1 IV INTERNATIONAL AND
		5.0			0.0			Brownish black poorly grower small	1241	sample at
		0.8						ul gravel (for angular); Worth large		0 5
								grushed ston; moist, dense; no		360109 - 26, 400000
						i		Staining, norder		Q 12:18
										(1210
i										
	S1									
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	1210	5								
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5					Ŷ		;			
									SP	
		3.0			0.0			for recovery poor y grant sort		sample dut
		6.3						moderant brom; trace silt; moist, anse,		5.1
								no odors, no staining		360109-55-400005
										@ 12.12.1
	S2									
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5 Borine			<u> </u>			<b>7</b> .	Industrial Overall - Supplemental RI	1	- 55-400 I
5 orine		استلاس کا س	Τ				Project Location: New Rochelle, New York	Page No	. 2
oring	511 Co	ongress S	treet, Po	rtland Mai	ne 04101		Project No.: 3612112221.06 Client: NYSDEC	0	e a
	g Loc	ation:	MN	হ			Refusal Depth: NA Total Depth: 15.0	Bore Ho	le ID/の L・2 ら
Veath	ner:	6	80	Melon	7	<u> </u>	Soil Drilled: 15.0 Method: Driect Push	Casing S	ize: $\sqrt{4}$
ubco	ntrac	tor;	Aztech	Technolo	gies		Protection Level: D	Sampler	5 Macrocorp
Driller	r: .	(-ei	<u>y</u>	((10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Date Started: 10/23/15 Date Completed: 10/23/15	Sampler	ID/OD: 1.5 12.25
lg T	ype/A	10del:		6610			Logged By: BAS (M) Checked By: JPP 12/1115	-  ·	
eiere S	ampl	e Inform	u; ation		Monitori	10.	water Level: NM 11me: NA	-	
cet bgs)	lumber	tion/ (feet)		lspace		*6	Sample Description and Classification	Group abol	Remarks
5 Depth (	Sample N	Penetra Recovery		PID Heat	Ncaulity			USCS	TOMANAD
		e .) /			2		10.10.3 SAA	30	
		21					brom , puell graded sound of gravel	Sw-sm	Sarple at 12.0 360109-55-
	53						to net; dense, no staining, no oder		400012 @ 12:25
	122								
15									
							EOB at 15.0 ft bgs		
							(JPB)		
20									
OTE	<u>ES:</u>	<b>_</b>	<b>1</b> ,		·				SOIL BORING LOG

i de la constante Constant	an si Silangan Silangan	<b>()</b>						SOIL BORING LOG		
	( () ()	N A	٨				~~¥	Project Name: Industrial Overall - Supplemental RI	Boring II	D: \$5~401
		TAT		16			لمنب	Project Location: New Rochelle, New York	Page No.	. 1
	511 (	Congress	Street,	, Portla	and Maine (	04101		Project No.: 3612112221.06 Client: NYSDEC	of	2
Born	ng Lo ther:	cation:	1	MA	e		=	Refusal Depth: VA Total Depth: 15-0	Bore Hol	e ID(OD) 2.25
Subc	contra	<u>68</u>	Azte	ech Te	chnologie	s		Protection Level: D	Sampler	The Marrie and
Drill	er;	Re	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					Date Started: 10/20/15 Date Completed: 10/20/13-	Sampler	ID/OD: 1.5 / 2.5-5
Rig'	Туре/	Model:		<i>###</i>	6610 C	7(		Logged By: DAS MY Checked By: JPP 12/11/5		
Refe	rence	Elevatio	n:					Water Level: NM Time: NA	. <u> </u>	
	Samp	le Inforr	natio	n .	Mo	nitoring T				
O Depth (feet bgs	Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
		5.01	i deren	Ι	6.0	Í		Bournis's black; poorly graded sond	FILL	Soil Somply
		1.0						upposel , little crushed store,		at 0.4
		(·			1			trace coal fragments; moist; median 2		
								dense; no staring, no oder		560 109-55-
			·							401000
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	S1									· · ·
	@									
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5										
		5.0			6			5=5.1 SAA (shull) (W) Sluff	5.00	soil saysu
		g			1.			5. P-5.9 Poors ground send ul gravel;	SP	at 5.5
		0- (						moderate brown; little large 1" drometer		
								grovel; moist; dense; no staining, no odor		360107 - 55 -
	do.									40,006
	52									@ 12:05
	 ເງ	~								
	1.20	15								· · ·
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NOT	ES:									
										SOIL BODING LOG
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	<u>I</u>	ΝΛ	Δ	(		FC	7	Project Name: Industrial Ove	rall - Supplemental	RI	Boring II	): 55-401	
颞		TAN'T		L	، سال اس		4	Project Location: New Rochelle	, New York		Page No.	2	
-	511 (	Congress S	Street,	Portla	and Maine	04101		Project No.: 3612112221.06	Client: NYSD	EC	of	2	
ori	ng Lo	cation:	<u>۲</u>	INR	, <b></b>		_	Refusal Depth: $MA$	Total Depth:	15.0	Bore Ho	eID/OD/ 2.2	5
ea 1	ther:	<u>680</u>	<u>Arto</u>	1 ele	ahmalania	<del>.</del>	÷	Soil Drilled: 15.0	Method: Direc	t phism	Casing S	ize: MA	
-11	er'	<u>0.01.</u>	AZIC		scilliologie			Date Startech and Las lun-	Date Completed:	D	Sampler.	D/OD 1. EL	54 V cm
α '	Tvne/	Model:	7	60	510	***		Logged By: BAS win	Checked By: \gc	1010-115	Banpici		* >
e fe	rence	Elevatio	m:		······································			Water Level: NM	Time: NA	16/115			
	Samp	le Inforr	natior	1	Mc	nitoring			,			· · · · · ·	
וו (נכנו נוצט)	le Number	etration/ very (feet)			Icadspace ing (ppm)			Sample Descripti	on and Classification	n	Symbol	Remarks	
	Samp	Pen Reco	,		PID H Read						5.		
<u></u>		0.0						Man with home in	lease how .	•••• ۲)	Sw-Sn	Soit same	
		1	.		0.0			considered and	cite the			at in 7	
		3.5						strate E rounded	ararel : more	i dunce i			•
	· ·						1	no storing no	ochar	()		360109-55-	
	1.											401011	
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	511 C	ongress S	treet, Port	land Maine (	4101	Project Location: New Rochelle, New York Project No.: 3612112221.06 Client: NYSDEC	of: 2 Bore Hole ID/OPD )-2 <				
Borin	g Loo	cation:	MNR	<u>}</u>		Refusal Depth: VA Total Depth: 15.0	Bore Hole ID/OD 2-25				
Weath	ner:	<u>66°</u>	Aztech T	rt)	d	Soil Drilled: 15.0 Method: Direct Push	Casing Si	ize: MA			
Drille	r:	Rau		contologic	5	Date Started: 10/00/15 Date Completed: 10/00/16-	Sampler: 5' Macrocover Sampler ID/OD: 1.5 / 2.25				
Rig T	ype/N	Model:	###	# 60:00	τ	Logged By: BAS New Checked By: JPP 12/7/15					
Refer	ence	Elevatio	1:			Water Level: NM Time: NA					
S	ampl	le Inform	ation	Mo	nitoring T						
Oeptin (feet bgs	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description and Classification	USCS Group Symbol	Remarks			
	•	5.0			-	Brownich black; poorly graded Sand of gravel; fittle force gravel; trace coal fragments to crush run;	Fil	5011 500 mg 4 a 1 10 360109-55-4000			
	S1					noist, und dense: no staining, no odor		@ 11:35			
	@ 11 3	5									
5							5 - 11				
. :	82	5.9 1.3				5-5: M State (possible sluff) S.1 - 6.8 modurate brown; pourly Graded Soud of gravel; little to: som fru subsonned gravel; moist, dence, no staining, no oder	50	50il saple at 6.0 360109-55-4020 (0 11:40			
	@ 11	10	-								
10	ľ										
NOT								L <u></u>			

	n stall <sup>en</sup> ste neg stell stell ne ste			ц. С <sub>ве</sub> на				SOIL BORING LOG	Doule - T	
		N/I	Ά	(		Fr		Industrial Overall - Supplemental RI		- 55-402
	劉 .				ب سالک اس			Project Location: New Rochelle, New York	Page No.	2 .
ori	511 C	congress &	street, I	Portla:	nd Maine 0	4101		Project No.: 3612112221.06 Client: NYSDEC	Of Deve Het	
Jea	ther:	canon.	160	MA	lower			Soil Drilled: 15.0 Method: Disant Berl	Casing S	
ubc	ibcontractor: Aztech Technologies riller: Roy ig Type/Model: 6610							Protection Level: D	Sampler:	5' Macrocove
rill								Date Started: 10/22/15 Date Completed: 10/22/15	Sampler	ID/OD: 1.5 1 2.25
ig '								Logged By: BAS MU Checked By: JPP 12/7/15		
efe	ference Elevation:							Water Level: NM Time: NA		and the second
	Samp	le Inforr	nation		Moi	utoring				
5 Depth (feet bgs	Sample Number	Penetration/ Recovery (feet)		-	PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
							<u> </u>		10	Louil Sample
<b></b>		4.1						10-11.4 SAA 11.4-14.1 grayish brown; well graded	31- 3~-5101	at 11-2
	555							sounded growel; trace organics; met; dense; no odors, no staining		@ 11:45
	14	5		•						
					·					
15										
								EOB at 15.0 ft by		
						,		JPP		· · ·
20										
01	<u>'ES:</u>									SOIL BORING LOG

	MAG	. ال	FC	Project Nar	ne: Industrial O	verall - Supplemental RI		Boring ID	): 35-403			
	TATT V			Project Loc	ation: New Roche	ile, New York		Page No.	<u> </u>			
511 Soring L	congress Street, Port	iand Maine 0	4101	Project No.	: 3012112221.06	Client: NYSDEC		Bore Hole ID/OD				
Weather:	. 65° Mel			Soil Drilled	1: 15.0	Method: Disco	Push.	Casing Size: $\mathcal{N}\mathcal{A}$				
ubcontr	actor: Aztech T	echnologie	s ·		Protection Level: D			Sampler: 5' Macro core				
Driller:	Roy			Date Starte	d: 10/00/15	Date Completed:	0122/15	Sampler J	D/OD: 1.512-25			
tig Type	Model: ###	# 6660	DT	Logged By:	BAS NW	Checked By: JPP	12/7/15		· · · · · · · · · · · · · · · · · · ·			
Sam	ple Information	Mo	nitoring	water Leve	a. <b>IN IV</b>	I me: NA	<b>,</b>	<b> </b>				
C Depth (feet bgs)	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)			Sample Descrip	tion and Classification		USCS Group Symbol	Remarks			
	5.0/ 2-0	0.0		groupsh proonly crushu moist no	black to graded ce r con store nuline storing	brownish black ; ind w/ gravel : + coal fra danse, no c	; linth grants; odu-	Fill	souple at 1.6 ff fys 360709-55-40300 @ 11110			
	¢											
5					· · · · · · · · · · · · · · · · · · ·							
	5.0/	0.0		moduan Sand Fm	· brom ; w/ gravel rounded gra	poorly grow	ted frace	sp	Sarple as 5.6			
				no	Stainny	no odor .	· ·		360109-55-403006 @ 11:15			
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10					<u>.</u>		······································	2 - - - - - - - - - - - - - - - - - - -	х Х			
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an de ser						SOIL BORING LOG	Donin - T			
M	ЛЛ	Δ	$\cap$	Fr		Industrial Overall - Supplemental RI		65-403		
	TAT				1	Project Location: New Rochelle, New York	Page No.	2		
511	Congress S	Street, Po	rtland Maine (	04101		Project No.: 3612112221.06 Client: NYSDEC	of	<u>} }</u>		
oring L	ocation:	M	NR	·		Refusal Depth: NA Total Depth: 15-0	Bore Hol	e ID/OD 7.15		
eather:	65	2 Mel	over			Soil Drilled: 15.0 Method: Direct Puch	Casing S	ize: NA		
bcontr	actor:	Aztech	Technologie	S		Protection Level: D	Sampler:	5' Murocore		
a Truno	Madal	<u>m</u>	6610			Date Started: 10/74/15 Date Completed: 10/12/15	Sampler ID/OD: 1.5 12.2			
ference	- Elevetic		0010			Logged By: BAS CO Checked By: JPP 12/115				
Sam	ple Inforr	nation	Mo	nitoring		Water Level, NM 11mic, NA		ing a second		
e Number	stration/ ery (feet)		(cadspace ng (ppm)			Sample Description and Classification	CS Group Symbol	Remarks		
Sampl	Pene Recov		PID H Readi	 			ns			
	5.0		0.0			10-10.6 SAA	SP	. · · .		
						10:6-13.2 grayish Goin; well graded	su-sm	Soil souple		
						Soud w/ silt; grace of rounded gravel	1	a- 47 m		
53						+ organics, met dense, no starining				
Ø						nu odur		MS/MD		
								Taken		
110								al menter i for una		
-	1		•					360109-25-903		
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MACTEC	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55 - May
	Project Location: New Rochelle, New York	Page No.
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of: 2
Veather: 65 <sup>-2</sup> MC In and	Soil Drilled: 15.10 Method: Date: 0.1	Casing Size:
subcontractor: Aztech Technologies	Protection Level: D	Sampler: Macroco
Friller: Ray	Date Started: 10/02/15 Date Completed: 10/02/15	Sampler ID/OD: 1.5 12.2 5
Lig Type/Model: ### 661007 []	Logged By: BAS Mu Checked By: JPP 12/1/15	
Leference Elevation:	Water Level: NM Time: NA	
Sample Information Monitoring	3 ····	
G Depth (feet bg: Sample Number Penetration/ Recovery (feet) Reading (ppm)	Sample Description and Classification	Remarks SUS
- <u>5.0</u> 4.3	0-07 (nisher run 0.7-1.3 bromish black; poorly gradid Sond w/ grwel; likke to trace coal fragments; there glass; dry to moist; red. dense; no storining; no Odors	Stor 50:1 somple talen ar 0,9 FELL 360109-55-404000 C 10:45
S1 @ WY5		
5	Milan have and and and	« ) Soil sample
	ul gravel; little to trace ( gravel (subrounded; moist; dense; no staining no odors	31 at 6.3 360109-55-404001 @ 10:50
10		
OTES:		SOIL BORING LOG

.

	Project Location: N	lew Rochelle, New York		Page No.	2
511 Congress Street, Portland Maine	04101 Project No.: 3612112	221.06 Client: NYSDE(	2	of:	2
Boring Location: MNR	Refusal Depth: N	4 Total Depth: 15	<u>ب</u> ې .	Bore Hole II	D/00 2.25
Subcontractor: Aztech Technologi	Soil Drilled: 15	.U Method: Direct	r Push	Casing Size	NA
Driller O	Date Started:	Protection Level:	D	Sampler: 2	Macrocone
Rig Type/Model: 6610 DT	Logged Ry: F	$\frac{1}{2}$ $\frac{1}$	10 Jalie	Sampler ID/	00.1.5 (2-25
Reference Elevation:	Water Level: NM	Time: NA	141115		
Sample Information M	onitoring	<u> </u>			
<ul> <li>Depth (feet bgs)</li> <li>Sample Number</li> <li>Penetration/</li> <li>Recovery (feet)</li> <li>PID Headspace</li> <li>PID Headspace</li> </ul>	Sam	ple Description and Classification		USCS Group Symbol	Remarks
53 50 0-0 53	10-11.9 11.9-13.5 Sond w/ torgonice No staine	SAA gragesh beam; vel silt; trace F romand s; vet to moist; ne y i no odors	l gradieł grane( d. druse;	5ρ  su5M	Sarple at 10.5 360109-55- 404011 @10:55
— e 1055					
15					
			/		•
		(JPP)			
<u>NOTES:</u>					SOIL BORING LC

Alla	ΝЛ	$\wedge$			Project Name: Industrial Overall - Supplemental RI	Boring II	D: SS = Yos C
	IVL	11	. ال ب	EU	Project Location: New Rochelle, New York	Page No.	<u> </u>
511 (	Congress Stre	et, Portla	and Maine 0	94101	Project No.: 3612112221.06 Client: NYSDEC	of	2
Boring Lo	ocation:	Μ	INR		Refusal Depth: 12.5 Total Depth: 12.5	Bore Ho	e ID/OD): 2-25
Veather:	630	M	clondy.		Soil Drilled: 12.5 Method: Direch Push	Casing S	ize: NA
ubcontra	actor: A	ztech Te	echnologie	S	Protection Level: D	Sampler:	5' Macrocose
ig Type	<u>Kay</u> /Model:	###	644	.۳	Logged By: 1345 WW Checked By 100 10 10 10	Sampler	<u> </u>
eference	e Elevation:		1000	<u>,                                     </u>	Water Level: NM Time: NA		
Sam	ple Informa	tion	Mo	nitoring			·
h (feet bgs) e Number	stration/ ery (feet)		cadspace ug (ppm)		Sample Description and Classification	CS Group Jymbol	Remarks
Sample	Penc Recov		PID H Readi			ns,	
	5.0		0-0		Brownish black; pourly graded sand of gravel; lintle to some fine ground;	(SP)	soil sample ent 1.3
	1.9	,			Linkle coal fragments; Moist to ong; dense; no stationy no color		360109-55-405000 @10:25
		5					
@	5						
5			of				
	5.0		0.0	· · ·	5-5-3 SIAA 5-3 3.5 Moderan brow ; poorly graded	SP	soit souph
	3.5				Soud al grouch; little for gravel (subroadul); trace a rounded gravel;		360109- 55-405008 @10:30
S2 @	30				No staining, no odor		
						1. 10 A. A	
10							
OTES:							SOIL BORING LOG
	· · · · · ·			n de la composition d		a a state a	

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- Gl ti	ΊλΛΛ	OTEO	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55-405
	TATA	ULEU	Project Location: New Rochelle, New York	Page No. 2
511	Congress Street, Po	rtland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of: 2
Boring L	ocation: MM	R	Refusal Depth: 12.5 Total Depth: 15.5	Bore Hole ID OD 2.25
Weather:	63° A	1 Clandy	Soil Drilled: 12.5 Method: Direct Push	Casing Size: NA
Subcontr	ractor: Aztech	Technologies	Protection Level: D	Sampler: 5' Monuracan
Driller:	Rom		Date Started: 10/22/15 Date Completed: 10/22/15	Sampler ID/OD: 1.5 (2.29
Rig Type	e/Model:	6610 107	Logged By: BAS-M Checked By: JPP 127115	
Referenc	e Elevation:		Water Level: NM Time: NA	
Sam	ple Information	Monitoring		
5 Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description and Classification	Remarks SSS N
	51	0.0	10-11.3 SAA 11.3-12.5 grayish brow; well graded	SP soil saple sw-sn at 11.5
57  103	3		Scool W/ Silt; little to trace f forman gravel, wet; wedden dense; no staining, no odor	Setward zon 360109-55-4050 (@ 10:35
15	y		7 245 05×	
			Artusul at 18.5 ft 675 EOB	
·				
			AAL	
20				
NOTES:	<u> </u>	<u> </u>	1	SOIL BORING I

MACTEC	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55-406		
IVIALILU	Project Location: New Rochelle, New York	Page No. 1		
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of:		
Boring Location: MNR	Refusal Depth: NA Total Depth: 15-0	Bore Hole ID/OD? 2.25		
Veather: 56 M (love M)	Soil Drilled: 15-0 Method: Direct Puish	Casing Size: V4		
Driller: Q	Date Started: 16/12/100 Date Completed: 10/12/100	Sampler: 5 Macrocore		
Rig Type/Model: ### 6400 DT	Logged By: BAS AMU Checked By: 120 12 12 14	Sampler 11/01. 1.3 / 3.23		
Reference Elevation:	Water Level: NM Time: NA			
Sample Information Monitoring				
Depth (fect bgs) Sample Number Penetration/ Recovery (feet) PID Headspace Reading (ppm)	Sample Description and Classification	Remarks SCO SCO SCO SCO SCO SCO SCO SCO SCO SCO		
).0 01 1 0.0 5.0/ 0.0 1.22 S1 @	Poor recovery : brownish black; poorly graded Sond ml gravel; Fill: Some frac angular gravel: trace coal fragments; dry to moist, dense : no staining, no odor	Fill Sample teten (SP) at 0.8 ft Sandy lense 360109-55406000 (209:55		
5.0 5.0 0.0 2.0 10550 5.0 0.0 0.0 *	Muducane brown to light yellowish brown " poorly growed sound uf grower : SP: som to within the subrowed grower i muist; dense; no steating; no odor	SP Saple takey at 5.3 ft 360109-55-406006 7 (210:00		
- S-0/ - S-0/ - S2 @ - 1015 - 101	10-11-1 SAA, becoming left of 10.5 11.1-12.7 graying brown to hyper brown; well graded soud of silt; some silt; trace clay; moise to wet; dense; no Staining, no odor toB at 15.0 ff G1,	5 P Sorple toking 5 P Sorple toking 5 m at 10.6 5 out. Sendy 20 m 360109-55-406011 (2 10:10		
OTES:		SOIL BORING LOG		

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1 1919 - 1917 - 1917 - 19	teran di amerika sera dare da Martin	a and a straight and a straight for		
			SOIL BORING LOG	
All	ΝΛΛ	TTC	Project Name: Industrial Overall - Supplemental RI Borir	19 ID:
	IVIA	JIEC	Project Location: New Rochelle, New York Page	No. (2)2-1
511 (	Congress Street, Portl	and Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of:
Boring Lo	ocation: MN1	<i>ک</i>	Refusal Depth: NA Total Depth: 15.0 Bore	Hole ID(OD) 2.25
Veather:	560 ;	M cloudy	Soil Drilled: 15.0 Method: Direct Push Casir	ng Size: NA
ubcontra	actor: Aztech T	echnologies	Protection Level: D Samp	oler: 5' Macrocom
Driller:	Ray 6	610	Date Started: 10/22/15 Date Completed: 10/22/15 Samp	oler ID/OD: 1.5/ 3.2.5
eference	e Elevation	010	Water Level NM Time: NA	
Sam	ple Information	Monitoring		
<ul><li>本 Depth (feet bgs)</li><li>Sample Number</li></ul>	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description and Classification	Remarks
	5.0	0 0	0-0.8 grayish brown; poorly graded Sand wil gravel (Fill); Some to little Frac angular gravel; trace site; aence; hoist; no stating no other 6.8 - 1.7 brownish black; powrl) graded Soul al gravel (Fill); Some coal fragments; luttle fru gravel; trace site; moist to dry; ned dense; no stating, no other 1.7-2.0 moderate brow; pourly graded Soul; SP; little f gravel; moist; dense; no stating, no oder	1 sort sonpu at 1.0 360109-55-407000 @09.25
45	5.0	C. U	Moduce brow ; poorly graded scool; SP; little fric subromoded to founded gravel, SP noist; dense; NO staining; NO odor	Soil Souple collected out 6.0
	35			Take field dyp 360109-55- 40700613 C09:35
	5.0		10-11.7 SAA, becoming net at 11.1 12.7 -12.6 biomish gray to light gray; well graded said and silt. Some silt. trace f grouel; moist to net; sofit; no' Stainty, no ador	Soil souph collected at 11.7 @ 09:45 top of fires
NOTES:			EOB at 15.0 ft 655	دان کور اور اور اور اور اور اور اور اور اور ا

			, 	i . Kana ast Biblit	A MARK MARK				
4	7	i na si	net Si Si Si				SOIL BORING LOG		
-	161-	Ň /T	A	-	ארדי	4	Project Name: Industrial Overall - Supplemental RI	Boring I	D:
	Ø	IVI.			E		Project Location: New Rochelle New York	Page No	3)- (00
5		Congress St	reet. Po	rtland Main	e 04101		Project No : 3612112221 06 a Client: NVSDEC	Page No	. <b>L</b>
oring	g Lo	cation:	Maro	Noct	<u>ц</u>		Refusal Denth: MA Total Denth: 15 (2)	Dora Uo	
/eath	er:	<u><u> </u></u>	U A	A Clum	n/m -		Soil Drilled: 15 (2) Method: Drive Aug 1	Bore Ho	
uhco	ntra	ctor 22	Aztech	Technolos	ies.		Drotaction Level D	Casing 2	
riller		0	<u>Lintoon</u>				Data Started: tayle a life Data Completed. ID	Sampler	S' Macrocore
σΤτ	vne/N	Model	<b>)</b>	44 6630	21		Langed By: Date Completed: (D/25/13)	Sampler	ID/OD: 1.5/1-35-
-fere	ence	Flevation		TH 0010			Water Lavel: ALLA		
S	amnl	le Inform	ation	N.	Ionitoring		Water Lever, NM Time: NA		
5	<u>amp</u>						· ·		
So mar marine C	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)	<pre>x 4 5 1</pre>		Sample Description and Classification	USCS Group Symbol	Remarks
				0-0			Dusky brown to moderate brown, pourly " graded send ? SP noist some	sp	collected soil saple
		5.9	1				fine gravel ; laste to stace coal fragments; no odor : modsun dense	-	360/09-55-408000 (saly zon)
	S1 @	2							@08:50
.  0 	,8 <sup>7</sup>								
-								÷ .	
					-	÷ 			
.		5.0		0.0			5.0-5.8 SPA	<i>د</i> ٩	collected sort
		5.5					5.8-7.5 Moderate brown; poorly graded (emf) sand; moist; trace f	-76	360109-55-408007
	52						gravel; dense; no odor; no staining	:	@ 08:55
0	@ 85 4	, · ·   ·							
	1	5.0		0.0			10-11.5 SAA	SP	collected soil scripte at
5	3	3.2					Soul moist: som sitt: latte organizes soft: no alos no staining		@ 09:15
	115	-					1) &= 15.2 light organizish brown; well graded of sold, moist; some site, trace rounded 1" around to no coder the statistic soft		360109-55-4080
<u>re</u> s	<u>S:</u>		••••••••••••••••••••••••••••••••••••••			Εø	B at 15.0 ft by s		, ,
				i.	15iten II		NC w screen 5-16ft to take grad	weiter	SOIL BORING LOC

3. A 1940

a A	SDRA MAL	TN /T	Γ. Λ		<b></b>			Project Name: Industrial Overall - Supplemental RI	Boring I	
(1938) (1938)		IVI			<u>ا ا ر</u>	El		Project Location: New Rochelle, New York	Page No	. 1
	511 C	Congress S	Street, I	ortla	nd Maine 0	4101		Project No.: 3612112221.06, Client: NYSDEC	ot	f: )
oriı	ıg Lo	cation: )	NSid	E 51	TE BLU	NUN	U	Refusal Depth: 7.8' Total Depth: 7.8'	Bore Ho	le ID(D) 2.25
'eat	her:	65	5	sur	M			Soil Drilled: 7.8 Method: DIRECT Phrt	Casing S	size: NA
ibc	ontra	ctor:	Aztec	h Teo	hnólogie	s		Protection Level: D	Sampler	S'MACROCURE
	Type/	<u> 160 B</u> Model:	UA	<u>MN</u> ###	IDN IJAND I	17		Date Started: 001 11/2015 Date Completed: 001 17,2015	Sampler	ID/OD: 1.5 2.25
g fei	ence	Elevatic	 n'	###	uuu	//	ו	Water Level: NM Time: NO		
1	Samp	le Inforr	nation		Mo	nitoring		And Sover Win And And		
(can nor) md	ple Number	metration/ overy (feet)			Headspace ding (ppm)			Sample Description and Classification	ISCS Group Symbol	Remarks
97 .0	Sam	Pe			PID Rea		1			
					10.1			0-0.4, CONTRETE & ANGAECATE (CYN DERS / COAL/ASH & STAN;	<b>XX</b>	e STEPLYLDINS & FLOOR
	•							0.4-5: LTBROWN TO OVINE BROWN F/M SAND, SOME/FRW WRAVEL (FINE) CONSITING OF ALMARTZITE/BIOTT	E	
	S1		-					" THE WEATHERED PARENT BR (SI-16T), POOLY WAADED, MOIST NOKO MALLINE	Sp	Collected soil stapp
	@ ]] ս						Ð			360109-45500005-7
	17,	5.0								
		2.9								
5				L						
		-			6 18			5-5.5: OHIE BROWN F(MSAND, POPPLY MRADED, WOIST, SA, VERY FAINT ONDE	Sp	
					1.5			55-7 Unstruised Brown we said and and	1	1
	S2	2.8			30,9			SP, VELY STRANT ODDR, WOIST, DENSE 778 7-7.8: BLACK TO HDEY WEATTHERED ON (NO	sp.	COLLECTED SOIL Strople Collector 6,5-4,8 'Dar- (0958224ED CONT.)
	@ 144	50			88.5		(75)	BOULDER), NERY ITRONU 6002;		360109-45500007 00/450
_					155		Ð	MACKOCOVE DEFUSAL 10 7,8 (BUL)	DEATLIE DE	OF WEATHERED BRE
										1 3100109-4500000 1500
_		• •								
0										
OT	ES:	MONIT	DRIN	h	BREAT	HINK	20N	E WHILE DALLING INSIDE (VENTING EXHAMT OF	utside	VIA PAPINA).;
	'L C	$\rho$ : $\gamma$	21.2	•	Le N	25:	r 7			SOIL BORING LOG

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		SOIL BORIN	GLOG			1
MARAC	TEC	Project Name:	Very 11 Supplemental AI	Boring ID	): (5-503	i
	JIEU	Project Location: New Roc	helle, M	Page No.	1	
511 Congress Street, Portla	nd Maine 04101	Project No .: 3617112221.66	Client: USACE NYSDEC	of		
Boring Location: Inside	Building Inc	Refusal Depth: NA	Total Depth: L. L	Bore Hole	e ID/OD:	
Weather: 55° M clow	1	Soil Drilled: 6.6	Method: Hand geoprobe	Casing Si	ze:	
Subcontractor: NA			Protection Level: D	Sampler:	2' Macrocore	
Driller: MA		Date Started: 10/36/15	Date Completed: wise his	Sampler I	(D/OD:	ĺ
Rig Type/Model: (touch	geoprobe	Logged By: NW	Checked By:		م مربق می از این	
Sample Information	Monitoring	Water Level, NM		 		
<ul> <li>Depth (feet bgs)</li> <li>Sample Number</li> <li>Penetration/</li> <li>Recovery (feet)</li> </ul>	NA frp (en)	Sample Descrip	tion and Classification	USCS Group Symbol	Remarks	
		0-0.4 Constelle sho		$\times$	、 、	
2.6 1		0.4-1.8 No sample 1.8-3.6 No Sample	, fit cleaned will post hele digger	59		
		Dark yellowish brom trace to little fm trace silt; noist no odor	; poorb gradud Sand; subranded gravel; ; dense ; no sitaining	SP.	501 500pt 01- 3. ( ft ( f703) 360109-05-503003 Q 17:03	
9.6 2 3.0 1.6 1730 6.6 1730 6.6 1730 1730 1730 1730 1730 1730 1730 1730	<i>6.0</i>	S.4.4 EOB art	6.6 Ft by 5	S₽	(° 17:03 soiil sample a+ 56 6.2 ft br 7 360109- CS- 503006 (° 17:20	
					SOIL BORING LOG	Υ.

WELE/PIE/	ZOMETER CON FLUSHM	STRUCTION OUNT	DIAGRAM	LOCATION ID: $M \mathcal{M}$ .	- 50/
Project Name:	Industrial Overall - Su	pplemental RI		Date Started: 0011BER 17,215	Date Completed: 0(TOPADIAS, U
Project Location:	New Rochelle, New Yo	rk	A	Logged By: B, SH	AN
Project Number:	3612112221	Task Numbe	erV(L.U]	Checked By:PP	Checked Date: 12/7/16
Subcontractor:	Aztech Technologies	Drilling Met	hod: Direct Push	I <u></u>	
Development Method:	PARASTAUTIU P	Mp Developmen	t Date: 0CT . 17.2015	Measuring Po	int Information
Bucking Posts/Ballards:	NA	. <u></u>			
Notes:				Measuring Point (MP) Type	Top Of Riser
		•		MP Elevation (ft):	
Item	Depth BMP (ft)	Elevation (ft)		Descr	iption
Surface Casing Elevation	n ~ 6	76.44	Slo	pe Away	
Ground Surface Elevatio		76.44 70		-	P. MUR +TZ=
Riser Pipe (Top)	~0.1 @	~76.34		Surface Sear Type.	US NOR-ETC
					<u>N n</u>
				Stickup Casing Diameter:	<u>NA</u>
			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Backfill/Grout Type:	NA
				Riser Pipe Type:	NА
				Riser Pipe ID:	NA
		de	▲	Borehole Diameter:	2.5-INCH
Top of Well Seal		714			
Top of Sand Pack	- 0.5 pus	~75.94		Type of Seal:	NH
		NZCAU			
Top of Screen	0.5 325			Screen Type:	SLOTTED PVR
				Screen ID:	H D. UIO 1 2 2-2-1
				Screen Slot Size:	0.010 " + 2.8"
				Screen Length:	2,81
	• .			Filter/Sand Pack	HON
Base of Screen	~2.8' Bly	~ 73.64		rype.	AC() 13
End Cap	~ 2.8' pur	~73.64	• • • • • • • • • • • • • • • • • • •	Sump:	
Drilled Depth	2,81	7 3,64		Fallback/Backfill:	NA
Bottom of Exploration	2 8 BALA	73.64			· · · · ·
Bedrock Surface	~ 2.8' Bly	~ 73.64	$\neg$		NOT TO SCALE
MAC 511 Commerce Stream Date	TIEC		WELL/PIEZO	METER CONSTRUCTION D	IAGRAM - FLUSHMOUNT
U					

WELL/PIR	ZOMETER CONSTR FLUS <u>HMOUN</u>	UCTION DIAGRAM	IOCATION ID:	-501
Project Name:	Industrial Overall - Supplem	ental RI	Date Started: OCT BLER 17 2	Date Completed: MTDpan 18
Project Location:	New Rochelle, New York	· · · · · · · · · · · · · · · · · · ·	Logged By: D. C	land
Project Number:	3612112221	Task Number 04.01	Checked By: $(\gamma)$	Checked Date: /////
Subcontractor:	Aztech Technologies	Drilling Method: Direct-Push	- Marlautrie d. A	- <u>man</u>
Development Method:	PARA- TATATU DIMO	Development Dates	Measuring F	Point Information
Bucking Posts/Ballards	······································	- Marine Construction	A	
Notes:	<u></u>		Measuring Point (MP) Typ	e: Top Of Riser
			- MP Elevation (ft):	<b></b>
			-	·····
Item	Depth BMP (ft) Eleva	tion (ft)	Desc	ription
Surface Casing Elevation	on		Slope Away	
Ground Surface Elevat	ioı	- MILL		
			Surface Seal Type:	CONURETE
Riser Pipe (Top)	معموم می بادید. این این این این این این این این این این		Lock Identification	NK
			Stickup Casing Diameter:	· NA
			- Backfill/Grout Type:	NA
			<ul> <li>Riser Pipe Type:</li> </ul>	NA
			Riser Pipe ID:	NA
			- Borcholo Diamotory	7.5-IN(A)
Top of Well Seal	NA.		Borenoie Diameter.	215 1101
	or but	·	- Type of Seal:	NA
Top of Sand Pack	~ 0.5 <i>FW</i>			
	in the			
Top of Screen			- Screen Type:	SLOTTED PVC
				1/4 Dural 2/0
			Screen ID:	0.010 7.2-21
			Screen Slot Size:	0.010 42.8
			Screen Length:	2,81
	•		<ul> <li>Filter/Sand Pack</li> </ul>	
	2 81 24		Туре:	#10N
Base of Screen	~ 218 Bly			
End Cap	~ 2.8' pup		– Sump:	
Drilled Depth	2,81		- Fallback/Backfill:	NA.
Bottom of Exploration	2 8' BUS			
Bedrock Surface	~ T'0 008			NOT TO SCALE
ИЛТАЛАА	OTTO			
	UIEU	WELL/PIEZ	ZOMETER CONSTRUCTION	DIAGRAM - FLUSHMOUNI
511 Congress Street, P	ortland Maine 04101			

ę.

Project Name:	Industrial Overall - Si	upplemental RI		Date Started:	OUT. 18,2015	Date Completed: DCT. 18,201
Project Location:	New Rochelle, New Ye	ork		Logged By:	BSHA	λ
Project Number:	3612112221	Task Numbe	r 06:01	Checked By:	JPP	Checked Date: 12/7/15
ubcontractor:	Aztech Technologies	Drilling Met	hod: Direct Push			
Development Method:	Pun pa surve	Developmen	t Date: 167.18,2015		Measuring Po	oint Information
Bucking Posts/Ballards:	NOME					
Jotes:		· · · · · · · · · · · · · · · · · · ·		Measuring Po	int (MP) Type	Top Of Riser
<u>.</u>	·	<u></u>		MP Elevation	(ft):	
Item	Depth BMP (ft)	Elevation (ft)			Desci	iption
urface Casing Elevatio	n Q 💯	76.49	. SI	ope Away		
Fround Surface Elevation		76.49 70				1
tiser Pipe (Top)	~ OIL Bus	76.39 /-		Surface Seal T	ype:	CONCRETE
				└ Lock Identifica	ation	NUNE
				Stickup Casing	g Diameter:	6-INCH
				Backfill/Grout	Туре:	NONE
			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Riser Pipe Typ	e:	The - SCH 40
				Riser Pipe ID:		1-1NCH)
on of Well Seal	0.5' BWS	75.99		Borehole Diam	ieter:	27/8-11/4
op or non bout	1-1			Type of Seal:		BENISTAL
op of Sand Pack	1.5 84)	74,99				
on of Screen	~ 4,5 RM	N71.99				
op of Bereen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Screen Type:		SLOTTED PR
				Screen ID:		I-INUA
				Screen Slot Siz	e:	0.010"
				Screen Length:		101
				-		
· · ·				Filter/Sand Pac	k	#/ (Abintana)
ase of Screen	~14.5 BUS	~61.99:		1 ype.		QUMATE.
nd Cap	~14.6 BUS	~ 61.89		Sump: 🦯 I	2.21	- 11 / 60
rilled Depth	18.2° AG	58.29	<b>—</b>	Fallback/Backt	ñ11:	NATTIE
ottom of Exploration	18.2' BM	58,29				(MEATHERED BR
edrock Surface	1481 11	6119				
MUUN DUITAUG	110 17 05	W1.01				NUT TO SCALE
MAC	CTEC		WELL/DIEZC	ΜΈΤΈΡ ΓΟΝΟ	ΤΡΗΟΤΙΟΝ Β	ACRAM - ET USTMOTINT

Project Name:	Industrial Overall - Sup	plemental RI		Date Started: NT. 18.70	S Date Completed: DCT.
Project Location:	New Rochelle, New Yorl	ζ		Logged By: BST	ful
Project Number:	3612112221	Task Number 00	10	Checked By:	Checked Date: 11 3
Subcontractor:	Aztech Technologies	Drilling Method: D	irect Push	or no el	which date yet.
Development Method:	Fun pa surve	Development Date:	Ut. 18,2015	Measuring	Point Information
Bucking Posts/Ballards	NOME		· · · · · · · · · · · · · · · · · · ·		the second
Notes:				Measuring Point (MP) Typ	e: Top Of Riser
				MP Elevation (ft):	·
Item	Depth BMP (ft) F	levation (ft)		Des	cription
Surface Casing Elevation	on		_ Slo	pe Away	
Ground Surface Elevati	01	MIL	a de la companya de la compan	_	
<b></b>	n n l ha		╸╡┠╲╲	Surface Seal Type:	CONCRETE
Riser Pipe (Top)	~ U [ MW)			Lock Identification	LALA
					NUNE
				Stickup Casing Diameter:	6-INCH
			-	Backfill/Grout Type:	NONE
			<b>↓</b>	Riser Pipe Type:	The -sch
				Riser Pipe ID:	1-1NCH)
Top of Well Seal	0.5' BWS		<b>—</b>	Borehole Diameter:	27/8-1/24/
1				Trans - 601	Phylon
Top of Sand Pack	1.5' 824			Type of Sear:	DEN STAL
	1				
Top of Screen	~ 4.5 MM			Ú	Cratter Day 6
				Screen Type:	SUTH B PTC S
				Screen ID:	1-INUA
				Screen Slot Size:	01010"
					1.0/
				Screen Length:	10'
				Filter/Sand Pack	that I AM
Base of Screen	VILLS MAN			Туре:	++1 110/1stan
	14 1 In			,	WARTZ
End Cap	DUS			Sump: $\sim 0.2^{l}$	
Drilled Depth	18.2' 14		·····	Fallback/Backfill:	NATTIE
Bottom of Exploration	18.2' Bhs				(MENTHERED BR
Bedrock Surface	14.8' pres				NOT TO
<i>Ш</i> л <i>к</i> л					
	JIEC	•	WELL/PIEZO	METER CONSTRUCTION	DIAGRAM - FLUSHM

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WELL/PIE	ZOMETER CON	STRUCTION DIAGRAM	LOCATION ID:	(,
	FLUSHM	OUNT	VUU	V - 50 j
Project Name:	Industrial Overall - Su	ipplemental RI	Date Started: $\underline{00T, 10, 10}$	The Completed Der. 21, 2015
Project Location:	New Rochelle, New Yo		Logged By:	staw
Project Number:	3612112221	Task Number 06.0	Checked By:	Checked Date: 11/3/15
Subcontractor:	Aztech Technologies	Drilling Method: Direct Push	No elvurtu	meletryet.
Development Method;	OVER Plomp \$ 5	UPUE Development Date:	— Measuring	Point Information
Bucking Posts/Ballards:	NONE			
Notes:			— Measuring Point (MP) Ty	pe: Top Of Riser
	· · · · · · · · · · · · · · · · · · ·		MP Elevation (ft):	
Item	Depth BMP (ft)	Elevation (ft)	De	scription
Surface Casing Elevation	)n		Slope Away	
Ground Surface Elevati	01		Surface Seal Type:	STITE DOLAD RAY / ICHKINETT
Riser Pipe (Top)			Lock Identification	JANE
		[1] [] [] [] [] [] [] [] [] [] [] [] [] []		<u>NUNE</u>
			Stickup Casing Diameter:	8-1N4-1
			Backfill/Grout Type:	NONE
			Riser Pipe Type:	SZH 40 PVC
			Riser Pipe ID:	1-1NCH
Top of Well Seal	~ 1.5 Blog		Borehole Diameter:	4-1N 41 x 215-1NCL
	IG NI PLA	•	— Type of Seal:	HOLEPHUA
Top of Sand Pack				(DENTIMITE)
Top of Screen	21.0 00			STATES DW
			- Screen Type:	Storres PVC
			Screen ID:	1-11124
			Screen Slot Size:	0.010 "
			Screen Length:	~5'
<b>D</b> 00	a da al pt		Туре:	##1 INAUSTRIAL
Base of Screen	~20:0 013			QUAPTZ
End Cap	~ Zu, 3' Bly		— Sump:	NA
Drilled Depth	~ 24:5 My		Fallback/Backfill:	~ 0.1 <sup>1</sup>
Bottom of Exploration	~ 24.5' My			
Bedrock Surface	-15,5' Mas	N		NOT TO SCALE
	TTC			
511 Congress Street, Po	DITIAND Maine 04101	WELL/PIE	ZOMETER CONSTRUCTION	I DIAGRAM - FLUSHMOUNT

**.** -

				PROJECT NAME	L DEVE	LOPMENT	RECORD	LOCATI	DI N		PAGE
2	MA	ACT]	EC	PROJECT NAME	Industria	l Overall - Suppl	lemental RI	M	w-501		
	TATT			PROJECT NUMBER		3612112221		STARTT	1625		10/19/05-
5	il 1 Congress St	eet, Portland Maine 0	4101	Nell Installatio	N DATE V	VELL DEVELOPN	lls	END TIM	<u>    1649</u>		10/19/15
WELL	DIAMETER ()	NCHES)	× 1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	OTH	ER		
CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	Потн	ER		<u> </u>
MEASI	UREMENT PO	INT (MP)	TOP OF	RISER (ŤOR)	TOP	OF CASING (TOC)	)	ОТН	IER		
INITIA DEPTI	L WELL I (BMP)	2.34	FINAL W FT DEPTH (	VELL BMP)	.35 ft	SCREEN LENGTH	2.	.34 ft	PRO STIC	T. CASING CKUP (AGS)	MA FT
INITIA ' (BMP)	L DTW	1.13	FT REMOV	NT ED	9.01 FT	SCREENED INTERVAL (I	вмр) О	то ).З	TOC DIF	TOR FERENCE	FT
WATE COLU	R MN	1.21	FT DEVELO	TER DP. (BMP)	-13 FT	PUMPING DEPTH (BMP	" J	.0 FT	PID Ami	BIENT AIR	3.6 PPM
(initial) CALC GAL/V	well depth - initi ULATED /OL	al depth to water)	FINAL F	(BMP)	13 ft	APPROXIMA RECHARGE	TE	FT/MIN	PID MO	WELL UTH	2.4 <sub>PPM</sub>
(column TOTA	n X well diamet L VOL.	er squared X 0.041)	FINAL F	RECOVERY	0.01 MIN	FLUIDS LOS		GAI	ENI	OF WELL	Ϋ́Ν
(mL pe	r minute X total	minutes X 0.000?6 g	al/mL)		, with	DUNING DRI			SAN	IPLE TAKEN	?
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP: (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
1629	1.13	300	23-42	1-990	6.74	2.95	61.5	162.2	0.25	0.25	· · · · ·
1,633	1.13	300	23.50	1,994	6,70	2.01	8.73	160.7	0.25	0.5	
1636	1-13	300	23.5 <sup>3</sup>	1. <i>99</i> 4	6,69	1.75	2-58	hi.i	0.25	0.75	
1639	1.13	300	23.54	1.995	6-68	1.75	2-11	105-1	0.25	1-0	
1642	1.13	300	23.54	1.996	6.68	1-76	0,75	150.3	0.25	1.25	
1645	1-13	300	3355	1-995	6.68	1.75	0.51	142.7	0-25	1.5	
1648	1-13	300	23-5Y	1.994	6,67	], / A	0.61	117.4	0.25	1.75	
										<u> </u>	
		<u> </u>									
EQUIPME	NT DOCUME	NTATION				WELL DE	VELOPMENT CRI	 TERIA		<u> </u>	
	DEDICATED SUURGE BLOCK	/BMERSIBLE ] ]4"	Y WATER LI PD WQ METE URB. ME OTHER OTHER OTHER	evel meter 15839 R Μοις - 5 Ter Μοιγ-33	<u></u>	Well wate Sediment Total wate Turbidity 10% chan WAS DEV	r clear to the unaided thickness remaining er removed = a minin < SNTUs? ge in field parameter ELOPMENT CRIT	i cyc? in well <1.0% c num of 5x calcu s? 'ERIA MET?	of screen length lated well volue Y	nes plus 5x dril	ling fluids lost?
ADDITIO PURGE W. CONTAIN	VAL OBSERV. ATER ERIZED	ATIONS Y N Yes	NUMBI GENER	ER OF GALLONS	1.9	SKETCH					189 19
NOTES	feder all c	swinging u , the crite	rithin a D Mia met	nge 710%, (	honge			·			
						1					WELL DEVELOPMEN

					WE	LL DEVE	LOPMENT	RECORD				
	211	ъл		EC	PROJECT NAME	Industri	al Overall - Supj	olemental RI	LOCATI MW #	Soc	1	PAGE 1 OF 3
		1017	1UI	EU	PROJECT NUMBER		3612112221		START		1	START DATE
	:	511 Congress S	treet, Portland Maine	04101	WELL INSTALLATIC	ON DATE	WELL DEVELOP	MENT DATE	END TIM	1E 1551	Į	END DATE 10/19/15
	WELL	DIAMETER (	INCHES)	× 1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	ОТІ	IER		1-11100-
	CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	ОТІ	IER		
	MEAS	UREMENT PO	DINT (MP)	TOP OF	RISER (TOR)	TOP	OF CASING (TOO	)	по П	IER		
	INITIA DEPTI	L WELL I (BMP)	13.84	FINAL V FT DEPTH	VELL (BMP)	4.09 <sub>ft</sub>	SCREEN LENGTH		10 FT	PRC STIC	)T. CASING CKUP (AGS)	NA FT
	INITIA (BMP)	L DTW	1.05	SEDIME FT REMOV	ED C	5, 25 <sub>FT</sub>	SCREENED INTERVAL (	BMP)	ТО	TO( DIF	C/TOR FERENCE	FT
	WATE	R MN	12.79 My 2.84	(final wel DTW AF	TER	) .05 <sub>FT</sub>	PUMPING DEPTH (BMI	13.8°		PID	RIENT AIR	O.O PPM
	(initial)	well depth - init	ial depth to water)									
	GAL/V	OL	0.5	GAL DEPTH	(BMP)	.27 FT	RECHARGE	RATE O.	3 ft/min	MO	WELL UTH	O, O PPM
	(columr TOTAI PURGI	n X well diamet L VOL. ED	7.75	FINAL R GAL TIME (el	RECOVERY (apsed)	70 <sub>MIN</sub>	FLUIDS LOS DURING DR	T NA	GAL	END	) OF WELL /ELOPMENT	Y N X
	(mL per	minute X total	minutes X 0.00026 g	gal/mL)	·					SAN	IPLE TAKEN	?
	TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
	1537	4.75	250	21.78	2.464	.7.59	1.46	20001	-514-0	0-1	0.1	very silly
	1544	12.80	250	21.34	2.539	7.56	5.87	7 1000	-398.1	0.5	0.6	
	1547	pry	250	12153	2.297			m298-	15 2 2 2 1 2 1 2	2		
	1630	12.2(	250	21-52	2.397	7.58	5-65	298	-241.2	0.5	1.1	
	1634	Dry	250				- 1997 - 1997	414			1.5	
	1717	13.68	250	21.64	2.260	7.60	5-32	71000	-327.9	0.5	2.0	
	1710	Dry									2.1	
	1300	13.81	250	21.60	2.226	7.52	5-78	969	-300.5	0-5	2.6	
ı		Dry				18. AN 1.						
10/19	6852	7.35	250	21.08	2.214	7.58	3.55	71000	-428,4	6.25	2.85	
	0858	14.08	250	21.5 Y	2.785	7.47	5-63	·71000	-367.5	0.25	3.1	
	୦ <b>୧</b> ୩	8.27	250	21-05	2.255	7.61	7.97	7 1000	-294.3	0.2	3.3	
		IT DOCUMEN EDICATED SU URGE BLOCK NILER 2" 2" 2" 100 POS 100 POS 1	    4"	WATER LE <sup>1</sup> PID N WQ METER TURB. MET OTHER OTHER OTHER	vel meter 15839 Mol5-07 er Mo24-3	3	WELL DEV Well water Sediment t Total wate Turbidity < 10% chang WAS DEVE	ELOPMENT CRIT clear to the unaided of hickness remaining in r removed = a minimu s NTUs? e in field parameters? CLOPMENT CRITE	ERIA syc? well <1.0% of m of 5x calcula RIA MET?	screen length? ated well volum Y	es plus 5x drilli	ng fluids lost?
	ADDITION/ PURGE WA	AL OBSERVA TER		NUMBER	R OF GALLONS		SKETCH					
	CONTAINEI NOTES	Low yie Low yie	Idong turbo t 10%	d rell; paramet	unable to r	1.0 	_					
	Well Develop Checked By:	oer Signature:	M		Print Name: Date:	Ubgen						WELL DEVELOPMENT RECORI

				WEI	L DEVE	LOPMENT	RECORD				
3110-				PROJECT NAME	Industria	al Overall - Suppl	emental RI	LÖCATIC	N ID		
	<b>M</b> <i>P</i>		EC	PROJECT NUMBER		3612112221		START T	ME 14-24		START DATE
51	1 Congress Stre	et, Portland Maine	04101	WELL INSTALLATION	DATE	WELL DEVELOPM	IENT DATE	END TIM	E 1551		END DATE
WELL D	IAMETER (II	NCHES)	[ ∭] 1-IN.	2-IN. [	4-IN.	6-IN.	8-IN.	Отн	ER		
CASING	DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	ОТН	ER		
MEASUI	REMENT POI	NT (MP)	TOP OF F	RISER (TOR)	TOP	OF CASING (TOC)		ОТН	ER		
INITIAL DEPTH	WELL (BMP)	13.84	FINAL W FT DEPTH (I	ELL BMP) [Y	-09 FT	SCREEN LENGTH		O FT	PRO STIC	OT. CASING CKUP (AGS)	№Д <sub>FT</sub>
INITIAL (BMP)	, DTW	1.05	SEDIME: FT REMOVE	D O	15 FT	SCREENED INTERVAL (F	BMP)	то	TOC DIFI	C/TOR FERENCE	FT
WATER COLUM	N	12.74	(final well DTW AF FT DEVELO	depth - initial well depth) FER P. (BMP) 14	.05 FT	PUMPING DEPTH (BMP	) ]'3.	.84 ft	PID Ami	BIENT AIR	Û. O PPM
(initial w CALCU GAL/VC	ell depth - initia	l depth to water) O · S	FINAL R GAL DEPTH (		דר <sub>FT</sub>	APPROXIMA RECHARGE I		3 <sub>ft/min</sub>	PID MOI	WELL UTH	O.O PPM
(column TOTAL PURGE (mL per	X well diameter VOL. D minute X total r	r squared X 0.041) 7-75 ninutes X 0.00026 g	GAL TIME (el: gal/mL)	ECOVERY apsed)	0 <sub>MIN</sub>	FLUIDS LOS DURING DRI	r NA	GAL	END DEV SAM	O OF WELL /ELOPMENT 1PLE TAKEN	? Y N Z
FIELD PARA	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP: (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
0946	13.17	250	21.57	2.314	7.48	6.53	71000	-289.9	0.25	3.55	
1033	9.92	250	21:18	J.253	7.06	5.35	71000	-295-5	0,25	3.8	
1036	13.70	250	21.56	J-303	7.18	6.58	71000	-2820	0.25	4.05	
1120	9.45	250	21.25	່ງເລາວ	7.)9	7.32	אוסיבי	-290_7	0-25	4.3	
1125	13.89	250	21.44	2.38 <sup>3</sup>	7.16	6.72	41000	-278.3	0.25	4.55	
1212-	8.87	175	21.32	2.222	7.21	5.01	690	-2443	0.3	4.85	
1219	12.27	175	21.52	2.265	7.14	4.54	373	-232-4	0.4	5.25	
309	9.89	150	21.33	2-240	7.20	ધ-૧૧	323	- 236.5	0.25	5-5	
1314	13-42	150	21.66	2.244	7.02	4.64	119	-238.8	0.5	6.0	
1400	8-27	150	21.39	2.234	7.08	5.16	29.1	-190.4	0.15	6.25	
1406	11.17	150	21.71	2.269	7.01	3.27	88.1	-2553	0.15	6.5	
1455	8.87	150	21.50	2.245	7.04	4.47	20-9	-189.3	0.25	6.75	7.0
EQUIPMEN DE SU BA GF OT	T DOCUMEN DICATED SU RGE BLOCK ILLER 2" 2" UNDFOS 2" HER AL ORSE DYA	ITATION BMERSIBLE    4" TIONS	WATER LE PID WQ METER OTHER OTHER OTHER	VEL METER 15839 Mo 15-0 TER Mo 24-3	7	WELL DEV Well wate Sediment to Total wate Turbidity 10% chang WAS DEVI	VELOPMENT CRI r clear to the unaided thickness remaining i r removed = a minim < 5NTUs? ge in field parameters ELOPMENT CRITI	reria eye? n well <1.0% o num of 5x calcul s? ERIA MET?	f screen length? lated well volur Y	nes plus 5x dril	Iing fluids lost?
PURGE WA CONTAINE	TER RIZED		NUMBE	R OF GALLONS	7.8						
Well Develop Checked By:	کھر per Signature:	naye 1 MW		Print Name: Nar Date:	Vogen						WELL DEVELOPMENT RECC

				WEI	L DEVE	LOPMENT	RECORD				이 것이 나라가 되었다. 것이 나 관련할 것 가지, <u>이</u> 나라지, 것이 있는 것이 같은 것이 같다. 같은 것이 있는 것이 있는 것이 같은 것이 같다.
2111	ъл/			PROJECT NAME	Industria	l Overall - Supp	lemental RI	LOCATI	ON ID	1	PAGE 3 OF 3
		101	EU	PROJECT NUMBER		3612112221		START	ПМЕ 1534	<u> </u>	START DATE
5	11 Congress St	reet, Portland Maine	04101	WELL INSTALLATION	N DATE V	VELL DEVELOP	MENT DATE	END TIM	1551		END DATE
WELL	DIAMETER (	NCHES)	[`?[∕] 1₋īN		4-IN.	6-IN.	8-IN.		HER		
WEEL		(NOURO)									
CASING	G DIAMETER	(INCHES)	4-1N.	6- <u>I</u> N.	8-1N.	10-IN.	12-IN.				
MEASU	IREMENT PO	INT (MP)	TOP OF	RISER (TOR)	TOP	OF CASING (TOC	)	∟т	HER		
INITIA DEPTH	L WELL (BMP)	13.84	FINAL W	VELL BMP) 1억	.09 FT	SCREEN LENGTH	i	0 FT	PRO	T. CASING CKUP (AGS)	N.4 <sub>FT</sub>
INITIA		· · · · ·		NT [		SCREENED			- ] тос	C/TOR	
(BMP)		1-05	FT REMOV	ED Ø	25 FT	INTERVAL (I	BMP)	TO	DIF	FERENCE	FT
WATEI	R	12 74	DTW AF	TER	, j. j	PUMPING	. 13	~84	PID		
COLUN (initial v	AN vell depth - initi	al depth to water)	FT DEVELO	0P. (BMP)		DEPTH (BMF	·)	· FT		BIENTAIR	
CALCU GAL/V	ILATED OL	0.5	GAL DEPTH (	ECOVERY BMP)	)7 FT	APPROXIMA RECHARGE	RATE O	3 <sub>ft/min</sub>	PID MO	WELL UTH	O.O PPM
(column TOTAL	X well diameter	er squared X 0.041)	FINAL R	ECOVERY		FLUIDS LOS	T		] ENI	OF WELL	Y N
PURGE	D minute X total	1.75 minutes X 0.00026	GAL TIME (el	apsed)	10 MIN	DURING DRI		GAL	_ DEN	/ELOPMENT 1PLE TAKEN	
FIELD PAR	AMETERS								VOLUME		 T
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	PURGED (gal)	TOTAL GALLONS	COMMENTS
1500	13.11	150	ગરપ	2-269	7-01	3. 52	24.2	-225-2	0.25	7.0	7.25
1545	8.95	150	21.41	2.252	7.do	4.50	22-1	-170.4	0.15	7.5	
1548	1250	150	21.67	2-258	7.01	Y.14	26.2	-188.8	0.25	7.75	
		<sup></sup>	Contraction of the second s						2		
											-
								<u>presido</u> Estas			
									1 1 1		
									<u> </u>		
							2				
ADDITION	EDICATED SU IRGE BLOCK ALLER 2" RUNDFOS 2" THER AL OBSERVA TER	BMERSIBLE ] ]4"	WATER LE PID WQ METEI TURB. MET OTHER OTHER OTHER	VEL METER 15839 M015-07 TER M034-33 R OF GALLONS		Well vate Sediment Total wate Turbidity 10% chan WAS DEVI	r clear to the unaided thickness remaining r removed = a minin < SNTUs? ge in field parameter:	l eye? in well <1.0% ( num of 5x calco s? ERIA MET?	of screen length ulated well volue Y	nes plus 5x dril	Iling fluids lost?
NOTES	RIZED	Yes See	Gener	ATED	7.8						
Well Develo Checked By:	per Signature.	nt		Print Name: Note Date:	Vogen						WELL DEVELOPMENT RECOI

21	M A	ACT	FC	PROJECT NAME	Industri	al Overall - Supp	lemental RI	LOCATION	NID イー 504	>	PAGE OF
	TATT			PROJECT NUMBER		3612112221		START TI	ме 1846		10/26/15
5	11 Congress St	reet, Portland Maine	04101	well installatio しつしい	I IS	well developi 1013	$\hat{b}$ (15	END TIME	8:16	<b></b>	END DATE 10/26/15
WELL	DIAMETER (I	NCHES)	<b>X</b> 1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	OTHE	R		
CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	OTHE	R		· · · ·
MEASU	JREMENT PO	INT (MP)	TOP OF I	RISER (TOR)	TOP	OF CASING (TOC)	1	OTHE	er		
INITIA DEPTH	L WELL (BMP)	24.93	FINAL W	YELL BMP)	<u>ૡ</u> ,૧૩ <sub>୮୮</sub>	SCREEN LENGTH		LO FT	PRC STI	OT. CASING CKUP (AGS)	N.4 FT
INITIA (BMP)	L DTW	1.19	SEDIME FT REMOVE		0.0 FT	SCREENED	IMP) 14-9	TO 24.9	TO	C/TOR FERENCE	FT
WATE	. I		(final well DTW AF	depth - initial well depth	) )	PUMPING	·····, [		PID		
COLUN	AN well denth - initi	23,74	FT DEVELO	Р. (ВМР) 2Ч	.9 <sub>FT</sub>	DEPTH (BMP	) גע.	9 FT	AM	BIENT AIR	ひ・ひ PPM
CALCU	JLATED	0.97	FINAL R	ECOVERY BMP)	0.11 FT	APPROXIMA RECHARGE		FT/MIN	PID MO	WELL	1.8 ppm
(column	X well diamete	er squared X 0.041)	FINAL R			FLUIDS LOS	r [		ENI	D OF WELL	Y N
PURGE	D minute X total	5.0 minutes X 0.00026	GAL TIME (els	apsed)	hers min	DURING DRI	LLING	GAL	DE	VELOPMENT	
FIELD PAR	AMETERS								VOLUME	T	
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	PURGED (gal)	TOTAL GALLONS	COMMENTS
0851	18.27	500	19.42	0.780	8-13	<u></u>	71000	-291.6	1.0	7.0	
6900	21.50	500	19,19	0,363	7.51	2.61	> 1000	-176,8	1.5	1.5	
0906	2 <b>4</b> .94	500	18-85	0.ગ્રવા	7.24	1.16	71000	-371.9	2.5	2.5	
1045	20.13	500	19,41	0.669	7.55	7.31	>1000	96.5			
1050	<i>⊋1.</i> 93	500	19.52	0.682	7.39	6.70	71000	104.8		3.5	
1055	23.60	500	19.54	0.529	7.20	6.89	>1000	91.2		3.8	
1240	20.75	500	20.58	1.343	7.13	6.78	271	46.2			
1245	23.71	505	19.79	1.235	7,13	6,90	>1000	75.3		5.1	
				<u>.</u>							
									- 		
FOUR	TDOCUMEN	ITATION				1 WELL DEX	TI OPMENT CPI	FFDIA			
	EDICATED SU JRGE BLOCK ALLER 2" CUNDFOS 2" THER	BMERSIBLE ] ]4"	★     WATER LE       ▶     PID       ★     WQ METER       ★     TURB. MET       OTHER     OTHER       OTHER     OTHER	VEL METER 1900 15839 	~47 27 33	Well water Sediment t Total wate Turbidity - 10% chang WAS DEVE	r clear to the unaided hickness remaining i r removed = a minim < 5NTUs? ge in field parameters ELOPMENT CRITI	eye? n well <1.0% of s num of 5x calculat s? ERIA MET?	screen length ted well volue Y	mes plus 5x dril	Iling fluids lost?
ADDITION PURGE WA CONTAINE	AL OBSERVA TER RIZED	TIONS Y N Yes	NUMBE GENERA	R OF GALLONS	5.0	SKETCH					· · ·
NOTES	Dy out remove	9-0 () 65 galle	s well win	unable in the funct	k to dm						
Well Develo	ner Signature	MU		Print Name Nate	Vagon						WELL DEVELOPMENT
n en Develo	p == ==g==atW 7;	•		Date	-			:			

	가 가는 것 같아.		LOW	FLOW GRO	UNDWAT	FER SAMPI	LING RECO	RD		
	PROJECT NAME	Indust	rial Overall - Suppleme	ntal RI	LOC	CATION ID	DAT	E Ja /	10/10	
	PROJECT NUMB	ER	3612112221.06		STA	<u>р 2-</u> rt time 131	Z END	TIME MO	7	-
	sample id 360109	- f2-7-2	SAM LIG	ple time i405	SITE	E NAME/NUMBER ustrial Overall/36010	R PAG	E I OF	1	
WELL DIAN	METER (INCHES)		2 4		18	OTHER				WELL INTEGRITY YES NO N/A
TUBING ID	(INCHES)		1/4 3/8		] 5/8	OTHER			CAP CASING	×
MEASUREN	MENT POINT (MP)	TOP OF	RISER (TOR)		ы — — — — — — — — — — — — — — — — — — —	OTHER			LOCKED COLLAR	<u> </u>
INITIAL D (BMP)	otw 8-	17 <sub>FT</sub>	FINAL DTW (BMP)	9.05	PRC FT STI	)T. CASING CKUP (AGS)	MA	FT	TOC/TOR DIFFERENCE	, site
WELL DE) (BMP)	ртн 20	,77 <sub>FT</sub>	SCREEN LENGTH	10	FT AM	BIENT AIR	0.0	РРМ	REFILL TIME SETTING	R i~A s
WATER COLUMN	12,	6 <sub>FT</sub>	DRAWDOWN VOLUME	0.04	GAL MO	WELL UTH	0.1	PPM	DISCHARGE TIMER SETTI	NG ~A S
CALCULA GAL/VOL (column X)	ATED Os	5 GAL	(mitial DT w- final D) TOTAL VOL. PURGED	I w X well diam. square 3.9	<u>GAL</u> TOT	AWDOWN/ FAL PURGED	0-04/20	1	PRESSURE TO PUMP	NΛ
FIELD PAR	AMETERS WITH	ROGRAM STAB	LIZATION CRITER	IA (AS LISTED IN T	HE QAPP)	-				
TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	E pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv (+/- 10 mv)	) INTAKE DEPTH (ft)	COMMENTS
·	BEGIN PURC	GING	<b>1</b>		- <u>1</u>	r			1	
Ő	8.17	200	19.09	3.066	6-64	7.38	45.6	178.1	16.0	·····
5	8.99	200	20-25	3.365	6.48	3-26	21:9	119.9	16.0	
10	9.02	200	20.55	3.518	6.46	3.10	9.62	124.2	16.0	
15	9.03	200	20,56	3.571	6.46	2.94	7.23	127.3	16.0	
20	9.03	200	20.69	3.584	6.46	2.79	. 4.44	127.5	16.0	
2.5	9.04	200	20.66	3.603	6.45	2.53	2.47	127.9	16.0	
30	9.03	200	20-60	3-614	6.45	2.39	1.47	129.6	16,0	
35	9.04	200	20.86	3-628	6-16	2=21	1.09	128.8	16.0	
40	9.04	200	20.81	3.629	6.46	2.16	1.09	127.0	16.0	
45	9.05	200	30.82	3.625	6.46	2.11	0.80	128.2	16.0	
50	9.05	100	20.67	3.635	6.45	2.13	0.68	127.0	16.0	
	FI	NAL STABILIZ	ZED FIELD PARA	METERS (to app	oropriate sign	ificant figures S	F])	I	TEMP.: nearest deg COND.: 3 SF max pH: nearest tenth (c DO: nearest tenth (c	gree (ex. $10.1 = 10$ ) (ex. $3333 = 3330, 0.696 = 0.696$ ) (x. $5.53 = 5.5$ ) ex. $3.51 = 3.5$ )
FOUIPMENT	DOCUMENTATI	N							ORP: 2 SF (44.1 =	44, 191 = 190)
PERIST SUBMI BLADI WATT. OTHEI OTHEI	TYPE OF PUMP TALTIC ERSIBLE DER ERA RR		ECON FLUIDS USED IQUINOX EIONIZED WATER OTABLE WATER ITRIC ACID EXANE IETHANOL THER	SILICON T TEFLON T TEFLON L HDPE TUE LDPE TUB OTHER	TUBING/PI UBING UBING INED TUBING BING UNG	UMP/BLADDER MAT S. STEI GEOPF TEFLO OTHEF OTHEF	TERIALS EL PUMP MATERIAL NOBE SCREEN N BLADDER R R		WL MET       PID       WQ MET       TURB. M       PUMP       OTHER       FILTERS	ECUJPMENT USED ER ISS39 ER MOIS ~ ~ 7 ETER SOOF ~ ч1  NO TYPE
ANALYTIC	AL PARAMETERS	ETER	METHOD	FIELD	PRESER	VATION V	OLUME S	AMPLE	QC COLLECTED	SAMPLE BOTTLI
X	Vo;		82600			<u>&lt;(</u>	Yone	3	~	360109- PZ-
									····	
							·			
PURGE OB PURGE WA CONTAINE	SERVATIONS TER YE RIZED X	S NO	NUMBER OF GALL GENERATED	ONS 3.0	S	KETCH/NOTES	• needs	ne~	O-Ring	for cap
NO-PURGE UTILIZED	METHOD YE		If yes, purged approxim to sampling or	ately 1 standing volume [ mL for this sample log	prior cation.		(missi	~ <sub>1</sub> )		
Sampler Sign	nature: MA		Print Name: 🖊	tate Vogen						
-					1					

J.

···			LOW	FLOW GROU	UNDWAT	FER SAMPI	LING RECO	RD		
Γ	PROJECT NAME	Indust	rial Overall - Suppleme	ntal RI	LOC	ATION ID	DAT	E lio	1. ~	
	PROJECT NUMBI	ER	2612112221.06		STA	TTIME	5 END	<u>10/19</u> TIME	<u>  5</u>	
	SAMPLE ID		SAM	PLE TIME	SITI	1010 NAME/NUMBER	PAG	ון א E	1	
	360109	- PZ-331	5	1140	Ind	ustrial Overall/36010	09	OF	7	]
WELL DIAM	ETER (INCHES)	XI –	2 4	6	8	OTHER			CAR	YES NO N/A
TUBING ID (I	INCHES)	× 1/8	1/4 3/8	1/2	5/8	OTHER			CASING	×
MEASUREM	ENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	
INITIAL D'I (BMP)	rw 3.	,07 <sub>FT</sub>	FINAL DTW (BMP)	11-28	FT STI	)T. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	E FT
WELL DEP (BMP)	тн [7-	89 FT	SCREEN LENGTH	10	PID FT AM	BIENT AIR	0.1	РРМ	REFILL TIMI SETTING	ER NA SEC
WATER COLUMN	14.	8ጋ FT	DRAWDOWN VOLUME	0.3	GAL MO	WELL UTH	0.7	РРМ	DISCHARGE TIMER SETT	ING NA SEC
CALCULAT GAL/VOL		)≂Ġ <sub>GAL</sub>	(initial DTW- final D TOTAL VOL. PURGED	W X well diam. square	1 X 0.041) <b>DR</b> A GAL TO	WDOWN/ TAL PURGED	0.3/4.	7	PRESSURE TO PUMP	NA PSI
(column X w	ell diameter squared	I X 0.041) PROGRAM STAB	(mL per minute X tota	al minutes X 0.00026 gal	/mL) IE QAPP)					
TIME	DTW (FT) 0.0-0.33 ft	PURGE RATE	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. $O_2 (mg/L)$	TURBIDITY (ntu) $(+/-10\% \le 10$ ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
5 5 muidices	Drawdown BEGIN PURG	I SING	(- <i>i</i> - 5 uegrees)	(+/- 3%)	[`	L	L		DEPTH (ft)	<u> </u>
Ö	( 2)	200	20.31	2.467	7.21	2.30	4.68	205.3	12.9	
5	7.52	700	20.67	2.554	7.53	0-67	2.57	194.7	12.9	
ìo	8:52	200	20-68	2.576	7.56	0.58	1.81	194.1	12.9	
15	9.32	200	20.55	2.557	7.57	0.48	1.02	184.5	12.9	
20	9.75	200	20.49	2.541	7.55	0.54	2.19	195.7	12.9	
25	10.09	200	20.43	2.518	7.59	0.47	0.90	192-1	12.9	
30	10.30	200	20.38	2.499	7.61	0.45	0.71	182.7	i2.9	
35	10.47	200	20-35	2-466	7.63	0.39	0.45	172.6	14-9	Drop intake above to dr
40	10.61	200	20.37	2.468	7.63	0.42	0,39	166.9	14-9	· · · · · · · · · · · · · · · · · · ·
ં પડ	10.74	200	20.39	2-465	7.63	0.44	0.45	162.7	14-9	
50	10.84	200	20-37	2.461	7.63	0.45	0.43	1570	14.9	
	FI	NAL STABILI	ZED FIELD PARA	METERS (to app	ropriate sign	ificant figures[S	F])		COND.: 3 SF max pII: nearest tenth (	(ex, 3333 = 3330, 0.696 = 0.696) (ex, 5.53 = 5.5)
			10	J.43	7.6	0.4	0,24	130	TURB: 3 SF max, ORP: 2 SF (44.1 =	rearest tenth (6.19 = 6.2, 101 = 101) = 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC <u>INFE OF PUMP</u> ALTIC RSIBLE ER RA		DECON FLUIDS USED IQUINOX DEIONIZED WATER OTABLE WATER ITRIC ACID JEXANE METHANOL WHER	<ul> <li>✓ SILICON TU TEFLON TU</li> <li>✓ TEFLON LI</li> <li>✓ HDPE TUBI</li> <li>UDPE TUBI</li> <li>OTHER</li> </ul>	<u>TUBING/PI</u> JBING JBING VED TUBING NG NG	JMP/BLADDER MAT	TERIALS EL PUMP MATERIAL JMP MATERIAL JOBE SCREEN N BLADDER	-	'★     WL MET       '★     PID       '★     WQ ME       '★     TURB. M       '★     PUMP       OTHER     FILTER:	EQUIPMENT USED TER $M_{200} - 47$ TER $M_{300} - 47$ METER $M_{300} - 4034 - 33$ -5008 - 41
ANALYTICA	AL PARAMETERS	<u></u>	METHOD	FIELD	PRESER	VATION V	OLUME S	AMPLE	OC.	SAMPLE BOTTLE ID
$\mathbf{X}$	PARAME V	0C	NUMBER 8260 C	FILTERED	MET t			LECTED	COLLECTED	NUMBERS 360109- PZ-33 (5
										<u></u>
					<u> </u>					
								<u> </u>	<del>.,</del>	
PURGE OBS	ERVATIONS				SI	KETCH/NOTES				
PURGE WAT CONTAINER NO-PURGE N UTILIZED	TER YES		NUMBER OF GALL GENERATED If yes, purged approxim to sampling or	Antely 1 standing volume pr mL for this sample loca	ior ation.					
Sampler Signa	ature: MHV		Print Name:	vare Vogen						
Checked By:			Date:							
JII Congre	MAC ss Street, Portlan	d Maine 04101	С					LOW FI	LOW GROU	NDWATER SAMPLING RECORD

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			LOW	FLOW GROU	INDWAT	ER SAMPL	ING RECO	RD		
	PROJECT NAME	Industr	ial Overail - Supplemen	tal RI	LOC	ATION ID	DAT	E	/r-	
	PROJECT NUMBE	CR	3612112221.06		STAI	(72-37 RT TIME	END	<u>тіме</u> \\Ч\	5	
	SAMPLE ID		~ SAMI	PLE TIME	SITE	NAME/NUMBER	PAG	<u>ж</u>	<u></u>	
	360109	- PZ-331	>	1140	Indu	strial Overall/36010	9	or OF	~	WELL INTEGRITY
WELL DIAM	IETER (INCHES)	<b>X</b> 1	2 4	6	8	OTHER			САР	YES NO N/A
TUBING ID (	(INCHES)	<u>×</u> 1/8	1/4 3/8	1/2	5/8	OTHER		. <u></u>	CASING LOCKED	<u>⊼</u> <u>∼</u> <u>−</u>
MEASUREM	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	<u>×</u> <u> </u>
INITIAL D' (BMP)	TW 3.	<b>ט 7</b> דז	FINAL DTW (BMP)	11.28	FT STIC	T. CASING (KUP (AGS)	MA	FŤ	TOC/TOR DIFFERENCE	FT
WELL DEF (BMP)	ידא איזי	-89 FT	SCREEN LENGTH	10	PID FT AMB	SIENT AIR	0.1	PPM	REFILL TIME SETTING	ER NA SEC
WATER COLUMN	<u>اب</u>	-87 <sub>FT</sub>	DRAWDOWN VOLUME (initial DTW- final DT	U. 34 C W X well diam. squared	PID <u> <u> </u> </u>	WELL JTH	0 <u>.</u> 7	РРМ	DISCHARGE TIMER SETT	ING NA SEC
CALCULA GAL/VOL (column X v	TED U.	6 GAL	TOTAL VOL. PURGED (mL per minute X tota	4,73 ( minutes X 0.00026 gal/	DRA GAL TOT mL)	WDOWN/ AL PURGED	0-3/4.7		PRESSURE TO PUMP	NA PSI
FIELD PARA	AMETERS WITH P	ROGRAM STAB	LIZATION CRITER	A (AS LISTED IN TH	E QAPP)				PUMP	
TIME 3-5 Minutes	0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	(mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	INTAKE DEPTH (ft)	COMMENTS
L	BEGIN PURG	ING			1					
55	10.95	२७०	20-39	2.457	7.63	0.41	0.40	151-6	14-9	
60	11-04	7-00	20.38	2.451	7.63	0.44	0.41	145.4	14.9	· · · · · · ·
65	11.09	7.00	20.37	2.447	7.63	0.44	0.27	141.8	14-9	
70	11.13	200	20.36	2.443	7.63	0.40	0.25	137.4	19.2	
15	11.20	200	20-35	2.937	7.63	0.42	0-24	131.9	19.9	
80	11-21	100	20.35	2.433	7.64	0.070	0.24	120-1	17.9	
85	11.24	200	10	1.130	7.64	0.41	0.29	122-5	1 ( /	
<u> </u>				(i)	67	- (~)	(1)	(nu)		
			20	3-43-	-7	10.4	er4	+30		
	FI	NAL STABILI	ZED FIELD PARA	METERS (to appr	opriate signi	ificant figures[Sl	F])		TEMP.: nearest de COND.: 3 SF max pH: nearest tenth (	egree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5.53 = 5.5)
			20	2.43	7.6	0.4	0-24	130	DO: nearest tenth ( TURB: 3 SF max, ORP: 2 SF (44.1 =	(ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) < 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC	)N			TURINGAR		FRIAIS	- 4		
	TALTIC ERSIBLE		IQUINOX EIONIZED WATER	SILICON TU	BING BING	S. STEE	EL PUMP MATERIAL		WL MET	TERMJOO - 47
BLADI	DER	P	OTABLE WATER	TEFLON LIN HDPE TUBI	IED TUBING	GEOPR TEFLO	OBE SCREEN N BLADDER		X WQME X TURB.N	TERM015-07
WATT OTHER	ERA {	н н	EXANE IETHANOL	LDPE TUBIN OTHER	ŧG	OTHER OTHER			PUMP OTHER	5008-41
ANALYTIC	AL PARAMETERS		THER	OTHER		OTHER			FILTER	<u>s no. type</u>
	PARAME	TER	METHOD NUMBER	FIELD FILTERED	PRESER MET	VATION V THOD RE	OLUME S QUIRED CO	AMPLE	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	VOC	<u> </u>	-8260C	N			Yome _	<u> </u>	<u>N</u>	360109-12-3315
								- <b></b>		
PURGE OB	SERVATIONS					KETCH/NOTES				
PURGE WA	TER YE RIZED X	s <u>NO</u>	NUMBER OF GALL GENERATED	ONS 4.8						
NO-PURGE UTILIZED	METHOD YE	S NO	If yes, purged approxim to sampling or	ately 1 standing volume pri mL for this sample loca	ior tion.					
Sampler Sign	nature: MA		Print Name:	Jak Vogen						
Checked By:			Date:							
	MAC	TE	C					LOW F	LOW GROU	INDWATER SAMPLING RECORD
511 Congr	ess Street, Portlan	d Maine 04101								

			LOW	FLOW GROU	UNDWAT	TER SAMPL	ING RECO	ORD	_	
	PROJECT NAME	Industr	ial Overall - Supplemen	ntal RI	LOC		DA	TE	110	
	PROJECT NUMBE	R	3612112221.06		STA	RT TIME	EN	D TIME	115	
	SAMPLE ID		OKT SAM	PLE TIME	SITE	150 ( NAME/NUMBER	PA	GE .	12	
	360109-1	2-34997	13490	1730	Ind	ustrial Overall/36010	9	I OF	_(	WELL INTECDITY
WELL DIAN	AETER (INCHES)		2 4	6	8	OTHER			CAP	YES NO N/A
TUBING ID	(INCHES)	<b>X</b> 1/8	1/4 3/8	1/2	5/8	OTHER			CASING	<u>× </u> <u>×</u> <u></u>
MEASUREN	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	×
INITIAL D (BMP)	0TW 6-	68 FT	FINAL DTW (BMP)	8-42	FT STI	T. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	FT
WELL DEI (BMP)	ртн с 1	-25 FT	SCREEN LENGTH		PID FT AMI	BIENT AIR	0.0	PPM	REFILL TIME SETTING	ER M SEC
WATER COLUMN	2.	.57 <sub>ft</sub>	DRAWDOWN VOLUME	0-1	GAL MO	WELL UTH	0.1	PPM	DISCHARGE TIMER SETT	
CALCULA	TED D.	11	(initial DTW- final DT TOTAL VOL.	W X well diam. square	<u>d X 0.</u> 041) DRA	WDOWN/	0-19	allas	PRESSURE	NA
GAL/VOL (column X v	well diameter squared	X 0.041)	(mL per minute X tota	l minutes X 0.00026 ga	<u>GAL</u> 101 l/mL)	AL PURGED			TOPUMP	r5i
FIELD PAR TIME	AMETERS WITH P DTW (FT)	ROGRAM STAB	TEMP. (°C)	IA (AS LISTED IN TH SP. CONDUCTANCE (mS/am)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu	) REDOX (mv)	PUMP	COMMENTS
3-5 Minutes	Drawdown	(mL/min)	(+/- 3 degrees)	(ms/cm) (+/- 3%)	(+/- 0.1 units)	(+/- 10%)	(+/- 10% <10 ntu	) (+/- 10 mv)	DEPTH (ft)	COMMENTS
5	BEGIN PURG	าย0	24		7 1/2	1.79 _	11 1		a. 15	Parent dr.
	Pinemed	dry	allow h	0.960	1-15	Scienty	11.1	-124.4	-(	Ingen i 9
	10-974	·····/	2.0~ 0	156040	iprer					
				-						
	<b>_</b>									
		•								
					<u> </u>				TEMP .: nearest de	gree (ex. 10.1 = 10)
	F 11	NAL STABILIZ	LED FIELD PARA	LVIETERS (to app)	ropriate sign		·))		pH: nearest tenth ( DO; nearest tenth (	(ex, 5.53 = 5.5) (ex, 3.51 = 3.5) (ex, 3.51 = 3.5)
EQUIPMENT	DOCUMENTATIO	N	1		1				ORP: 2 SF (44.1 =	earest temin (6.19 = 6.2, 101 = 101) • 44, 191 = 190)
PERIST	<u>TYPE OF PUMP</u> FALTIC	[가니	<u>ECON FLUIDS USED</u> QUINOX	SILICON TU	<u>TUBING/PI</u> JBING	UMP/BLADDER MAT	<u>ERIALS</u> L PUMP MATERIA	L	WL MET	EQUIPMENT USED TER
SUBMI BLADI	ERSIBLE DER		EIONIZED WATER OTABLE WATER	TEFLON TU TEFLON LI	JBING NED TUBING	PVC PU GEOPR	MP MATERIAL OBE SCREEN		Y PID Y WQ ME	15839 TER
	ERA		EXANE ETHANOL	LDPE TUBI	NG NG	OTHER			PUMP OTHER	5003-41
OTHER			THER	OTHER		OTHER			FILTER:	<u>s no. type</u>
	PARAME	TER	METHOD NUMBER	FIELD FILTERED	PRESEF MET	RVATION V THOD RE	olume Quired Co	SAMPLE OLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
~	VOC		8260C		H	<u>c\</u>	wint_	3	£0	360109-123409
	a a deba d'an amin'ny fanana amin'ny fanana dia 2008–2018. N				-			······		
							. <u> </u>			
PURGE OB	SERVATIONS TER YES	NO	NUMBER OF GALL	ons o.l	S	KETCH/NOTES				
CONTAINE NO-PURGE	RIZED 🔀 METHOD YE		GENERATED If yes, purged approxim	ately 1 standing volume m	rior					
UTILIZED			to sampling or	mL for this sample loc	ation.					
Sampler Sign	nature: MA		Print Name: 🏌	Jate Voyan						
Checked By:			Date:							<u></u> ,
	<b>MA</b>	TE	C					LOW F	LOW GROU	NDWATER SAMPLING RECOR
511 Congre	ess Street, Portlan	d Maine 04101	$\mathbf{C}$							

			LOW	FLOW GRO	UNDWAT	FER SAMPI	LING REC	CORD		
;	PROJECT NAME	Indust	rial Overall - Sunnleme	ntal RI	LOC	CATION ID	a	ATE		· ·
	PROJECT NUMB	ER	3612112221.06		STA	V2 -35 RT TIME	E	10//7/	<u>15</u> -	
	SAMPLE ID		SAM	PLE TIME	SITE	1625 E NAME/NUMBER	P	AGE	/	
	360109-6	2-3527	<u> </u>	1720	Ind	ustrial Overall/36010	09	) OF	ł	WELL INTECDITY
WELL DIAM	IETER (INCHES)		2 4	6	8	OTHER			CAP	YES NO N/A
TUBING ID	(INCHES)	1/8	1/4 3/8	1/2	5/8	OTHER		<u>.</u>	CASING	<u>→</u> <u>→</u> <u>→</u> <u>→</u>
MEASUREM	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	G (TOC)	OTHER			COLLAR	<u> </u>
INITIAL D (BMP)	TW	7.34 <sub>FT</sub>	FINAL DTW (BMP)	9.99	FT STI	OT. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	E
WELL DEF (BMP)	этн 3	1.56 FT	SCREEN LENGTH	10	FT AM	BIENT AIR	0.0	PPM	REFILL TIM SETTING	ER NA SEC
WATER COLUMN	24	・ , , , FT	DRAWDOWN VOLUME	0.11	GAL MO	WELL UTH	0.1	РРМ	DISCHARGE TIMER SETT	ING MA SEC
CALCULA GAL/VOL	TED Ó	.99 GAL	(mitial DI w- final D. TOTAL VOL. PURGED	4.3	GAL TOT	AWDOWN/ FAL PURGED	0.41	4-3	PRESSURE TO PUMP	~A PSI
(column X w	vell diameter squared	IX 0.041)	(mL per minute X tota	I minutes X 0.00026 g	al/mL)		·			
TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (±/- 3%)	pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (r (+/- 10% <10 n	ntu) REDOX (mv) (tu) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURG	SING	• • • • •	( , , , , , , , , , , , , , , , , , , ,			-1			·····
0	8.98	300	21.21	2.516	7.31	6.77	18.3	-131.7	26.6	
5	9.32	300	20.67	2.539	7.40	1.68	19-1	-133.1	26.6	
10	9.64	300	20.15	2.550	7.41	0.70	12-1	-140	26-6	
15	9.76	300	20-20	2-570	7.45	0.61	4-62	-128-2	26 6	
20	9.82	300	20-11	2.584	7.45	0.61	4.07	-117.9	26.6	
25	9.88	300	2002	2-594	7-46	0.59	2-79	-110.4	26.6	
30	9.93	300	19.97	2.602	7.46	0-48	2.47	-167.5	26.6	
35	9.95	300	19.92	3-608	7.46	0.48	1.99	-101.5	26.6	
40	9.96	300	19-89	2.607	7.46	0.38	2.02	-97-7	266	
45	9.91	300	19.85	2-605	7-46	0.38	1.99	-94.4	26.6	
50	9.91	500	19-84	2-600	7.46	0 # -(0	1.4	- 13-8	26.6 TEMP.: nearest de	egree (ex. 10.1 = 10)
	FI	NAL STABILIZ	LED FIELD PARA	METERS (to app	oropriate sign	ificant figures[S	F]) T		COND.: 3 SF max pH: nearest tenth DO: nearest tenth	s (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5.53 = 5.5) (ex. 3.51 = 3.5)
FOURPMENT	DOCUMENTATIC	N .	20	2.60	7-5	0.4	1.4]	-94	TURB: 3 SF max, ORP: 2 SF (44.1 -	nearest tenth (6.19 = 6.2, 101 + 101) = 44, 191 = 190)
	TYPE OF PUMP		ECON FLUIDS USED		TUBING/PI	UMP/BLADDER MAT	FERIALS	141	No. WILME	EOUIPMENT USED
SUBME	ERSIBLE		EIONIZED WATER	TEFLON T	UBING UBING INED TUBING	PVC PL GEOPR	JMP MATERIAL	IAL	Y PID	15859 TER Mais-07
WATTE	ERA		ITRIC ACID EXANE	HDPE TUB	ING	TEFLO	N BLADDER		TURB. I	METER <u>MO34-33</u> ちのおってい
OTHER OTHER	t		ETHANOL THER	OTHER OTHER		OTHER OTHER			OTHER FILTER	<u>s</u> NO, TYPE
ANALYTIC	AL PARAMETERS	TER	METHOD	FIELD	PRESER	RVATION V	OLUME	SAMPLE	QC	SAMPLE BOTTLE ID
	VOC		NUMBER 8260C	- N	> MET  1+	THOD RE -C ( パ	equired いっっし	COLLECTED		0 NUMBERS 360109-P23527
		······			<u> </u>	<u> </u>				
							·			
PURGE OBS	SERVATIONS				<b>S</b>	KETCH/NOTES				<u> </u>
PURGE WAT	TER YES		NUMBER OF GALL GENERATED	.ONS						
NO-PURGE	METHOD YES		If yes, purged approxim to sampling or	ately 1 standing volume p mL for this sample lo	orior cation.					
		- <u></u>	·	1						
Sampler Sign	ature: MMV	/	Print Name:	Vate Vage	m		,			
Checked By:			Date:							
	MAC	CTE	С				λ.	LOW FI	LOW GROU	NDWATER SAMPLING RECOR
511 Congre	ess Street Portlan	d Maine 04101								

								COBB	National Article	
	an Alex Maria		LOW	FLOW GRO	UNDWA	TEKSAMIPI	JING KE	CORD		<u>an a 11 sa katata</u> n k T
	PROJECT NAME	Indust	rial Overall - Supplemen	ntal RI	LO	$\frac{MW-5C}{MW-5C}$	1	DATE 1013	7 h5	
	PROJECT NUMB	ER	3612112221.06		ST/		56	END TIME	840	
	SAMPLE ID 360109	1 - MW-50	102 SAMI	1840	SIT In	E NAME/NUMBER dustrial Overall/3601(	)9	PAGE	OF	
WELL DIAM	IETER (INCHES)			6	8	OTHER				WELL INTEGRITY YES NO N/A
TUBING ID (	(INCHES)	1/8	1/4 3/8	1/2	5/8	OTHER			CAP CASING	<u>^ ~</u>
MEASUREM	ENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASIN	G (TOC)	OTHER			COLLAR	
INITIAL D' (BMP)	wł.	61 FT	FINAL DTW (BMP)	1.61	FT ST	OT. CASING (CKUP (AGS)	N	↓ <sub>FT</sub>	TOC/TOR DIFFERENC	E FT
WELL DEP (BMP)	Э.	.34 <sub>ft</sub>	SCREEN LENGTH	2,34	FT AM	) IBIENT AIR	0.)	PPM	REFILL TIM SETTING	er NA sec
WATER COLUMN	0.	73 <sub>FT</sub>	DRAWDOWN VOLUME	0,0004	GAL MC	) WELL DUTH	0.3	PPM	DISCHARGE TIMER SET	
CALCULA	TED C	0.03	(initial DTW- final DT TOTAL VOL.	W X well diam. squar	ed X 0.041) DR	AWDOWN/	0.0604	+3	PRESSURE	
GAL/VOL (column X w	vell diameter squared	X 0.041)	(mL per minute X tota	1 minutes X 0.00026 g	GAL 10 al/mL)	TAL PURGED				PSI
TIME	DTW (FT) 0.0-0.33 ft	PURGE RATE	TEMP. (°C)	IA (AS LISTED IN I SP. CONDUCTANCI (mS/cm)	HE QAPP)	DISS. O2 (mg/L)	TURBIDITY	(ntu) REDOX	(mv) PUMP INTAKF	COMMENTS
3-5 Minutes	Drawdown BEGIN PURG	(mL/min)	(+/- 3 degrees)	(+/- 3%)	(+/- 0.1 units	(+/- 10%)	(+/- 10% <10	ntu) (+/- 10	DEPTH (ft)	
5	1.63	200	73.40	2.564	7.19	c7		5 129	3	· · ·
ìo	1.62	200	23.41	2-557	6.91	2.14	2.4	2 130	.1	
15	1.62	200	23.39	2-555	6.75	2-03	0.7	3 130	.7	
20	1-62	200	23.36	2.559	6.69	1.69	0.4	2 130	8	
25	1.62	200	23.34	2-566	6.64	1.35	0.4	9 130.	2	
50	1.62	200	23.31	2.579	6.61	1.19	0.3	7 130	<u>,</u> ,	
35	1-62	200	23.30	2.584	6.60	1.14	0.4	7 132	3	
<u> </u>	1.65	200	23.30	2.586	1.59	110	0.2	135 1135 1135		
	1-03		21.30	06			0.0	1 10		
	· Fn	NAL STABILI	ZED FIELD PARA	METERS (to app	propriate sign	nificant figures[S	F])		TEMP.: nearest o COND.: 3 SF ma	legree (ex. 10.1 = 10) x (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5 53 = 55)
			23	2.59	6.6	1.1	0.2	130	DO: nearest tenth TURB: 3 SF max ORP; 2 SF (44.1	(ex, 3.5) = 5.5) (ex, 3.51 = 3.5) (x, arcset seath (6.19 = 6.2, 101 = 101) = 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC	DN E	ECON FLUIDS USED	<u> </u>	TUBING/F	YUMP/BLADDER MAT	ERIALS	•	1********************************	EQUIPMENT USED
X PERIST SUBME	ALTIC RSIBLE	ж Х	IQUINOX EIONIZED WATER	SILICON T TEFLON T	UBING UBING	S. STEE PVC PL	EL PUMP MATE	RIAL	Se WL ME N PID	
BLADD	RA		OFABLE WATER ITRIC ACID EXANE	HDPE TUE	INED TUBING BING BING	TEFLO	OBE SCREEN N BLADDER		TURB.	METER
OTHER OTHER			ETHANOL THER	OTHER OTHER		OTHER OTHER				R
ANALYTICA	AL PARAMETERS PARAME	TER	METHOD	FIELD	PRESE	RVATION V	OLUME	SAMPLE	QC	SAMPLE BOTTLE ID
R	Mar 1	10C	NUMBER <u>840</u>		о ме 	$\frac{1}{100} \qquad RE$	QUIRED	COLLECTEI		j <u>see aber</u>
							·	. <u> </u>		
PURGE OBS	SERVATIONS	S NO			- <u> </u>	KETCH/NOTES				
CONTAINER			GENERATED		<u>&gt;</u>					
UTILIZED		Í	to sampling or	mL for this sample lo	cation.					
Sampler Sign:	ature: Mtw		Print Name:	Nate Vogo	m					
Checked By:			Date:							
	MAC	TE	С					LO	V FLOW GROI	UNDWATER SAMPLING RECOR
511 Congre	ss Street. Portlan	d Maine 04101	~							

	GROUNDWATE	R/ PORE WATE	R GRAB SAM	PLING RECORD		
	PROJECT NAME	•	<u>.</u> .	SAMPLE LOCATION	I	DATE
		ustrial Overall - Supplemental	RI	<u></u> <u>55~36</u> )		10/22/15
511 Congress Succe, Formand Manie 04101	PROJECT NUMBER	3612112221.06.01		IYIO	ſ	1430
	SAMPLE ID 360609 - 1	Sw - 301010	SAMPLE TIME	SITE NAME/NUMBE Industriall Overall /	R F 360109	PAGE OF
SAMPLE TYPE X GRAB WELL/PIEZO	DMETER GEOPROBE	PORE WATER	OUTFALL	OTHER		VELL INTEGRITY
WELL DIAMETER (INCHES) X 1	2 4 6	8	OTHER		CAP	YES NO N/A
TUBING ID (INCHES)	1/4 3/8 1	/2 5/8	OTHER		LOCKED	
MEASUREMENT POINT (MP) TOP O	FRISER (TOR) TOP C	F CASING (TOC)	OTHER		COLLAR	<u> </u>
INITIAL DTW (BMP) 11.51 FT	FINAL DTW (BMP)	4.89 FT STI	DT. CASING CKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	NA FT
(BMP) H. 89 FT	SCREEN LENGTH	しつ FT AM	BIENT AIR	<u>С.</u> с ррм	REFILL TIMES	NA SEC
COLUMN 3.38 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well di	GAL PID GAL MO am. squared X 0.041)	WELL	2.6 PPM	DISCHARGE TIMER SETTIN	NG NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	TOTAL VOL. PURGED (mL per minute X total minutes X (	ひっうち GAL DR. .00026 gal/mL) DR.	AWDOWN/ TAL PURGED	NA	PRESSURE TO PUMP	NA PSI
FIELD PARAMETERS					PUMP	
TIME DTW (FT) PURGE RATE (mL/min)	TEMP. (°C) SP. CONE (mS	DUCTANCE pH (units) S/cm)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu) REDOX (mv)	INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING	10 40 1	78 117	2 34	2:0 -1120	120	
1413 12-01 150	19.99 1.1	1.0 6.63	>. 5%	840 - 2419	12.7	
	10 11 0.	575 6.01	- <b>U</b> • 11	71000 - 111. [	171.7	
SAMPLE OBSERVATIONS: CLEAR			<u>ا</u>	00 ODOR	اا. ب	THER (and notes)
EQUIPMENT DOCUMENTATION					······ `	
TYPE OF PUMP	LIQUINOX X	TUBING/PL SILICON TUBING	JMP/BLADDER MATE	<u>UALS</u> L PUMP MATERIAL		R LEVEL METER
BLADDER	POTABLE WATER	TEFLON TUBING TEFLON LINED TUBING	GEOPR	MP MATERIAL OBE SCREEN V BLADDER	X PID X WQ ME	$\frac{15639}{51ER}$
WATTERA OTHER	HEXANE X METHANOL	LDPE TUBING OTHER	OTHER		X PUMP OTHER	5008-41
	OTHER	OTHER	OTHER		FILTER	<u> INO TYPE</u>
PARAMETER	METHOD NUMBER	PRESERVATION	VOLUME REO	URED SAMPLE	QC	SAMPLE BOTTLE ID
	82600	METHOD	3 X 40 MI			NUMBERS
			<u> </u>			
		<u></u>				·
	······					······
NOTES Source interference	it 13.9 ft by	5	SKETCH			
- ilaya						
allow						
				•		•
PURGE OBSERVATIONS						
PURGE WATER YES NO	NUMBER OF GALLONS	0-15				
	-SIMMIDD				• •	
NO-PURGE METHOD     YES     NO       UTILIZED     X     X	If yes, purged approximately 1 standing to sampling ormL for this	g volume prior s sample location.				
AND	Nom	Vegen				
Sampler Signature:	Print Name:	,		GROUNDWATER/ POI	RE WATER	GRAB SAMPLING RECOR
Checked By	Date:					
1989 A 1999 A				31		

emental RI FAPVAttachment 2 - FDRs\Geoprobe GW

 $i_{ij}m$ 

1\Contract D007619\Projects\Industrial Overall Serv
<b>M</b> M. 511 Con	ACT]	EC Maine 04101	PROJECT NA PROJECT NU	ME Industrial Overa MBER 361	II - Supplemental 12112221.06.01	RI	SAM	PLE LOCATIO 35-40 AT TIME 135	8 8	DATE 10/22/15 END TIME 1515
			SAMPLE ID	09-CW-4	°ଟ୍ଟା <sub>ऽ</sub> -	SAMPLE TIME	SITE	NAME/NUME	BER 11/360109	PAGE (
SAMPLE TYPE WELL DIAME <sup>*</sup> TUBING ID (IN MEASUREMEI	E X GRAB [ TER (INCHES) [ NCHES) [ NT POINT (MP)	WELL/PIEZO	METERGEOP ] 2 4 ] 1/4 3/8 RISER (TOR)	ROBE PORE W	/ATER	]OUTFALL ] OTHER ] OTHER ] OTHER	OTHER		CAP CASING LOCKED COLLAR	WELL INTEGRITY YES NO N/A
INITIAL D? (BMP)	TW	.44 <sub>FT</sub>	FINAL DTW (BMP)	14-86	FT ST	DT. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	e NA FT
WELL DEP (BMP)	тн јч	.86 FT	SCREEN LENGTH	10	PII FT AM	BIENT AIR	0-0	PPM	REFILL TIMI SETTING	ER NA SEC
WATER COLUMN	0.	ዛኔ <sub>FT</sub>	DRAWDOWN VOLUME	0.07	GAL MO	WELL UTH	0-0	ррм	DISCHARGE TIMER SETT	ING NA SEC
CALCULAT GAL/VOL	TED Or	っつ GAL	(initial DTW- final DT TOTAL VOL. PURGED	W X well diam. squared :	X 0.041) GAL TO	AWDOWN/ FAL PURGED	NA		PRESSURE TO PUMP	NA PSI
FIELD PARA	METERS	. 0.041)	(mL per minute X total	minutes X 0.00026 gal/n	nL)				DIDAD	· .
TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (a	u) REDOX (m	v) INTAKE DEPTH (ft)	COMMENTS
1356 Nov	BEGIN PURC	SING bak	in well	for w	em	Quality	~>			-f
						0 /		progra	y	
		·······								
					··					
MPLE OBSERVA	ATIONS: CLEA CLEA COCUMENTA DOCUMENTA DE OF PUMP	AR FION	COLORED	CLOUD	TUBING/PI	TURBID	ERIALS	ODOR		OTHER (see notes)
XMPLE OBSERV/ EQUIPMENT X PERISI SUBM BLADI OTHEF OTHEF ANALYTICA	ATIONS: CLE/ ATIONS: CLE/ DOCUMENTA' PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER VOC	AR FION	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID HEXANE METHANOL OTHER METHOD NUME 8260C	X SILICON TEFLON TEFLON LDPE TU X LDPE TU OTHER 3ER PRE HC1/	Y	TURBID IMP/BLADDER MAT S. ST PVC F GEOP TEFLA OTHE OTHE OTHE OTHE 3 X 40 MI	ERIALS ESEL PUMP MATERIAI ROBE SCREEN ON BLADDER R R QUIRED	ODOR	X WATI X PID X WQ M X TURE PUMI OTHE ELLIT	OTHER (see notes)         EQUIPMENT USED         ER LEVEL METER ^J200 47         IS39         METER _M037 - 67         S METER _M034 - 23         P         SAMPLE AUTOR         SAMPLE BOTTLE ID         NUMBERS         see above
AMPLE OBSERV/ EQUIPMENT X PERST SUBM BLADI WATTI OTHEF ANALYTICA	ATIONS: CLE/ ATIONS: CLE/ DOCUMENTA' PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC	AR FION	COLORED		Y	TURBID IMP/BLADDER MATI S. STF GEOP TEFL OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE SKETCH	ERIALS SEEL PUMP MATTERIAI ROBE SCREEN ON BLADDER R R QUIRED QUIRED	ODOR	X WATI X PID X WQ N X TURB Y UMM OTHE ELLT QC COLLECTED	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^J200 47 1 5839 METER /J00 73 P 5008 41 ER EKS NO SAMPLE BOTTLE ID NUMBERS  _
AMPLE OBSERV/ EQUIPMENT X PERISI SUBM BLADI WATTI OTHEF ANALYTICA	ATTONS: CLEA DOCUMENTAT DE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC 0.110 0.25	AR FION X X S TER TER	COLORED	X SILICON TEFLON TEFLON UDPETU X LOPETU OTHER OTHER HCI/	Y TUBING // TUBING TUBING LINED TUBING BING BING SERVATION METHOD 4 C	TURBID	ERIALS EEL PUMP MATERIAI ROBE SCREEN ON BLADDER R R QUIRED	ODOR	X WATI X PID X WQ M X TURB VITHE COLLECTED	OTHER (see notes)
AMPLE OBSERV/ EQUIPMENT X DELADI BLADI WATTI OTHEF OTHEF ANALYTICA	ATIONS: CLEA	NR FION X S TER yw to to to Nows	COLORED	ER PRE 1	Y TUBING // TUBING LINED TUBING BING // Comparison	TURBID	ERIALS ERIALS ERIPUMP MATH UMP MATERIAI ROBE SCREEN ON BLADDER R R R QUIRED	ODOR	X WATI X PID X WQ N X TURK Y PUMI OTH OTH EILT QC COLLECTED	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^A J 200 47 1 5 8 39 METER _MO_1- 67 
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI OTHER OTHER ANALYTICA	ATIONS: CLEA CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS CLEATION CLEATIO	NR FION X X S S TER More S	COLORED	SER PRE	Y TUBING // TUBING LINED TUBING BING SERVATION METHOD 4 C	TURBID IMP/BLADDER MAT S. ST GEOP GEOP TEFLA OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE SKETCH	ERIALS BEL PUMP MATE VMP MATERIAI ROBE SCREEN ON BLADDER R R R R QUIRED	ODOR	X WATI X PID X WQN X TURE PUMI OTHE ELLT	OTHER (see notes)
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI WATTI OTHEF OTHEF ANALYTICA NOTES PURGE OBSERV PURGE WATER CONTAINERIZED	ATIONS: CLEA ATIONS: CLEA DECUMENTAT PEOFPUMP TALTIC ERSIBLE DER R R L PARAMETER PARAME VOC 0A (LC A (LC A (LC) A (LC) VOC VATIONS VATIONS YES D	NR FION X X S TER Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID HEXANE METHOD NUME 8260C 00000000000000000000000000000000000	Single NS	Y	TURBID IMP/BLADDER MATI S. ST GEOP GEOP TEFLA OTHE OTHE OTHE 3 X 40 MI 3 X 40 MI SKETCH	ERIALS ERIALS ERIPUMP MATERIAI ROBE SCREEN ON BLADDER R R	ODOR	X WATI	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^AJ200477 1 5 8 39 METER _MO_1- 67 
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI WATTI OTHEF OTHEF ANALYTICA NOTES PURGE OBSERV PURGE WATER CONTAINERIZEI NO-PURGE METI UTILIZED	ATTONS: CLEA DOCUMENTAT PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC 0A \\\c CA\\\C CA\\\C	NR FION X X S TER FER Now S	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID METHANOL OTHER METHOD NUME 8260C  Quite COJOC pull 42 Sub ~ H NUMBER OF GALLO GENERATED If yes, purged approximate to sampling or		Y TUBING/PI TUBING LINED TUBING BING SERVATION METHOD 4 C  JCA	TURBID	ERIALS SEEL PUMP MATTERIAI ROBE SCREEN ON BLADDER R R R QUIRED	ODOR	X WATI	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^J200477 1 \$ 8 39 METER _M034 - 67 s. METER _M034 - 73 P \$ 500841 ER ER SAMPLE BOTTLE ID NUMBERS     

			GROUN	DWATER/ POR	E WATER	R GRAB SAM	PLING REC	ORD			
AMAN A			PROJECT N	ME			SAMPI	E LOCATION		DATE .	
🌌 M	ACI	EC		Industrial Overall	- Supplemental R	I	1	4w-50	1	د/10	7/15
511 Co	ongress Street. Portland	Maine 04101	PROJECT NU	MBER			START	TIME OF3	2	END TIME	1622
			SAMPLE ID		112221.06.01	SAMPLE TIME	SITE N/	ME/NUMBER		PAGE	1000
			3601	09- MW-50	410	1620	Ind	ustriall Overall / 3	60109	1	OF
SAMPLE TYPI	e 🖾 grab	Wellpiezow	ieter Geo	PROBE PORE WA	TER	OUTFALL	OTHER			WELL INTEGH	
WELL DIAME	TER (INCHES)		2 4	6	8	OTHER			CAP CASING	<u>×</u>	
TUBING ID (IN	(CHES)	1.8	1.4 3.8		58	OTHER			LOCKED	<u> </u>	<u> </u>
MEASUREME	NT POINT (MP)	TOP OF I	RISER (TOR)	TOP OF CASING (TO	) ()	OTHER					
INITIAL DTV (BMP)	* <u>1</u>	-65 FT	FINAL DTW (BMP)	8.18	FT STIC	T. CASING XUP (AGS)	NA	FT	TOC/TOR DIFFERENCE		FT
WELL DEPT (BMP)	тн iч	-ບໆ <sub>FT</sub>	SCREEN LENGTH	10	PID FT AMB	BIENT AIR	0-9	PPM	REFILL TIME SETTING	R	NA SEC
WATER COLUMN	1:	እ.ሣዛ <sub>FT</sub>	DRAWDOWN VOLUME	0.3	GAL MOU	WELL JTH	3.4	ррм	DISCHARGE TIMER SETTI	NG	NA SEC
CALCULATE	ED (7	.5	(mitial DTW- final DT TOTAL VOL.	W X well diam. squared X 0.	U41) DRA	WDOWN/	0.3/1	, 55	PRESSURE	<b>—</b>	MA north
GAL/VOL (column X wel	I diameter squared X 0	.041)	(mL per minute X tota	minutes X 0.00026 gal mL)	GAL TOT	AL PURGED	0,0,0	·	IOPUMP	L	V PSI
FIELD PARAM	AETERS	PURCERATE							PUMP		
TIME	DTW (FT)	(mL min)	TEMP. (°C)	(mS/cm)	: pH (units)	DISS. O <sub>2</sub> (mg L)	TURBIDITY (ntu)	REDOX (mv)	INTAKE DEPTH (ft)		COMMENTS
	BEGIN PURGI	NG	2					1	1	1	
0831	5.72	250	41.21	2.480	7.55	2.75	49.0	-397.2			
0835	10-17	250	21-34	2.510	7.43	1-38	52.2	- 405.6			
0831	14.17	150	21.72	2-501	7.40	2.45	156	-340.2		Projed	<i>∽</i>
1627	8-12	250	21.69	2.442	7.38	2-46	9.98	-167.1	10	Post	sampy
										1	
SAMPLE OBSERV	CLE	AR <u>7</u>	_COLORED	CLOUDY		TURBID		ODOR		OTHER (see no	tes)
TY	THE OF PUMP		CON FLUIDS USED		TUBING PL	MP BLADDER MATH	RIALS			EQUIPMENT I	USED
SUBME	RSIBLE		QUINOX EIONIZED WATER	TEFLON TUE	SING SING	PVC PU	MP MATERIAL		PID WOME		9
WATTE	IRA		TRIC ACID	HDPE TUBIN	10 10 10 10 10 10 10 10 10 10 10 10 10 1	TEFLON	BLADDER		TURB.	METER	1075-07 1074 - 33
OTHER OTHER			ETHANOL THER	OTHER OTHER		OTHER OTHER			OTHER FILTER	<u></u>	TYPE
ANALYTICAL	PARAMETERS										
	PARAM	ETER	METHOD NUN	IBER PRES	ERVATION ETHOD	VOLUME RE	QUIRED	SAMPLE DLL <u>E</u> CTED	QC COLLECTED	SAM	IPLE BOTTLE ID NUMBERS
×	Vi o	1260C	82600		HC 1	3×4	oml_	¥	<u>_~</u>	<u> </u>	e abou
								•			
									·····		
			<u></u>			<u> </u>				<u> </u>	
NOTES	- Reco	inter to	171	ft bhac	SI	KETCH					
	1	160.		0,-0,							
	ク	1070									
	- Dwge	tubing	+ Sav	ple, take							
	r a	samp	<i>wat</i>	guality							
	reasu	tenen+		Ū.							
PURGE OBSERV	ATIONS	· · ·									
	VE	NO NO	NIMBEROFONI								
PURGE WATER CONTAINERIZED	5 <del>x</del>		GENERATED	<u> </u>							
	10D VE	- <u> </u>									
NO-PURGE METH UTILIZED			If yes, purged approxim to sampling or	ately 1 standing volume prior mL for this sample location.							
							•				
Sampler Signature:				Jak Voc.							
cumptor organization y			Print Name:	our oga							

	GROUNDWATER/ FOR	E WATEK GRAD SAWIPI	LING KECORD	dat ng polon ng tangangan di kang panggang pangang
	PROJECT NAME	· · · · ·	SAMPLE LOCATION	DATE
SIL Congress Street Portland Maine ()4101	Industrial Overall	Supplemental RI		
	3612	12221.06.01	1512	1521
	SAMPLEID 360109 - MW - 505	22 SAMPLE TIME 1515	SITE NAME/NUMBER Industriall Overall / 360109	
SAMPLE TYPE 🔀 GRAB 💽 WELL PIEZOMETEI	R GEOPROBE PORE WAT	TER OUTFALL OT	THER	WELL INTEGRITY
WELL DIAMETER (INCHES) X 1 2	4 6	8 OTHER	CAP	YES NO N'A
TUBING ID (INCHES)	3.8	5 8 OTHER	LOCKEI	
MEASUREMENT POINT (MP) TOP OF RISE	R (TOR) TOP OF CASING (TO	C) OTHER		·
INITIAL DTW (BMP) J. U FT (BM	AL DTW (P)  Zil	PROT. CASING FT STICKUP (AGS)	NA FT DIFFERENC	E FT
(BMP) 24.93 FT LET	NGTH 10	PID FT AMBIENT AIR	O . O PPM SETTING	ER NA SEC
WATER COLUMN 14.83 FT VOI	AWDOWN LUME	PID WELL MOUTH	7-3 DISCHARGE	
CALCULATED GAL/VOL (olumn X well diameter crusted X 0.041) (Diameter crusted X 0.041)	TAL VOL. RGED ner minute X total minute X 0.00026 cal mL	GAL TOTAL PURGED	0.3/0.6 PRESSURE TO PUMP	NA <sub>PSI</sub>
FIELD PARAMETERS				
TIME DTW (FT) PURGE RATE (mL min)	TEMP. (°C) SP. CONDUCTANCE (mS cm)	pH (units) DISS. O <sub>2</sub> (mg.L) T	PUMP URBIDITY (ntu) REDOX (mv) INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING				-
1518 14.02 250	19.19 1.750	7.69 5-90	17.5 154.2 21.9	3
SAMPLE OBSERVATIONS: CLEAR X COU		TIBED	0008	
EQUIPMENT DOCUMENTATION				
TYPE OF PUMP         DECON           PERISTALTIC         LQUIN           VENERISTATIC         X	NOX SILICON TUB	TUBING PUMP BLADDER MATERI ING S. STEEL P	ALS UMP MATERIAL WATE	EQUIPMENT USED ER LEVEL METER M 200 ~ 47
BLADDER POTAE	BLE WATER TEFLON LINE	ED TUBING GEOPROB	E SCREEN WQ M LADDER TURE	$\frac{(5057)}{\text{(ETER}} = \frac{1005}{2} \frac{37}{2}$
WATTERA HEXAN	ANOL LDPE TUBIN	OTHER OTHER	PUMI OTHE	SUUB-41
ANALYTICAL PARAMETERS	CTHER	OTHER		ERS NO TYPE
PARAMETER	METHOD NUMBER PRES	ERVATION VOLUME REQU	IRED SAMPLE QC	SAMPLE BOTTLE ID
Voc	8260C 1.	CI 3x10	ent Y N	see abit ~?
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······································	
well developed on	10/26/15	SKEICH		
- Dward dry	for 5 well volu	ue 5		
P - Jost	after Divicion			
- take sample	take post sam	nh		
Later and	3	r		
Bor	··/			
PURCE OBSERVATIONS	· · ·			
	0.6			
PURGE WATER YES NO NU	MBER OF GALLONS NERATED			
UTILIZED	es, purged approximately 1 standing volume prior ampling ormL for this sample location.			
Sampler Signature:	Prine Name Nate Vogen			
Charled Da	Peter		GROUNDWATER/ PORE WA	ATER GRAB SAMPLING RECORD
IC NECKED DY	Date:			

.

P:/Projects/nysdec1/Contract D007619/Projects/Industrial Overall Service Corporation - RI\_FS\4.0\_Deliverables\4.2\_Work\_Plans\Supplemental RI FAP/Attachment 2 - FDRs\Geoprobe GW Grab,Pore Water.xlsx

					Ambie	ent Air	S	oil Vapo	or					
Location(1)	Type (2)	Depth	Excavation	Sampling	<b>O</b> <sub>2</sub>	CO <sub>2</sub>	0 <sub>2</sub>	CO <sub>2</sub>	PID	Date/Time	Sample ID	PCE	TCE	Comment
		(feet)	Method (3)	Method (4)	(% vol)	(% vol)	(% vol)	(% vol)	(ppbv)			Result	Result	
RP-01	SA	9.2	NA	PRT						10-26-15 1400	SA-RP01-09			Manhole at intersection of Relyea and Bartels Place
BP-01	SA	8.4	NA	PRT						10-26-15 1417	SA-BP01-08			Bartels Place manhole (MH-01) in front of Bulfamante
PS-01	SA	9.8	NA	PRT						10-26-15 1435	SA-PS01-10			Pine Street manhole (MH-03) immediately adjacent to Pearlgreen Parking lot
PS-02	SA	10.6	NA	PRT						10-26-15 1445	SA-PS02-11			Pine Street manhole (MH-04) at turn of the sewer line
PS-03	SA	7.6	NA	PRT						10-26-15 1500	SA-PS03-08			Upgradient background sample at manhole outside 35 Pine Street
PS-04	SA	10.0	NA	PRT						10-26-15 1507	SA-PS04-10			Pine Street manhole (MH-05) in front of 21 Pine St
PS-05	SA	11.6	NA	PRT						10-26-15 1515	SA-PS05-12			Pine Street manhole (MH-06) in front of 12 Pine St
BP-02	SVG	3.0	GP	PPS	20.9	0.6	20.9	0.4	1268	10-26-15 1537	SVG-BP02-03			HS-508 Sample location adjacent to IO building post sample (20.9 / 0.2 / 657 ppbv)
BP-03	SVG	3.0	GP	PPS	20.9	0.6	20.9	0.4	673	10-26-15 1600	SVG-BP03-03			HS-507 Sample location adjacent to IO building post sample (20.9 / 0.4 / 828 ppbv)
BP-04	SVG	3.0	GP	PPS	20.9	0.4	20.9	0.4	1E+05	10-26-15 1610	SVG-BP04-03			HS-506 Sample location adjacent to IO building post sample (20.9 / 0.2 / 113 ppmv)
BP-05	SVG	3.0	HD, SV	PPS	20.9	0.4	20.9	0.4	615	10-27-15 1018	SVG-BP05-03			Eastern most point on sewer line (8.8 ft west of connection to main line); post sample (19.1 / 1.6 / 799)

#### Notes:

ppm- parts per million ppbv-parts per billion per volume PID- photo ionization detector ug/m<sup>3</sup> - micrograms per cubic meter PCE - Tetrachloroethene TCE - Trichloroethene

(1)	Sample Location
BP	- Bartels Place
PS	-Pine Street
MF	R- MetroNorth Property
ST#	For the structure 1 or 10

Ambient Air

Reviewed By:

(2) Sample Type SVG- Soil Vapor Grab SA- Sewer Line Air IAS- Indoor Air Screening AA- Ambient Air

Soil Vapor

#### (3) Excavation Method SV- Shop Vac AK- Air Knife HA- Hand Auger GP- hand geoprobe HD- Hammer Drill

# (4) Sampling Method

PPS- push point sampler PRT- post run tubing HSS- Hapsite Screening

# Soil Vapor and Air Field Data Record

October 2015

Location(1)	Type (2)	Depth	Excavation	Sampling	02	CO <sub>2</sub>	02	CO <sub>2</sub>	PID	Date/Time	Sample ID	PCE	TCE	Comment
		(feet)	Method (3)	Method (4)	(% vol)	(% vol)	(% vol)	(% vol)	(ppbv)			Result	Result	
												(ug/m <sup>3</sup> )	(ug/m <sup>3</sup> )	
	SVC	2.0		סחס	20.0	0.4	0 <b>1</b>		2150	10-27-15				42.4 ft west of building tie in, associated with potential
BP-00	300	3.0	пD, 3V	PPS	20.9	0.4	8.2	4.4	3138	1048	3VG-BP00-03			lateral (PL-02); post sample (6.6 / 9.2 / 3771)
	SVG	3.0		DDS	20.0	0.2	20.6	0.6	2525	10-27-15				60.9 ft west of building tie in, associated with potential
BF-07	300	3.0	110, 30	FFJ	20.9	0.2	20.0	0.0	2222	1105	3VO-BF07-03			lateral (PL-03); post sample (20.9 / 0.6 / 2382)
BP-08	SVG	3.0	HD SV	PPS	20.9	0.2	10.4	24	1365	10-27-15	SVG-BP08-03			108.1 ft west of building tie in, potential lateral (PL-05)
51 00	540	5.0	110, 31	113	20.5	0.2	10.4	<u> </u>	1505	1117	510 51 00 05			to 25 Bartels Place; post sample (0.7 / 3.4 / 1488)
BP-09	SVG	3.0	HD. SV	PPS	20.9	0.2	5.4	1.8	1924	10-27-15	SVG-BP09-03			111.2 ft west of building tie in, potential lateral (PL-05)
		5.0			2015		511			1127	516 51 65 65			to 16 Bartels Place; post sample (8.4 / 1.6 / 2042)
BP-10	SVG	3.0	HD. SV	PPS	20.9	0	12.2	1.8	990	10-27-15	SVG-BP10-03			155.7 ft west of building tie in (MH-01), NE side;
										1145				post sample (9.5 / 2.2 / 3005)
BP-11	SVG	3.0	HD. SV	PPS	20.9	0	5.1	4.6	2114	10-27-15	SVG-BP11-03			155.7 ft west of building tie in (MH-01), NW side;
			, -	_		-	-			1157				post sample (11.6 / 2.6 / 2743)
BP-12	SVG	3.0	HD, SV	PPS	20.9	0	6.5	3	3098	10-27-15	SVG-BP12-03			155.7 ft west of building tie in (MH-01), SW side;
			,					<u> </u>		1210				post sample (5.7 / 3.0 / 1069)
BP-13	SVG	4.0	HD, SV	PPS	20.9	0	17.4	0.3	2488	10-27-15	SVG-BP13-04			188.7 ft west of building tie in, in front of 29 Bartels
			,							1228				Place; post sample (11.8 / 1.6 / 3730)
BP-14	SVG	2.5	HD, SV	PPS	20.9	0.2	20.9	0.2	3052	10-27-15	SVG-BP14-03			218.7 ft west of building tie in, in front of 31 Bartels
				-						1404				place; post sample (19.8 / 0.0 / 2484)
BP-15	SA	2.0	HD, SV	PRT	20.9	0	20.9	0.2	2689	10-27-15	SA-BP15-03			Storm sewer at corner of Clear Channel Outdoor and
			,							1423				the MNR property; post (20.9 / 0.0 / 2109)
BP-16	SVG	2.5	HD, SV	PPS	20.9	0.2	17.1	2	2058	10-27-15	SVG-BP16-03			Sample 7 tt east of BP-07, IO side of sewer line;
			,							1533				post sample (16.7 / 2.2 / 2384)

#### Notes:

ppm- parts per million ppbv-parts per billion per volume PID- photo ionization detector ug/m<sup>3</sup> - micrograms per cubic meter PCE - Tetrachloroethene TCE - Trichloroethene

(1) Sample Location
<b>BP-</b> Bartels Place
PS -Pine Street
MR- MetroNorth Property
ST#- Structure 1 or 10

### (2) Sample Type SVG- Soil Vapor Grab SA- Sewer Line Air IAS- Indoor Air Screening AA- Ambient Air

(3) Excavation Method SV- Shop Vac AK- Air Knife HA- Hand Auger GP- hand geoprobe HD- Hammer Drill

## (4) Sampling Method PPS- push point sampler PRT- post run tubing HSS- Hapsite Screening

Ambient Air Soil Vapor

\_Reviewed By: \_

Industrial Overall Supplemental RI

# Soil Vapor and Air Field Data Record

October 2015

Location(1)	Type (2)	Depth	Excavation	Sampling	02	CO <sub>2</sub>	<b>O</b> <sub>2</sub>	CO <sub>2</sub>	PID	Date/Time	Sample ID	PCE	TCE	Comment
		(feet)	Method (3)	Method (4)	(% vol)	(% vol)	(% vol)	(% vol)	(ppbv)			Result	Result	
												(ug/m³)	(ug/m³)	
BP-17	SVG	3.0	HD, SV	PPS	20.9	0.2	12.4	3	1267	10-27-15 1548	SVG-BP17-03			16 ft west of BP-07 between 21 and 23 Bartles Place; post sample 99.5 / 3.6 / 1280)
BP-18	SVG	3.0	HD, SV	PPS	20.9	0.4	1.7	2.6	11300	10-27-15 1706	SVG-BP18-03			7 ft west of BP-07; post sample (0.4 / 8.4 / 6640)
PS-06	SVG	5.8	HD, SV	PPS	20.9	0	20	1.6	7045	10-28-15 1130	SVG-PS06-06			Adjacent to brick wall for Pearlgreen; Post sample (20.0 / 1.4 / 6944)
PS-07	SVG	5.8	HD, SV	PPS	20.9	0	20.9	0	6247	10-28-15 1153	SVG-PS07-06			4 ft south of manhole MH-04; post sample (20.9 / 0.0 / 7053)
PS-08	SA	6.2	NA	PRT	20.9	0	20.9	0	7910	10-28-15 1220	SA-PS08-06			Catch basin sample from storm sewer in front of Pearlgreen; post sample (20.9 / 0.0 / 7910)
PS-09	SVG	2.9	HD, SV	PPS	20.9	0	NA	NA	8071	10-28-15 1229	SVG-PS09-03			53.4 ft south of MH-04; associated with potential lateral PL-01; post sample (16.7 / 3.6 / 2939)
PS-10	SVG	2.9	HD, SV	PPS	20.9	0	11.5	2.4	5837	10-28-15 1250	SVG-PS10-03			129.4 ft south of MH-04, associated with potential pipe break (PB-02); post sample (11.3 / 3.2 / 5772)
PS-11	SVG	1.5	HD, SV	PPS	20.9	0.2	20.8	0.4	7400	10-28-15 1305	SVG-PS11-02			172.1 ft south of MH-04, located just north of manhole MH-05; post sample unavailable due to water in tubing
PS-12	SVG	1.0	HD, SV	PPS	20.9	0.2	16.6	2.2	5042	10-28-15 1340	SVG-PS12-01			209.2 ft south of MH-04; shallow sample point due to hammer drill failure; post sample (17.5 / 2.8 / 5230)
PS-13	SVG	1.0	HD, SV	PPS	20.9	0.2	20.9	0.4	600	10-28-15 1405	SVG-PS13-01			264.7 ft south of MH-04; adjacent to MH-06; post sample (16.4 /2.8 / 700)
PS-14	SVG	1.3	HD, SV	PPS	20.9	0.2	18.6	0.6	500	10-28-15 1415	SVG-PS14-01			313.5 ft south of MH-04; shallow sample point due to hammer drill failure; post sample (20.9 / 0.0 / 500))

Notes:	(1) Sample Location	(2) Sample Type	(3) Excavation Method	(4) Sampling Method
ppm- parts per million	BP- Bartels Place	SVG- Soil Vapor Grab	SV- Shop Vac	PPS- push point sampler
ppbv-parts per billion per volume	PS -Pine Street	SA- Sewer Line Air	AK- Air Knife	PRT- post run tubing
PID- photo ionization detector	MR- MetroNorth Property	IAS- Indoor Air Screening	HA- Hand Auger	HSS- Hapsite Screening
ug/m <sup>3</sup> - micrograms per cubic meter	ST#- Structure 1 or 10	AA- Ambient Air	GP- hand geoprobe	
PCE - Tetrachloroethene			HD- Hammer Drill	
TCE - Trichloroethene	L			
Sampled By: Nate Vogan	Reviewed By:			

Surveyed	All points
	SA-RP01-09
SA-BP01-08	SA-BP01-08
SA-PS01-10	SA-PS01-10
SA-PS02-11	SA-PS02-11
	SA-PS03-08
SA-PS04-10	SA-PS04-10
SA-PS05-12	SA-PS05-12
SVG-BP02-03	SVG-BP02-03
SVG-BP03-03	SVG-BP03-03
SVG-BP04-03	SVG-BP04-03
SVG-BP05-03	SVG-BP05-03
SVG-BP06-03	SVG-BP06-03
SVG-BP07-03	SVG-BP07-03
SVG-BP08-03	SVG-BP08-03
SVG-BP09-03	SVG-BP09-03
	SVG-BP10-03
	SVG-BP11-03
	SVG-BP12-03
	SVG-BP13-04
	SVG-BP14-03
	SA-BP15-03
	SVG-BP16-03
SVG-BP17-03	SVG-BP17-03
	SVG-BP18-03
	SVG-PS06-06
	SVG-PS07-06
	SA-PS08-06
SVG-PS09-03	SVG-PS09-03
SVG-PS10-03	SVG-PS10-03
	SVG-PS11-02
	SVG-PS12-01
	SVG-PS13-01
	SVG-PS14-01

Points to manually adjusts
SA-RP01-09
SA-PS03-08
SVG-BP10-03
SVG-BP11-03
SVG-BP12-03
SVG-BP13-04
SVG-BP14-03
SA-BP15-03
SVG-BP16-03
SVG-BP18-03
SVG-PS06-06
SVG-PS07-06
SA-PS08-06
SVG-PS11-02
SVG-PS12-01
SVG-PS13-01
SVG-PS14-01

#### **APPENDIX B.1**

## SOIL, BEDROCK, SLUDGE SAMPLING FIELD DATA RECORDS



	SOIL BORING LOG	
	Project Name: Industrial Overall - Supplemental RI	Boring ID:
MACIEC	Project Location: New Rochelle, New York	45-504 Page No /
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of
Boring Location: 1 MIDE STRE BIMLDING	Refusal Depth: Z, & W/S Total Depth: Z, & W/S	Bore Hole ID/OD:
Weather: 60'F (JUNIM)	Soil Drilled: 2.8 Huy Method: MAMD 7222 LS	Casing Size:
Subcontractor: Aztech Technologies	Protection Level: D	Sampler:
Driller: BOB KAMMON	Date Started: 047.17, 2015 Date Completed: 047 17,2015	Sampler ID/OD: 4
Rig Type/Model: ### LEPPROBE MANDIE	Logged By: BAS Checked By: AC 11/3/2015	· / · · · · · · · · · · · · · · · · · ·
Reference Elevation:	Water Level: 72.8 800 Time: 17.50	
bin ) are etc. / to bin ) for the second sec		dnor
o Depth (fee Sample Nuu Penetrati Recovery ( PID Heads) Reading (p	Sample Description and Classification	S S S S S S S S S S S S S S S S S S S
A/	0-015' CONVIDETE & ALLARECATE	PLAIDING
	0.5- : RICONIN TO LT BROWN F/C SAND &	FLODE
· L.O. 1	WROTEL, WELL IMANEN BRICK OPENERNT	
	Quel Stanta M Drugs	c. /
	T' ", MOIST, NI, DENSE)	514
SI NA	Fill ?	A CONTENTED SOIL
		SAMPLE P2.7' Men
1720		300104-45502003
		C172.
	BUTHAL BOST BLO WILLIAND TOPIS:	
<u>9</u>	VILEY NOT PEDROCK	
5		
10	07	
NOTES: MONTUPING BREATHING ZON 02:21.0 LU: P LEL: P H2S:4	SE VI 4-LATS METER '	SOIL BORING LOC

							SOIL BORING LOG		
- AMM	ΤΝ /Ι	· ^	$\mathbf{C}$	┑┍╌┰╌┑╵			Project Name: Industrial Overall - Supplemental RI	Boring I	D:
	IVI	A	IC		El		Project Location: New Rochelle, New York	Page No	43-304
511 (	Congress	Street,	Portland	d Maine 04	4101		Project No.: 3612112221.06 Client: NYSDEC	o	f: 2
Boring Lo	ocation:	ASTER	N STIDE	OF STET	BLALDIN	h	Refusal Depth: 18.2'365 Total Depth: 18.2'	Bore Ho	le [19/OD: 2.5''
Weather:	40F	<u>su</u>	INNY	1 1 1			Soil Drilled: 14.8 Method: 31 PECT Plural	Casing S	Size: -
Driller	actor:	Azte	ch Tech 1 Anna a	nnologies	3		Date Started: art 16 2 a.C. Date Completed: Outstor	Sampler:	1800 2 Er
Rig Type	Model:	2	###	Lak 10	DT		Logged By: BAS Checked By: Hun 1121	Sampler	10D. 2.3
Reference	e Elevatio	n:					Water Level: Time:		
Sam	ple Infori	natior	1	Mor	nitoring				
Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
0.0				101			Q-0,4 ( DNDETE & HUI, OF TATE & FLOOR		
			.  '				a second and the second s	7/5	>
1				<del>8.5</del> 3:9		Ð	FEW M/C SAND, TRACE GRAVE, POORLY GRADED SP, MDENSE, MULT,	Î	CONTECTED SON VDC SAMPLE-@ 112-115'827
e1	50			4.3			Fill 2		000845
@	3.16			5.9				5p/sn	
				u·8					
				8.9				₩	
				10.9					IN PATER SOLLVOL
5				11.5		R		-	Stupte @ 4,81 412 [ Houto 7- 45 504005] [ C
				2.8			5-8.5 OLIVE DROWN FIM SAND of SOME SILT & TRACE GRAVEL, DORLY GRADED MDENSE,	501	
4				3.7			MOIST, SP, MORE WRALER P-8'	<sup>-1</sup> /Sh	
7 S2	50	-		5.1			GRANEL, PODELI GRADED, DENSE, NP, MUIST		
@ 0% <sup>C</sup>	4,1			7,8					
8				12.5		Ð		UP	- LOWERTED SOL
				1.9					VUL CAMPLE @ 81 Mg 3100104-41504008
Ŷ				L7				Sp	(D090)
10				2.0					
NOTES:	MONTI L	04N/ 01 721	h 824 1 \$ 2. ZG	еАты И 2 .9	ZUNT	κ υ Γ Γ	N 4-WAS METER (EXHAMINIST IS VENTED OWTHINE EL: Ø 125: Ø	)	SOIL BORING LOG
						: .		·	

						SO	L BORING	LOG			
đ		ŇЛ				Project Name:	Industrial Ove	all - Supplemental R		Boring II	D: 115-574
		<b>IVI</b>	A		EC	Project Location:	New Rochelle.	New York		Page No	· 2
	511 Co	ongress S	treet, Port	land Maine 0	4101	Project No.: 36121	12221.06	Client: NYSDE	C	of	2
Borin	ig Loc	cation: <b>\</b>	ITE BV	yuplah (	(EAST)	Refusal Depth:	8,2 Whs-	Total Depth: 18.	2 Arus	Bore Hol	e ID/OD:
Weat	her:	4-0 1F	-, SWNN	N		Soil Drilled:	4.8 000	Method: DILEET	plut	Casing S	ize:
Subc	ontrac	tor:	Aztech 7	Technologie:	5		160 11	Protection Level:	D	Sampler:	
Drille	er:	BUB	hamn	6100T		Date Started: 0()	· 18,2015	Date Completed:	1, 18, 2013	Sampler	10/0D: 120
Refer	ype/M	Elevatio		0101/		Water Level	BAS	Time:	· ///	<b></b>	
S	Sampl	e Inforn	nation	Mo	nitoring			11110.	VV(		
E Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		s	ample Descriptic	n and Classification		USCS Group Symbol	Remarks
				0.9		10-14.8 6	AREY TO LT	arefish or W	E, FIM SAND		
						FEW CSAND	, TRACE 4	RAVER/SILT,	PODALY		
	53 (°	5.0		v.7		HAATOED, SP, 14:8-15 BW BEDROCK, F PROPERTIE	VERV DEN Azie to Greg Printe a 37	SE, MONT/1 (7) UNLITE W AZMOST SOIL 1	ND OLON EATYERED	-SP	
15	JA K	)		0.2 0.1 0.1						MEATE	ENED REDUCK
16 17 18	54 C m4)	3.2	1	40. <b>f</b>		IS-18.2 WE OF A M SAND UREY TO IR UNARTZ FIN	ATTHERED # ); WHINED DN STAINED 1 CA; REFULAL	EDROGE, SHINT, BLACK to Me (-17.5-18) 70	Properaties ENISH DE hoey,		
20 NOT	ES:				8	MATALOCIVE	<i>Р</i> КЛ ИЛ-НЦ	~ 1X.L' #WY	e 1501tom of 15	orny	
											SOIL BORING LOG

		Project Name: Industrial Overall	l - Supplemental RI	Boring II	1:45-505
	<b>JIE</b>	Project Location: New Rochelle, New	ew York	Page No.	1
511 Congress Street, Port	land Maine 04101	Project No.: 3612112221.06 C	Client: NYSDEC	of	à
Boring Location:		Refusal Depth: T	Total Depth: 26,5'B65	Bore Hol	e ID/OD: 4-inili × 2.
Weather: 50°F, CL	UN PREEZE	Soil Drilled: 15.5 BGS N	Aethod DIRECT Phrz	Casing Si	$ze: 4^{z}(-12,2')$
Driller: Bry LA	econologies	Pote Started Over 18 2 17	rotection Level: D	Sampler:	5 MacosCon
Rig Type/Model: ###	# leleinor	Logged By: BAS	Checked By:	Sampler,	UD: dis jurh
Reference Elevation:	~~ 10pj	Water Level:	Sime:	1	
Sample Information	Monitoring				
C Depth (feet bgs) Sample Number Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description a	and Classification	USCS Group Symbol	Remarks
	н.а	0-0,5 CONCRETE 4 ARUPE D.5-2.5: BRINN SAND & A -> HAND LEEADED TO	RATE SIDENALK. RANEL - / BAUKS& ASPHALI > 2.5' OLS	50/.	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2:5-5 BRWN PO IRANM	of BROWN MSAND	· /u	F,11
s1 2.5		CARAVEL, FEW F/C S. DROPLY ADJANEN THE NIT	AND; COBBLE (9.5!		
2,5 @ 2.3	3.7	, the provide sense	, ivi, voivest replay	SP	
	3015				COLUCITED SOIL
	son o			40	SAMPLE @ 45-5
	<u> </u>				P 3.2-3.5' Mus
	MA			0	360109-4550500
	33.4			11	C/255
5	38.5				
	37.5	5-10 BRONN TO OLIVE	BROWN ACSAND, SOME		
		MATTER, MOTST, PODENY	WARTIDED, DENSE,		
	30.5	NO DOR, MORE SILT	FROM 9-10' 424	0	
52	42.7		- - -	'V	
@	50.5				
					しいもしたわ 501
118	43.4				VOU SAMPLE C
<sup>y</sup> ''					W-505 69'0
	53.7				260109-61501
					-012
	100.5				(1305
10	255			50/50	_
NOTES:	/ * * * * *	l	······		
					SOIL BORING I

		SOIL BORING LOG	
<i>Ш</i> ТЛЛЛ	OTEO	Project Name: Industrial Overall - Supplemental RI	Boring ID: M - 505
	UIEU	Project Location: New Rochelle, New York	Page No. 2
511 Congress Street, I	Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of: Z
ring Location: LAS	THN YPE OF SHEBUL	Refusal Depth: Total Depth: 265'B65	Bore Hole ID/OD: 4-INU-1 + 2.5
eather: 55 F	WNNNIMIND	Soil Drilled: 15.5' Method: DIPUED PLM-	Casing Size: 4-INCH (~12.2' b
bcontractor: Azteo	h Technologies	Protection Level: D	Sampler: 5 MA CHOLORE
Turna/Madal:	MWNN 6610 DT	Date Started: $0078,2015$ Date Completed: $0071115$	Sampler 10/OD: 2.5-IN24
g Type/Model:	0010 07	Logged By: BAS Checked By: Huulff 113/15	
Sample Information	Monitoring	Wald Level.	
		- ·	
ffeet) / Log	pace		
ary (Nu	eads.	Sample Description and Classification	Remarks
cove	O He adiin		n nsc
Re P Sal	PII		
		HAT K ALLA DALL) CALTAL COMP. 11	
	30.5	TEN LAND	· · ·
		10. WRIVEL, MOIST, NP, NO ODDR,	
	38.6	In dense to dense;	50-1
1			12/1/Sm
2.8	41.5		
'3  /	127		
(° 2.7)	074		
	7.2		
(1)			COLLECTED SDIV VOI
	75.3	had a prover and a play and a provational	Sample Clag
Martines and a construction of the second		MUCKBORE REFUSAL PILLS & UP MOVAN CINC	1360109-43503012
		THE THE DIMENS DOWN TO DEDLOCK & THEN	01325
		WE 20 2015 - AUUEREN (4/4-INGA ID) TO SEDUNCE (DED	
			(AL)
		(120, D); BELINNING TO ROMER PIT ~5/10 GNF	IRM BEDROCK & SET HYBRIDWELL
		067 21,2015:	CORE AUN TIMES :
		CORED TAROUMAN I BOULDER FROM 12,5-13,5	says NA
		-> WAS NOT ABLE to ADVANCE CASING DUD THAT DO	
		-> Rolltapit to asht (	"MXR
7			
		· ENLOUNTERED WEATHEDED BEDDOK	
-		them 15:5' to plus pur	
		+27EZIA HAS NO MORE RODE ton	
		TOWANUNA POULTOR	
		to INTERNATION ATTENDED	N A A A A A A A A A A A A A A A A A A A
判		DENDERNE MOMPORINA WELLIN	
		- + LN HOLING	
-		"DID NOT ENCOUNTER COMMETTENT",	
		HARDER BEDROCK	,j¥
-			
		la on the sect	
<u>۲۹ ۲۰ ۲۲</u>		1 25 Bottomot BORTy = 265-1	yo repuse
<u>J1E5:</u>			
			SOIL BORING LOG
		· · · · · · · · · · · · · · · · · · ·	

		M	A		CT.	EC	Project Name: Industrial Overall - Supplemental RI Project Location: New Rochelle. New York	Boring I Page No	D: 45-50k
****	511 C	Congress S	treet,	Portla	ind Maine (	94101	Project No.: 3612112221.06 Client: NYSDEC	0	f: <b>Z</b> .
ori	ıg Lo	cation:	sou	TH E	END OF	SITEBULD	Refusal Depth: 19,0' buts Total Depth: 19.0' buts	Bore Ho	ble ID/OD: 2.5-1NU-
Veat	her:	60	<u>er</u> ?	<u>sun</u>	M		Soil Drilled: 19.0 Mb Method: DIREA Plust	Casing S	Size: NA
ubc	ontra	$\frac{1}{1} \frac{1}{1} \frac{1}$	Azte	ch Te	chnologie	8	Protection Level: D	Sampler	5 MACHOLORE
<u>ππ</u> iα (	er: Syne/	Model	HAY	<u>mm</u> ###	Lunr	<b></b> -	Date Started: 00.01 1015 Date Completed: 10124 2015	Sampler	1D/OD: 2.5-INU)
efe	rence	Elevatio	n:	mm	<u>uun n</u>	1	Water Level: 11.5 4 bda Time: 0490		
	Samp	le Inforn	natior	1	Мо	nitoring			
(SS	н					T			
C Depth (feet by	Sample Numbe	Penetration/ Recovery (feet			PID Headspace Reading (ppm)		Sample Description and Classification	USCS Grou Symbol	Remarks
					Lei		0-0,3 (ONLDETE/ANGREGATE -> SIDEWALK		
-							P.3-0.8 ASPHALT, BALK, BACKFILL	511	
ι							0.8-3 PRONTO ONCE PROVIN CUTUTION	1/1	4/11
							THE GARDE DENSE GRANDD		
		ri					Wenter and well some ist, Moist		
/		5.0					3-5 PRONN F/M SAND, FEW WANKE, TRACE SILF,		
	S1						DRY, MDE ME		AS LE MEUED SDIL
5	@	4,0					, active, NO spore		SAMPLE C'3,2' 1200
	140		•						CUN-586 ASMIMIC BIT
									DET H OF SEVER LINE
								\$P/	760109-45-506003
+							· · ·	I /F	11 APW
-			•					1	
5					4				
					L.O.1		5-le OLIVE BROWN ELCSAND & MEAVEL WELL MRADED, MOIST, SP, MDENSE Le-LIS AS & HALT & CONVERTE -> FILL	SW	É.U
							10.5-8.5 DUVE BROWN F/M SANN FINI / GANN	NA	
		5.0'					TRAVE SILT OF LOAVEL MANAT AN ANAL	·	
	52						Lamo		
	e C	5.0					We DED	So	
	0219	,					8.5-9 WATHERED BEDROCK FRATHMENT		
							9-10 OLME BROWN INTE SAND WI GAME		
							Se production -		-
							a, roomy MADED, DENSE, MONT, VERY	- A DECEMBER OF THE OWNER	
							FAINTODOR		
								Sm	
10							Mar .		
					<u> </u>		· · · ·		
<u>01</u>	<u>'ES:</u>								SOIL BORING LOG

	·						SOIL BORING	LOG		
12		ΝЛ	· <b>Л</b>	OT		۲	Project Name: Industrial Ove	rall - Supplemental RI	Boring I	D: 45-506
		IVI	. / 1			1	Project Location: New Rochelle	, New York	Page No	2
Ĺ	511 (	Congress	Street, P	ortland Maine 0	4101		Project No.: 3612112221.06	Client: NYSDEC	0	f: 2
Bori	ng Lo	cation:	Soluti	( OF SITE B	MLDING		Refusal Depth: 19.0	Total Depth: 19,6	Bore Ho	le ID/OD: 2,5-1N(4-1
Wea	ther:	ko j	<u>- SU</u>	WW.			Soil Drilled: 9.0	Method: DMEDTPLost	Casing S	Size: NA
Subo	contra	$\frac{\text{ctor:}}{n M}$	Aztec	h Technologies	3		Data Stantade Alot 21 a	Protection Level: D	Sampler	5 MARKOCOKE
Rig"	Tvne/	<u>K/i</u> Model:	<u>FI MM</u>	6610 DT			Logged By: BAS	Checked By: All Handaus	Sampler	ID/OD: 2.5-1NLH
Refe	rence	Elevatio	on:				Water Level: ~ 11.5 Ma	Time: 0900		·
	Samp	le Inform	nation	Mor	nitoring					
5 Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)			Sample Description	on and Classification	USCS Group Symbol	Remarks
				479.5		2	10-15 IRPIDELENT TO	SILVER TO OLIVE TO		
				463.2			SILT, PODALY URADDO	AND, TEW GRAVEL & TRAKE , MOIST, VERY STRONG MDENSE	SP	LO WELTED SOIL VOL SAMPLE E45-581 10.8-11,2 Bus
	53	5.0		402						360109-61506011 # 360109-61506016
	° হস্	2.4		332						C \$ 30
15				198.5						
				842.		5	15-15,8 100 DECENTION	ULITE FSAND, POORLY	Sp	CO LECTED SOIL 100
				432			15-8-19 BRONN TO O	HUETSMONN F/M SAND,		Stmple Elis-526 15.5-15.7 ( 042)
		Цa		185			FEW MRAVEL, MO.ST	to WET, NT, NOENSC		320109-45526016
	54	50		101			TO DENSE, METTER	ED BA LOBACE 17,9 (		. @ <del>\$50</del> \$45
	C	p"/		Gai			PODDLY GRADED			
	084	24							S	
	- 1	·		33.5					•	
				4.0				internet of		
					841		MACIDOLIPE PEPUSAL C	17 Why = Bottom of the	U	
20					, v					
<u>NOT</u>	<u>'ES:</u>			/						SOIL BORING LOG

					SOIL RODING L			
ALAIM	· •••••	× ~			Project Name:		Boring II	
	N/I	A		$\mathbf{FC}$	Industrial Overall -	- Supplemental RI	Loung II	~US-507
	<b></b>				Project Location: New Rochelle, New	w York	Page No.	I
511	Congress S	treet, Portla	and Maine 0	4101	Project No.: 3612112221.06 Cli	ient: NYSDEC	of	2.
Boring Lo	ocation: S	E SIRE	PULLON	4	Refusal Depth: NA Tot	tal Depth: 20	Bore Hol	e ID/OD: 2.5-1N4
weather:	<u> </u>	tr j j (	UNNY		Son Drilled: 10' Me	ethod: DIVERT PLISH	Casing S	ize: NH
Driller	DAVI LIA	TAALAN NO	N	3	Date Started 201771 2 aut	the Completed: MIT 21 1 AT	Sampler:	3 MACDOLONE
Rig Type	/Model:	###	L Le los	<u>n</u> r	Logged By BAS Ch	ecked By: Qan Manual	Sampler	ID/OD: Z.S-INCH
Reference	e Elevatio	n:			Water Level: $\sim q$ $Phh$ Tin	me: 103D	P	
Sam	ple Inforn	nation	Mo	nitoring				······
© Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description an	nd Classification	USCS Group Symbol	Remarks
			11		O-013'- CONLATE & AULIPE	WATE - MDEWATK	$\sim$	
			~~, )		03-05 ALUNITEDALL			
	5.0 3.7	,		Å	0.5-2.5 OLNETO REDDHING TRACE ARAVEZ, MOIST, \$1 2.5-5 BROWN TO REDDHING SOME # GRAVEL, POOLING NA, CONPART TO LOUSE, N	BROWN F SILTY SAND, IMP, DENJE, I BROWN FLM SAND WAVED, MOIST TUDRY SP	Smy	/R/1 CONFLITED SOIL SAMPLE NUBLE DOTTOM OF GUELLINE 2.5'-3.0' BB [3/40109-61507023] [00955
5			0.3				37/	K, U
			0,5		5.6 : SAME AS 2.5-5 6-6,5 CONCRETE & ASPHALT	r	Sp /	[E,1]
			0.9		6.5-9 BROWN TO OHVE	BROWN M SAND, PODELY	¥₽	
S2 @ 060			3.5 7.8		9-10 WREFISH OHVE, POTONI REPORD, MOIST	+ SAND, FEW STLT	Sp	
			7.8 4.NW		0 DOZ	,	<b>-</b>	(), LECTED SOIL VUCSAMPLE P 9,29.6 1000 (TOP VF CONT.)
			↓		17		50	360109-655075097
10				.			47	$\mathcal{O}(\alpha m)$
NOTES:	Ø	P10 M	ut wor	KINA C	ALL ALLAND			SOIL BORING LOG

					SOIL RODING			
ALA	111 -	AT A			Project Name: Industrial Out	Proll Supplemental DI	Boring I	D: / , / 1
2	/ IV	P		-j( )	Deviant Laurtine New Deviation			<u>u)-507</u>
5	11 Congres	s Street	Portland Maine 04	101	Project No : 3612112221.06	Client: NVSDEC	Page No	. 2 6 <b>7</b>
Boring	Location	: S	= cite PIMI	in h	Refusal Depth: <b>NA</b>	Total Denth: 20	Bore Ho	
Weath	er: 7	one s	UNINV		Soil Drilled: 20	Method: DPD177 Phon-	Casing S	lize: NA
Subcor	ntractor:	Azte	ch Technologies			Protection Level: D	Sampler	S' MACKOCORE
Driller	: QF	(A	nn ONP	1	Date Started: OCT 21, 2015	Date Completed: 046 21,245	Sampler	ID/OD: 2.5-WCH
Rig Ty	/pe/Model	!	6610 <b>DT</b>		Logged By: BAS	Checked By: Alult 11/3/15		
Refere	nce Eleva	tion:			Water Level: 19 Day	Time: 1030 VV		
Sa	ample Info	rmatio	n Mon	toring	-			
Depth (feet bgs	Sample Number Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Descripti	on and Classification	USCS Group Symbol	Remarks
			325		10-14,5 WEEY 15H 01	IVE to IRA DECENT		
			281		GRAPED, Meisr, VE	by strength opport	sp	
<u> </u>	3 5,0		352		NY, COMPACT.	IN FLM SALIS LOUGHLE		(AWPOTED SOLVIDE
12 6			421	43	TO DENSE, MOIST,	NP		Shuple @ 45577
'	010 9,1		139					3160109-63507012
			149					@1615
			63.5					
15			47.5				59	
			56.5		15-20 BRUNNTO R	LODMAN BROWN		
					the course	and armine		
			39,7		TIM SAND, TEW SILT	I SOME FARATEL		
			12.5		(OBBLE (QUARTZ)	C 18.5' Buy DODELV		
			1213		GRADED, MDIDIT	WET IND		
	= 5	0-	8.9			NP, DEWDE	SO	
'	Y	1	4.6				$ \mathcal{Q} $	
	$\rho$ 4	1	u ve					
			3,7					
	1030		1101					
			1.0					
			0.7					
			8,0					
20			0,8		Bottom	5+ boing 2 20'665 - No	Refi	isul
NOTE	<u>s:</u>				P-2-7	· · · · · · · · · · · · · · · · · · ·		SOIL BORING LOG
	· · · ·							

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						SOIL BORING	LOG		
	Al Al	ТАЛ	· <b>A</b>	OTT		Project Name: Industrial Overal	1 - Supplemental RI	Boring I	
	2	IVI	A	$\mathbf{U}\mathbf{I}$		Project Location: New Rochelle N	lew Vork	Daga Ma	45-508
	511 (	Congress S	Street, P	ortland Maine 041	01	Project No.: 3612112221.06	Client: NYSDEC	Page No.	· · · · · · · · · · · · · · · · · · ·
Bori	ng Lo	cation:	> 64 5	STTE BLULDING		Refusal Depth: 16,8 Blue T	Fotal Depth: 16.8 (m)	Bore Ho	e ID/OD: 2 5-(NZ1)
Wea	ther:	701	F, Su	NM		Soil Drilled: 16,8 Mrs N	Viethod: DIPEET Plush	Casing S	ize: NM-
Subo	contra	ctor:	Aztec	h Technologies		F	Protection Level: D	Sampler:	5' MAUROCORE
Drill	ler:	KAY H	Amu	WND		Date Started: 1 21, 2015 I	Date Completed: OUT 21, 2015	Sampler	1D/OD: 2,51NLA
Rig' D-f	Type/	Model:	; 	### Ulelodt		Logged By: BAS (	Checked By: Hawliffe 11/3/15	1	
Refe	Same	Elevatio	n:	Monit	oring	Water Level ~ 11 mm	Time: 11300 W	ļ	
(s									
Oepth (feet bg	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description	and Classification	USCS Group Symbol	Remarks
				L.g.		0-0.3 CONTRETE STOR	EWALLE	××	~
	-					10-25 REDDISU BROWN	DIST, COMPACT	Sny	RII
	sı @ [03f	5.0	-			2.5.5 BROWN TO PEODI FEW FSAND & FARA WOIST, COMPACT TO L	15H BROWN, MSAND VEL, NOVELY GRAPED. OVSC, NP		-
5	-			Q.3 0.4 0.7				5p/	F.11
	-			0.3 0.4		5-6 SAMEA 2.5-5 6-6.6 CONCRETE & ASP 6.6-9,5 BRUIN TO 61	41417 Live Bizonin F/C	50/	Fill
	S2 @	5°D		0.1		SAND WY LITTLE heard mest, NP	EZ, WELL WADED, COMPAG	***	_
-	1040	5.0		0.2		SILT & FW WEADOWN SILT & FW WEADOWN NP(SP) FAINT ODOR	MASAND MSOME Melst, MDENSE,	รฟ	
				ø.l					-
10				e.2				م <sup>ر</sup>	
NOT	TES:	<u>_</u>							
	~	71	50	with sot	48-	506		<del></del>	SOIL BORING LOG
		小田山南西部	R		Station of the		-4.96-00-98215-16-1	Contract Con	

V.

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V.

	SOIL BORING LOG	
	Project Name: Industrial Overall - Supplemental RI	Boring ID:
MACIEC	Project Location: New Rochelle, New York	H3-508
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	$r_{age NO.}$ 2 of: Z
Boring Location: ~ 7' SOUTH of Usque	Refusal Depth: 11,8' Mas Total Depth: 16.8' Mas	Bore Hole ID/OD: 2,5-INCH
Weather: 70 \$ 15UN M	Soil Drilled: 16,8 plas Method: DIDECT PUSA	Casing Size: NA
Subcontractor: Aztech Technologies	Protection Level: D	Sampler: 5' MATROCODE
Driller: RAY HAMMOND	Date Started: CT 21, 2015 Date Completed: CT 21, 2015	Sampler ID/OD: 2.5-1NCr1
Reference Elevation:	Water Level: ~ 11 44. Time: 11 30	
Sample Information Monitoring	Hater Bore. 11 Day Hand. 1150	
<sup>1</sup> Depth (feet bgs)          Sample Number         Penetration/         Recovery (feet)         Recovery (feet)         PID Headspace         Reading (ppm)	Sample Description and Classification	di Remarks Sympol SDSU
1.9	10-13,5 BRONN TO OHVE'BROWN TO TAN	
	FICSAND US Some WRAVEL, COULDERE CO 11, VELL WRADED, ND, MOIST, NODENSE 70 COMPART, V. PAINT ODDR P-13	SW
3.1	13,5-15 BROWN TO OLIVE BROWN FSAND	COLLECTED SOIL
$-C_{49}$ 8.1	) FON MIC SAND, SOME GRAVEL, POUPLY	45-528 @ B.2'Sky
0.8	4RADED, MOILT, DENSE,	760107-6550863
e. 9		50 ° 1055
15 0.7		
	15-heits BROWN TO OLIVE BRAND SAF STLETY BAND PEW GRAVEL, POOPLY GRADED, MET,	
. v. 2	LOOSE, NO ODOR	510
168 P		
Ios, 5.0	Bottom of bourn = 16.8'BGS Refused with Direct Push	
20 NOTES:		

SOIL BORING LOG

		IVI	<u></u>	L.	E.C.	Project Location: New Rochelle, New York	Page No	<u> 33° 361</u>
2.19 <b>17.18</b> 14	511 C	ongress a	street, Po	rtland Maine (	4101	Project No.: 3612112221.06 Client: NYSDEC	0	ани и и и и и и и и и и и и и и и и и и
Bori	ng Lo	cation:	MA	JR.	an a	Refusal Depth: NA Total Depth: 15-0	Bore Ho	1e ID(OD) 2.35
Weat	ther:	10°	Mc	Techny		Soil Drilled: 15.0 Method: Divect Push	Casing S	ize: NA
Drill	onira	ctor:	Aztech	Technologie	S	Date Started: Ici Date Completed: Ici Date	Sampler	DOD: 15 1A ST
Rig	Type//	Model:	#	## 6610		Logged By: WBAS NW Checked By: 1PP 12/21/6	Gampion	
Refe	rence	Elevatio	n:	er wil de worden en enwechen sok in fas	the Orac processor with the State State and	Water Level: NM Time: NA		naman da kana kana kaya yang kana kana kana kana kana kana kana k
	Samp	le Inforr	nation	Mo	nitoring		W methods 10.4 millions and 20	n nation line of the loss of anneal fire in front to large for the large
S Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description and Classification	USCS Group Symbol	Remarks
		5-0/ 0.9		0.0		Brownish black to norterate brown; pourly graded soud up gravel, trace 1" angular crushed stam + coal fragment project dense; no starining, no odars	F:11	
	s <b>/</b>							
5		-						
	55%	5.0		0.0		Moderan brown; poor's graded Sand; Arace me subrounded gravel; moist; redum dense	50	Sample at G.O (Dup takin) 360109-55- \$ 301006 - 0 301006 D- 0
10 NOT	'ES:							
								SOIL BORING LOG

and the second s	IN I	NA	Δ		FC	Project Name: Industrial Ov	erall - Supplemental RI	Boring I	D: 55-301
		TAT	T.T.		ĽU	Project Location: New Rochell	e, New York	Page No	. 2
<u> </u>	511 (	Congress &	treet, Por	tland Maine 04	4101	Project No.: 3612112221.06	Client: NYSDEC	0	f: 2
Bori	ing Lo	cation:		12	·····	Refusal Depth: NA	Total Depth: 15.0	Bore Ho	le ID(OD) ), ) 5
wea	uner:	70	M	Clover			Method: Direct With	Casing S	
Deill	ler	<u>cioi.</u>	AZICCII .	recimologies		Date Started: Julaa Let	Date Completed: 1. 1.	Sampler	10/00: 1.5 (1.5 C
Rig	Type/	Model	·	6610		Logged By: MD-BAS- AM	Checked By: Ipp 12 (all 1)	i banipior	
Refe	erence	Elevatio	n:			Water Level; NM	Time: MA	2	
	Samp	le Inforr	nation	Mor	itoring				
5 Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Descript	ion and Classification	) USCS Group Symbol	Remarks
10						- will make and how in	well and the co	(h)	
ĺ	é	5.9				Luche to trare for	found it must .	a ··· <del>smi</del> sm	Jampies ait
	-	5.9				Coline and only	iominua graver, Na	u	10.0 and
						JULL MOIST to W	i oanse; no ou	ions,	13.0
	53					no staining			(7) 210109-55-7mlat
	e							4	52/0109-55-301012
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1.7		<u> </u>							
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<u>NO'</u>	TES:	<u></u>				<u></u>			
									SOIL BORING LOG
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9 4 - 9	201 - 101	Gartine,					/ / P	SOIL BORING LOG		
	er en ser en Ser en ser en		- m	969 ( 18 Marine				Project Name:	Boring II	D:
Æ		N/I	Α				1			55-400
A BAR	劉 .		nden a	Site Man	سر سلاهم <i>الاس</i>	B	A	Project Location: New Rochelle, New York	Page No.	
Dori	211 C ###################################	ongress a	street,	POTIE	na Maine U	4101		Project No.: 3612112221.06 Client: NYSDEC	Dorn Hal	
Weat	her	6au011.	•	Mal	n sala			Soil Drilled: March Method: Draw Resh	Cosing S	170 1.2.25
Subc	ontra	ctor:	Azte	ch Te	chnologies	5		Protection Level: D	Sampler:	5' Macrosole
Drill	er:	Ro	1					Date Started: 10/22/15 Date Completed: 10/22/15	Sampler	ID/OD: 1.5/1.25
Rig 7	[ype/]	Model:	<b></b>	###	6610	0.4		Logged By: BAS MU Checked By: JPP 12/7/15		
Refe	rence	Elevatio	n:					Water Level: NM Time: NA		
	Samp	le Inforr	natior	1	Moi	nitoring				
Depth (feet bgs)	Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
0.0										and the second
		5.0			0.0			Brownish black poorly grower small	1241	sample at
		0.8						ul gravel (for angular); Worth large		0 5
								grushed ston; moist, dense; no		360109 - 26, 400000
						i i		Staining, norder		Q 12:18
										(1210
i										
	S1									
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	1210	5								
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5					Ŷ		:			
									SP	
		3.0			0.0			for recovery poor y grant sort		sample dut
		6.3						moderant brom; trace silt; moist, anse,		5.1
								no odors, no staining		360109-55-400005
										@ 12.12.1
	S2									
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NIOT	TELO				¢۷		-			
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5 Borine			<u> </u>			<b>7</b> .	Industrial Overall - Supplemental RI	1	- 55-400 I
5 orine		استلاس کا س	Τ				Project Location: New Rochelle, New York	Page No	. 2
oring	511 Co	ongress S	treet, Po	rtland Mai	ne 04101		Project No.: 3612112221.06 Client: NYSDEC	0	e a
	g Loc	ation:	MN	হ			Refusal Depth: NA Total Depth: 15.0	Bore Ho	le ID/の L・2 ら
Veath	ner:	6	80	Melon	7	<u> </u>	Soil Drilled: 15.0 Method: Driect Push	Casing S	ize: $\sqrt{4}$
ubco	ntrac	tor;	Aztech	Technolo	gies		Protection Level: D	Sampler	5' Macrocorp
Driller	r: .	(-ei	<u>y</u>	((10	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Date Started: 10/23/15 Date Completed: 10/23/15	Sampler	ID/OD: 1.5 12.25
lg T	ype/A	10del:		6610			Logged By: BAS (M) Checked By: JPP 12/1115	-  ·	
eiere S	ampl	e Inform	u; ation		Monitori	10.	water Level: NM 11me: NA	-	
cet bgs)	lumber	tion/ (feet)		lspace		*6	Sample Description and Classification	Group abol	Remarks
5 Depth (	Sample N	Penetra Recovery		PID Heat	Ncaulity			USCS	TOMANAD
		e .) /			2		1010.3 SAA	30	
		21					brom , puell graded sound of gravel	Sw-sm	Sarple at 12.0 360109-55-
	53						to net; dense, no staining, no oder		400012 @ 12:25
	122								
15									
							EOB at 15.0 ft bgs		
							(JPB)		
20									
OTE	<u>ES:</u>	<b>_</b>	<b>1</b> ,		·				SOIL BORING LOG

i de la constante Constant	an si Silangan Silangan	<b>()</b>						SOIL BORING LOG		
	( () ()	N A	٨				~~¥	Project Name: Industrial Overall - Supplemental RI	Boring II	D: \$5~401
		TAT		16			لمنب	Project Location: New Rochelle, New York	Page No.	. 1
	511 (	Congress	Street,	, Portla	and Maine (	04101		Project No.: 3612112221.06 Client: NYSDEC	of	2
Born	ng Lo ther:	cation:	1	MA	e		=	Refusal Depth: VA Total Depth: 15-0	Bore Hol	e ID(OD) 2.25
Subc	contra	<u>68</u>	Azte	ech Te	chnologie	s		Protection Level: D	Sampler	The Marrie and
Drill	er;	Re	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					Date Started: 10/20/15 Date Completed: 10/20/13-	Sampler	ID/OD: 1.5 / 2.5-5
Rig'	Туре/	Model:		<i>###</i>	6610 C	7(		Logged By: DAS MY Checked By: JPP 12/11/5		
Refe	rence	Elevatio	n:					Water Level: NM Time: NA	. <u> </u>	
	Samp	le Inforr	natio	n .	Mo	nitoring T				
O Depth (feet bgs	Sample Number	Penetration/ Recovery (feet)			PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
		5.01	i deren	Ι	6.0	Í		Bournis's black; poorly graded sond	FILL	Soil Somply
		1.0						upposel , little crushed store,		at 0.4
		(·			1			trace coal fragments; moist; median 2		
								dense; no staring, no oder		560 109-55-
			·							401000
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	S1									· · ·
	@									
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5										
		5.0			6			5=5.1 SAA (shull) (W) Sluff	5.00	soil saysu
		g			1.			5. P-5.9 Poors ground send ul gravel;	SP	at 5.5
		0- (						moderate brown; little large 1" drometer		
								grovel; moist; dense; no staining, no odor		360107 - 55 -
	do.									40,006
	52									@ 12:05
	ື ເ	~								
	1.20	15								· · ·
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NOT	ES:									
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	<u>I</u>	ΝΛ	Δ	(		FC	7	Project Name: Industrial Ove	rall - Supplemental	RI	Boring II	): 55-401	
颞		TAN'T		L	، سال اس		4	Project Location: New Rochelle	, New York		Page No.	2	
-	511 (	Congress S	Street,	Portla	and Maine	04101		Project No.: 3612112221.06	Client: NYSD	EC	of	2	
ori	ng Lo	cation:	<u>۲</u>	INR	, <b></b>		_	Refusal Depth: $MA$	Total Depth:	15.0	Bore Ho	eID/OD/ 2.2	5
ea 1	ther:	<u>680</u>	<u>Arto</u>	1 ele	ahmalania	<del>.</del>	÷	Soil Drilled: 15.0	Method: Direc	t phism	Casing S	12e: MA	
-11	er'	<u>0.01.</u>	AZIC		scilliologie			Date Startech and Las lun-	Date Completed:	D	Sampler.	D/OD 1. EL	54 V cm
α '	Tvne/	Model:	7	60	510	***		Logged By: BAS win	Checked By: \gc	1010-115	Banpici		* >
e fe	rence	Elevatio	m:		······································			Water Level: NM	Time: NA	16/115			
	Samp	le Inforr	natior	1	Mc	nitoring			,	· · · · · · · · · · · · · · · · · · ·		· · · · · ·	
וו (נכנו נוצט)	le Number	etration/ very (feet)			Icadspace ing (ppm)			Sample Descripti	on and Classification	n .	Symbol	Remarks	
	Samp	Pen Reco	,		PID H Read						5.		
<u></u>		0.0						Man with home in	lease how .	• • • • • • • • • • • • • • • • • • •	Sw-Sn	Soit same	
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		3.5						strate E rounded	ararel : more	i dunce i			•
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	1.											401011	
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	511 C	ongress S	treet, Port	land Maine (	4101	Project Location: New Rochelle, New York Project No.: 3612112221.06 Client: NYSDEC	Page No. ) of: 1				
Borin	g Loo	cation:	MNR	<u>}</u>		Refusal Depth: VA Total Depth: 15.0	Bore Hole ID/OD 2-25				
Weath	ner:	<u>66°</u>	Aztech T	rt)	d	Soil Drilled: 15.0 Method: Direct Push	Casing Size: MA				
Drille	r:	Rau		contologic	5	Date Started: 10/00/15 Date Completed: 10/00/16-	Sampler 1	1D/OD: 15/2.25			
Rig T	ype/N	Model:	###	# 60:00	τ	Logged By: BAS New Checked By: JPP 12/7/15					
Refer	ence	Elevatio	1:			Water Level: NM Time: NA		1979-1987			
S	ampl	le Inform	ation	Mo	nitoring T						
Oeptin (feet bgs	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)		Sample Description and Classification	USCS Group Symbol	Remarks			
	•	5.0			-	Brownich black; poorly graded Sand of gravel; fittle force gravel; trace coal fragments to crush run;	Fil	5011 500 mg 4 a 1 10 360109-55-4000			
	S1					noist, wed dense; no staining, no odor		@ 11:35			
	@ 11 3	5									
5							5 - 11				
. :	82	5.9 1.3				5-5: M State (possible sluff) S.1 - 6.8 modurate brown; pourly Graded Soud of gravel; little to: som fru subsounded gravel; moist, dence, no staining, no oder	50	50il saple at 6.0 360109-55-4020 (0 11:40			
	@ 11	10	-								
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NOT								L <u></u>			

	n stall <sup>en</sup> ste neg ste stere ne ste			ц. С <sub>ве</sub> на				SOIL BORING LOG	Doule - T	
		N/I	Ά	(		Fr		Industrial Overall - Supplemental RI		- 55-402
	劉 .				ب سالک اس			Project Location: New Rochelle, New York	Page No.	2 .
ori	511 C	congress &	street, I	Portla:	nd Maine 0	4101		Project No.: 3612112221.06 Client: NYSDEC	Of Deve Het	
Jea	ther:	canon.	160	MA	lower			Soil Drilled: 15.0 Method: Disant Berl	Casing S	
ubc	ontra	ctor:	Aztec	h Te	chnologies	3		Protection Level: D	Sampler:	5' Macrocove
rill	er:	Ro	2					Date Started: 10/22/15 Date Completed: 10/22/15	Sampler	ID/OD: 1.5 1 2.25
ig '	Гуре/	Model:		66	10			Logged By: BAS MU Checked By: JPP 12/7/15		
efe	rence	Elevatio	n:	<u> </u>			and the second distance of the local distance of the local distance of the local distance of the local distance	Water Level: NM Time: NA		and the second
	Samp	le Inforr	nation		Moi	utoring				
5 Depth (feet bgs	Sample Number	Penetration/ Recovery (feet)		-	PID Headspace Reading (ppm)			Sample Description and Classification	USCS Group Symbol	Remarks
							<u> </u>		10	Louil Sample
<b></b>		4.1						10-11.4 SAA 11.4-14.1 grayish brown; well graded	31- 3~-5101	at 11-2
	555							sounded growel; trace organics; met; dense; no odors, no staining		@ 11:45
	14	5		•						
					·					
15										
								EOB at 15.0 ft by		
						,		JPP		· · ·
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01	<u>'ES:</u>									SOIL BORING LOG

	MAG	. ال	FC	Project Nar	ne: Industrial O	verall - Supplemental RI		Boring ID	): 35-403
	TATT V			Project Loc	ation: New Roche	ile, New York		Page No.	<u> </u>
511 Soring L	congress Street, Port	iand Maine 0	4101	Project No.	: 3012112221.06	Client: NYSDEC		Bore Ucl	
Weather:	. 65° Mel			Soil Drilled	1: 15.0	Method: Disco	Push.	Casing S	ze: NA
ubcontr	actor: Aztech T	echnologie	s ·			Protection Level:	)	Sampler;	5' Macio core
Driller:	Roy			Date Starte	d: 10/00/15	Date Completed:	0122/15	Sampler J	D/OD: 1.512-25
tig Type	Model: ###	# 6660	DT	Logged By:	BAS NW	Checked By: JPP	12/7/15		· · · · · · · · · · · · · · · · · · ·
Sam	ple Information	Mo	nitoring	water Leve	a. <b>IN IV</b>	I me: NA	<b>,</b>	<b> </b>	
C Depth (feet bgs)	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)			Sample Descrip	tion and Classification		USCS Group Symbol	Remarks
	5.0/ 2-0	0.0		groupsh proonly crushu moist no	black to graded ce r con store nuline storenerg	brownish black ; ind w/ gravel : + coal fra danse, no c	; linth grants; odu-	Fill	souple at 1.6 ff fys 360709-55-40300 @ 11110
	¢								
5					· · · · · · · · · · · · · · · · · · ·				
	5.0/	0.0		moduan Sand Fm	· brom ; w/ gravel rounded gra	poorly grow	ted frace	sp	Sarple as 5.6
				no	Stainmy	no odor .	· ·		360109-55-403006 @ 11:15
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10					<u>.</u>		······································	2 - - - - - - - - - - - - - - - - - - -	х Х
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M	ЛЛ	Δ	$\cap$	Fr		Industrial Overall - Supplemental RI		65-403
	TAT				1	Project Location: New Rochelle, New York	Page No.	2
511	Congress S	Street, Po	rtland Maine (	04101		Project No.: 3612112221.06 Client: NYSDEC	of	<u>} }</u>
oring L	ocation:	M	NR			Refusal Depth: NA Total Depth: 15-0	Bore Hol	e ID/OD 7.15
eather:	65	2 Mel	over			Soil Drilled: 15.0 Method: Direct Puch	Casing S	ize: NA
bcontr	actor:	Aztech	Technologie	S		Protection Level: D	Sampler:	5' Murocore
a Truno	Madal	<u>m</u>	6610			Date Started: 10/74/15 Date Completed: 10/12/15	Sampler	ID/OD: 1.5 12.24
ference	- Elevetic		0010			Logged By: BAS CO Checked By: JPP 12/115		
Sam	ple Inforr	nation	Mo	nitoring		Water Level, NM 11mic, NA		ing a second
e Number	stration/ ery (feet)		(cadspace ng (ppm)			Sample Description and Classification	CS Group Symbol	Remarks
Sampl	Pene Recov		PID H Readi	 			ns	
	5.0		0.0			10-10.6 SAA	SP	. · · .
						10:6-13.2 grayish Goin; well graded	su-sm	Soil souple
						Soud w/ silt; grace of rounded gravel	1	a- 47 m
53						+ organics, met dense, no starining		
Ø						nu odur		MS/MD
								Taken
110								al menter i for una
-	1		•					360109-25-903
								(MGIMD)
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<u>TES:</u>								SOIL BORING L

MACTEC	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55 - May				
	Project Location: New Rochelle, New York	Page No.				
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	Bore Hole ID/OD) 2.25				
Veather: 65 <sup>-5</sup> MC In and	Soil Drilled: 15.10 Method: Date: 0.1	Casing Size:				
subcontractor: Aztech Technologies	Protection Level: D	Sampler: Macroco				
Friller: Ray	Date Started: 10/02/15 Date Completed: 10/02/15	Sampler ID/OD: 1.5 12.2 5				
Lig Type/Model: ### 661007 []	Logged By: BAS Mu Checked By: JPP 12/1/15					
Leference Elevation:	Water Level: NM Time: NA					
Sample Information Monitoring	3 ····					
G Depth (feet bg: Sample Number Penetration/ Recovery (feet) Reading (ppm)	Sample Description and Classification	Remarks SUS SU SU SU SU SU SU SU SU SU SU SU SU				
- <u>5.0</u> 4.3	0-07 (nisher run 0.7-1.3 bromish black; poorly gradid Sond w/ grwel; likke to trace coal fragments; trace glass; dry to moist; red. dense; no storining; no Odors	Stor 50:1 somple talen ar 0,9 FELL 360109-55-404000 C 10:45				
5	Milan have and and	« ) Soil sample				
	ul gravel; little to trace ( gravel (subrounded; moist; dense; no staining no odors	31 at 6.3 360109-55-404001 @ 10:50				
10						
OTES:		SOIL BORING LOG				

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	Project Location: N	lew Rochelle, New York		Page No.	2	
511 Congress Street, Portland Maine	04101 Project No.: 3612112	221.06 Client: NYSDE(	2	of: 2		
Boring Location: MNR	Refusal Depth: N	4 Total Depth: 15	<u>ب</u> ې .	Bore Hole II	D/00 2.25	
Subcontractor: Aztech Technologi	Soil Drilled: 15	.U Method: Direct	r Push	Casing Size	NA	
Driller O	Date Started:	Protection Level:	D	Sampler: 2	Macrocone	
Rig Type/Model: 6610 DT	Logged Ry: F	$\frac{1}{2}$ $\frac{1}$	10 Jalie	Sampler ID/	00.1.5 (2-25	
Reference Elevation:	Water Level: NM	Time: NA	141115			
Sample Information M	onitoring					
<ul> <li>Depth (feet bgs)</li> <li>Sample Number</li> <li>Penetration/</li> <li>Recovery (feet)</li> <li>PID Headspace</li> <li>PID Headspace</li> </ul>	Sam	ple Description and Classification		USCS Group Symbol	Remarks	
53 50 0-0 53	10-11.9 11.9-13.5 Sond w/ torgonice No staine	SAA gragesh beam; vel silt; trace F romand s; vet to moist; ne y i no odors	l gradieł grane( d. druse;	5ρ  su5M	Sarple at 10.5 360109-55- 404011 @10:55	
— e 1055						
15	15M					
			/		•	
		(JPP)				
<u>NOTES:</u>					SOIL BORING LC	

Alla	ΝЛ	$\wedge$			Project Name: Industrial Overall - Supplemental RI	Boring II	D: SS = Yos C
	IVL	11	. ال ب	EU	Project Location: New Rochelle, New York	Page No.	<u> </u>
511 (	Congress Stre	et, Portla	and Maine 0	94101	Project No.: 3612112221.06 Client: NYSDEC	of	2
Boring Lo	ocation:	Μ	INR		Refusal Depth: 12.5 Total Depth: 12.5	Bore Ho	e ID/OD): 2-25
Veather:	630	M	clondy.		Soil Drilled: 12.5 Method: Direch Push	Casing S	ize: NA
ubcontra	actor: A	ztech Te	echnologie	S	Protection Level: D	Sampler:	5' Macrocose
ig Type	<u>Kay</u> /Model:	###	644	.۳	Logged By: 1345 WW Checked By 100 10 10 10	Sampler	<u> </u>
eference	e Elevation:		1000	<u>,                                     </u>	Water Level: NM Time: NA		
Sam	ple Informa	tion	Mo	nitoring			·
h (feet bgs) e Number	stration/ ery (feet)		cadspace ug (ppm)		Sample Description and Classification	CS Group Jymbol	Remarks
Sample	Penc Recov		PID H Readi			ns,	
	5.0		0-0		Brownish black; pourly graded sand of gravel; lintle to some fine ground;	(SP)	soil sample ent 1.3
	1.9	,			Linkle coal fragments; Moist to ong; dense; no stationy no color		360109-55-405000 @10:25
		5					
@	5						
5			of				
	5.0		0.0	· · ·	5-5-3 SIAA 5-3 3.5 Moderan brow ; poorly graded	SP	soit souph
	3.5				Soud al grouch; little for gravel (subroadul); trace a rounded gravel;		360109- 55-405008 @10:30
S2 @	30				No staining, no odor		
						1. 10 A. A	
10							
OTES:							SOIL BORING LOG
	· · · · · ·			n de la composition d Entre de la composition de la compositio		a a state a	

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Allel	ΊΛΛΛ	OTEO	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55-405
	TATA	ULEU	Project Location: New Rochelle, New York	Page No. 2
511	Congress Street, Po	ortland Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of: 7-
Boring L	ocation: MA	rR .	Refusal Depth: 12.5 Total Depth: 15.5	Bore Hole ID(OD) 1.25
Weather:	630 1	y clanary	Soil Drilled: 12.5 Method: Direct Push	Casing Size: NA
Subcontr	actor: Aztech	Technologies	Protection Level: D	Sampler: 5' Monorescen
Driller:	Roy		Date Started: 10/22/15 Date Completed: 10/22/15	Sampler ID/OD: 1.5 (2.29
Rig Type	/Model:	6610 107	Logged By: OBAS-NW Checked By: JPP 127/15	
Referenc	e Elevation:		Water Level: NM Time: NA	
Sam	ple Information	Monitoring	-	
5 Depth (feet bgs) Sample Number	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description and Classification	Remarks SOSO Control SOSO CONTROL SOSOS CONTROL S
	51	0.0	10-11.3 SAA 11.3-12.5 grayish brow; well graded	SP Soil Saple SW-SM at 11.5
53  103	3		Sand all silt; lutte to trace f toman gravel; met; meddan dense; no staining; no odor	Saturahil zon 360109-55-4050 (@10:35
15	ki ka		7 245 05	
			Artusul at 12.5 ft 675 EOB	
·				
			AAL	
20				
NOTES:			1	SOIL BORING I

MACTEC	Project Name: Industrial Overall - Supplemental RI	Boring ID: 55-406
IVIALLU	Project Location: New Rochelle, New York	Page No.
511 Congress Street, Portland Maine 04101	Project No.: 3612112221.06     Client:     NYSDEC       Refusal Depth:     ∧ ∧     Total Depth:     \\$ - 0	of: 1 Bore Hole ID/OD? ).75
Boring Location: MNR		
Veather: 56° M (lov M	Soil Drilled: 15-0 Method: Direct Puish	Casing Size: NA
Driller: Q	Date Started: 16/12/100 Date Completed: 10/12/100	Sampler: 5 Macrocore
Rig Type/Model: ### 6400 DT	Logged By: BAS AMU Checked By: 120 12 12 14	Sampler 11/01. 1.3 / 3.23
Reference Elevation:	Water Level: NM Time: NA	
Sample Information Monitoring		
Depth (fect bgs) Sample Number Penetration/ Recovery (feet) PID Headspace Reading (ppm)	Sample Description and Classification	Remarks SC Group SC Croup SC C
).0 01 1 0-0 5.0/ 0-0 122 S1 @	Poor recovery : brownish black; poorly graded Sond ml gravel; Fill: Some frac angular gravel: trace coal fragments; dry to moist, dense : no staining, no odor	Fill Sample teten (SP) at 0.8 ft Sandy lense 360109-55406000 (209:55
5.0 5.0 0.0 2 2.0 10550 10 10	Muducane brown to light yellowish brown " poorly growed sound uf grower : SP: som to within the subrowed grower i muist; dense; no steating; no odor	SP Saple takey at 5.3 ft 360109-55-406006 7 (210:00
- S-0/ - S-0/	10-11-1 SAA, becoming left of 10.5 11.1-12.7 grayish brown to hyper brown; well graded send of silt; some silt; trace clay; moist to wet; dense; no Staining, no odor bob at 15.0 ff G1, JPP	50 500 500 500 500 500 500 500 500 500
OTES:		SOIL BORING LOG

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1 1919 - 1917 - 1917 - 19	teran di amerika sera dare da Martin	a and a straight and a straight for		
			SOIL BORING LOG	
All	ΝΛΛ	TTC	Project Name: Industrial Overall - Supplemental RI Borir	19 ID:
	IVIA	JIEC	Project Location: New Rochelle, New York Page	No. (2)2-1
511 (	Congress Street, Portl	and Maine 04101	Project No.: 3612112221.06 Client: NYSDEC	of:
Boring Lo	ocation: MN1	<i>ک</i>	Refusal Depth: NA Total Depth: 15.0 Bore	Hole ID(OD) 2.25
Veather:	560 ;	M cloudy	Soil Drilled: 15.0 Method: Direct Push Casir	ng Size: NA
ubcontra	actor: Aztech T	echnologies	Protection Level: D Samp	oler: 5' Macrocom
Driller:	Ray 6	610	Date Started: 10/22/15 Date Completed: 10/22/15 Samp	oler ID/OD: 1.5/ 3.2.5
eference	e Elevation	010	Water Level NM Time: NA	
Sam	ple Information	Monitoring		
<ul><li>本 Depth (feet bgs)</li><li>Sample Number</li></ul>	Penetration/ Recovery (feet)	PID Headspace Reading (ppm)	Sample Description and Classification	Remarks
	5.0	0 0	0-0.8 grayish brown; poorly graded Sand wil gravel (Fill); Some to little Frac angular gravel; trace site; aence; hoist; no stating no other 6.8 - 1.7 brownish black; powrl) graded Soul al gravel (Fill); Some coal fragments; luttle fru gravel; trace site; moist to dry; ned dense; no stating, no other 1.7-2.0 moderate brow; pourly graded Soul; SP; little f gravel; moist; dense; no stating, no oder	1 sort sonpu at 1.0 360109-55-407000 @09.25
45	5.0	C. U	Moduce brow ; poorly graded scool; SP; little fric subromoded to founded gravel, SP noist; dense; NO staining; NO odor	Soil Souple collected out 6.0
	35			Take field dyp 360109-55- 40700613 C09:35
	5.0		10-11.7 SAA, becoming net at 11.1 12.7 -12.6 biomish gray to light gray; well graded said and silt. Some silt. trace f grouel; moist to net; sofit; no' Stainty, no ador	Soil souph collected at 11.7 @ 09:45 top of fires
NOTES:			EOB at 15.0 ft 655	دان دومن SOIL BORING LOG

			, 	i . Kana ast Biblit	A MARK MARK				
4	7	i na si	net Si Si Si				SOIL BORING LOG		
-	161-	Ň /T	A	-	ארדי	4	Project Name: Industrial Overall - Supplemental RI	Boring I	D:
	Ø	IVI.			E		Project Location: New Rochelle New York	Page No	3)- (00
5		Congress St	reet. Po	rtland Main	e 04101		Project No : 3612112221 06 a Client: NVSDEC	Page No	. <b>L</b>
oring	g Lo	cation:	Maro	Noct	<u>ц</u>		Refusal Denth: MA Total Denth: 15 (2)	Dora Uo	
/eath	er:	<u><u> </u></u>	U A	A Clum	n/m -		Soil Drilled: 15 (2) Method: Drive Aug 1	Bore Ho	
uhco	ntra	ctor 22	Aztech	Technolos	ies.		Drotaction Level D	Casing 2	
riller		0	<u>Lintoon</u>				Data Started: tayle a life Data Completed. ID	Sampler	S' Macrocore
σΤτ	vne/N	Model	<b>)</b>	44 6630	21		Langed By: Date Completed: (D/25/13)	Sampler	ID/OD: 1.5/1-35-
-fere	ence	Flevation		TH 0010			Water Lavel: ALLA		
S	amnl	le Inform	ation	N.	Ionitoring		Water Lever, NM Time: NA		
5	<u>amp</u>						· ·		
So mar marine C	Sample Number	Penetration/ Recovery (feet)		PID Headspace Reading (ppm)	<pre>x 4 5 1</pre>		Sample Description and Classification	USCS Group Symbol	Remarks
				0-0			Dusky brown to moderate brown, pourly " graded send ? SP noist some	sp	collected soil saple
		5.9	1				fine gravel ; laste to stace coal fragments; no odor : modsun dense	-	360/09-55-408000 (saly zon)
	S1 @	2							@08:50
.  0 	,8 <sup>7</sup>								
-								÷ .	
						÷ 			
.		5.0		0.0			5.0-5.8 SPA	<i>د</i> ٩	collected sort
		5.5					5.8-7.5 Moderate brown; poorly graded (emf) sand; moist; trace f	-76	360109-55-408007
	52						gravel; dense; no odor; no staining	:	@ 08:55
0	@ 85 4	, · ·							
	1	5.0		0.0			10-11.5 SAA	SP	collected soil scripte at
5	3	3.2					Soul moist: som sitt: latte organizes soft: no alos no staining		@ 09:15
	115	-					1) &= 15.2 light organizish brown; well graded of sold, moist; some site, trace rounded 1" around to no coder the statistic soft		360109-55-4080
<u>re</u> s	<u>S:</u>		••••••••••••••••••••••••••••••••••••••			Εø	B at 15.0 ft by s		, ,
				i.	15iten II		NC w screen 5-16ft to take grad	weiter	SOIL BORING LOC

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a A	SDRA MAL	TN /T	Γ. Λ		<b></b>			Project Name: Industrial Overall - Supplemental RI	Boring I	
(1938) (1938)		IVI			<u>ا ا ر</u>	El		Project Location: New Rochelle, New York	Page No	. 1
	511 C	Congress S	Street, I	ortla	nd Maine 0	4101		Project No.: 3612112221.06, Client: NYSDEC	ot	f: )
oriı	ıg Lo	cation: )	NSid	E 51	TE BLU	NUN	U	Refusal Depth: 7.8' Total Depth: 7.8'	Bore Ho	le ID(D) 2.25
'eat	her:	65	5	sur	M			Soil Drilled: 7.8 Method: DIRECT Phrt	Casing S	size: NA
ibc	ontra	ctor:	Aztec	h Teo	hnólogie	s		Protection Level: D	Sampler	S'MACROCURE
	Type/	<u> 160 B</u> Model:	UA	<u>MN</u> ###	IDN IJAND I	17		Date Started: 001 11/2015 Date Completed: 001 17,2015	Sampler	ID/OD: 1.5 2.25
g fei	ence	Elevatic	 n'	###	uu (v )	//	ו	Water Level: NM Time: NO		
1	Samp	le Inforr	nation		Mo	nitoring		And Sover Win And And		
(can nor) md	ple Number	metration/ overy (feet)			Headspace ding (ppm)			Sample Description and Classification	ISCS Group Symbol	Remarks
97 .0	Sam	Pe			PID Rea		1			
					10.1			0-0.4, CONTRETE & ANGAECATE (CYN DERS / COAL/ASH & STAN;	<b>XX</b>	e STEPLYLDINS & FLOOR
	•							0.4-5: LTBROWN TO OVINE BROWN F/M SAND, SOME/FRW WRAVEL (FINE) CONSITING OF ALMARTZITE/BIOTT	E	
	S1		-					" THE WEATHERED PARENT BR (SI-16T), POOLY WAADED, MOIST NOKO MALLINE	Sp	Collected soil stapp
	@ ]] ս						Ð			360109-45500005-7
	17,	5.0								
		2.9								
5				L						
		-			6 18			5-5.5: OHIE BROWN F(MSAND, POPPLY MRADED, WOIST, SA, VERY FAINT ONDE	Sp	
					1.5			55-7 Unstruised Brown we said and and	1	1
	S2	2.8			30,9			SP, VELY STRANT ODDR, WOIST, DENSE 778 7-7.8: BLACK TO HDEY WEATTHERED ON (NO	sp.	COLLECTED SOIL Strople Collector 6,5-4,8 'Dar- (0958224ED CONT.)
	@ 144	50			88.5		(79)	BOULDER), NERY ITRONU 6002;		360109-45500007 00/450
_					155		Ð	MACKOCOVE DEFUSAL 10 7,8 (BUL)	DEATLIE DE	OF WEATHERED BRE
										1 3100109-4500000 1500
_		• •								
0										
от	ES:	MONIT	DRIN	h	BREAT	HINK	20N	E WHILE DALLING INSIDE (VENTING EXHAMT OF	utside	VIA PAPINA).;
	i L C	$\rho$ : $\gamma$	21.2	•	Le N	25:	r 7			SOIL BORING LOG

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		SOIL BORIN	G LOG			1
MARAC	TEC	Project Name:	Very 11 Supplemental AI	Boring ID	): (5-503	i
	JIEU	Project Location: New Roc	helle, M	Page No.	1	
511 Congress Street, Portla	nd Maine 04101	Project No .: 3617112221.66	Client: USACE NYSDEC	of		
Boring Location: Inside	Building Inc	Refusal Depth: NA	Total Depth: L. L	Bore Hole	e ID/OD:	
Weather: 55° M clow	1	Soil Drilled: 6.6	Method: Hand geoprobe	Casing Si	ze:	
Subcontractor: NA			Protection Level: D	Sampler:	2' Macrocore	
Driller: MA		Date Started: 10/36/15	Date Completed: wise his	Sampler I	(D/OD:	ĺ
Rig Type/Model: (touch	geoprobe	Logged By: NW	Checked By:		مريد مريد (1997) (1996) مريد مريد مريد مريد مريد مريد مريد مريد	
Sample Information	Monitoring	Water Level, NM		 		
<ul> <li>Depth (feet bgs)</li> <li>Sample Number</li> <li>Penetration/</li> <li>Recovery (feet)</li> </ul>	NA frp (en)	Sample Descrip	tion and Classification	USCS Group Symbol	Remarks	
		0-0.4 Constelle sho		$\times$	、 、	
2.6 1		0.4-1.8 No sample 1.8-3.6 No Sample	, fit cleaned why post hele digger	59		
		Dark yellowish brom trace to little fm trace silt; noist no odor	; poorb gradud Sand; subranded gravel; ; dense ; no sitaining	SP.	501 500pt 01- 3. ( ft ( f703) 360109-05-503003 Q 17:03	
9.6 2 3.0 1.6 1730 6.6 1730 6.6 1730 1730 1730 1730 1730 1730 1730 1730	<i>6.0</i>	S.4.4 EOB art	6.6 Ft by 5	S₽	(° 17:03 soiil sample a+ 56 6.2 ft br 7 360109- CS- 503006 (° 17:20	
					SOIL BORING LOG	Υ.

#### **APPENDIX B.2**

#### MONITORING WELL CONSTRUCTION/DEVELOPMENT FIELD DATA RECORDS

WELE/PIE/	ZOMETER CON FLUSHM	STRUCTION OUNT	DIAGRAM	LOCATION ID: $M \mathcal{M}$ .	- 50/
Project Name:	Industrial Overall - Su	pplemental RI		Date Started: 0011BER 17,215	Date Completed: 0(TOPADIAS, U
Project Location:	New Rochelle, New Yo	rk	A	Logged By: B, SH	AN
Project Number:	3612112221	Task Numbe	erV(L.U]	Checked By:PP	Checked Date: 12/7/16
Subcontractor:	Aztech Technologies	Drilling Met	hod: Direct Push	I <u></u>	
Development Method:	PARASTAUTIU P	Mp Developmen	t Date: 0CT . 17.2015	Measuring Po	int Information
Bucking Posts/Ballards:	NA	. <u></u>			
Notes:				Measuring Point (MP) Type	Top Of Riser
		•		MP Elevation (ft):	
Item	Depth BMP (ft)	Elevation (ft)		Descr	iption
Surface Casing Elevation	n ~ 6	76.44	Slo	pe Away	
Ground Surface Elevatio		76.44 70		-	P. MUR +TZ=
Riser Pipe (Top)	~0.1 @	~76.34		Surface Sear Type.	US NOR-ETC
					<u>N n</u>
				Stickup Casing Diameter:	<u>NA</u>
			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Backfill/Grout Type:	NA
				Riser Pipe Type:	NА
				Riser Pipe ID:	NA
		de	▲	Borehole Diameter:	2.5-INCH
Top of Well Seal		714			
Top of Sand Pack	- 0.5 pus	~75.94		Type of Seal:	NH
		NZCAU			
Top of Screen	0.5 325			Screen Type:	SLOTTED PVR
				Screen ID:	H D. UIO 1 2 2-2-1
				Screen Slot Size:	0.010 " + 2.8"
				Screen Length:	2,81
	• .			Filter/Sand Pack	HON
Base of Screen	~2.8' Bly	~ 73.64		rype.	AC() 13
End Cap	~ 2.8' pur	~73.64	• • • • • • • • • • • • • • • • • • •	Sump:	
Drilled Depth	2,81	7 3,64		Fallback/Backfill:	NA
Bottom of Exploration	2 8 BALA	73.64			· · · · ·
Bedrock Surface	~ 2.8' Bly	~ 73.64	$\neg$		NOT TO SCALE
MAC 511 Commerce Stream Date	TIEC		WELL/PIEZO	METER CONSTRUCTION D	IAGRAM - FLUSHMOUNT
U					

WELL/PIR	ZOMETER CONSTR FLUS <u>HMOUN</u>	UCTION DIAGRAM	IOCATION ID:	-501
Project Name:	Industrial Overall - Supplem	ental RI	Date Started: OCT BLER 17 2	Date Completed: MTDpan 18
Project Location:	New Rochelle, New York	· · · · · · · · · · · · · · · · · · ·	Logged By: D. C	land
Project Number:	3612112221	Task Number 04.01	Checked By: $(\gamma)$	Checked Date: /////
Subcontractor:	Aztech Technologies	Drilling Method: Direct-Push	- Marlautrie d. A	- <u>man</u>
Development Method:	PARA- TATATU DIMO	Development Dates	Measuring F	Point Information
Bucking Posts/Ballards	······································		A	
Notes:	<u></u>		Measuring Point (MP) Typ	e: Top Of Riser
			- MP Elevation (ft):	<b></b>
			-	·····
Item	Depth BMP (ft) Eleva	tion (ft)	Desc	ription
Surface Casing Elevation	on		Slope Away	
Ground Surface Elevat	ioı	- MILL		
			Surface Seal Type:	CONURETE
Riser Pipe (Top)	معموم می بادید. این این این این این این این این این این		Lock Identification	NK
			Stickup Casing Diameter:	· NA
			- Backfill/Grout Type:	NA
			<ul> <li>Riser Pipe Type:</li> </ul>	NA
			Riser Pipe ID:	NA
			- Borcholo Diamotory	7.5-IN(A)
Top of Well Seal	NA.		Borenoie Diameter.	215 1101
	or but	·	- Type of Seal:	NA
Top of Sand Pack	~ 0.5 <i>FW</i>			
	in the			
Top of Screen			- Screen Type:	SLOTTED PVC
				1/4 Dural 2/0
			Screen ID:	0.010 7.2-21
			Screen Slot Size:	0.010 42.8
			Screen Length:	2,81
	•		<ul> <li>Filter/Sand Pack</li> </ul>	
	2 81 24		Туре:	#10N
Base of Screen	~ 218 Bly			
End Cap	~ 2.8' pup		– Sump:	
Drilled Depth	2,81		- Fallback/Backfill:	NA.
Bottom of Exploration	2 8' BUS			
Bedrock Surface	~ T'0 008			NOT TO SCALE
ИЛТАЛАА	OTTO			
	UIEU	WELL/PIEZ	ZOMETER CONSTRUCTION	DIAGRAM - FLUSHMOUNI
511 Congress Street, P	ortland Maine 04101			

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Project Name:	Industrial Overall - Si	upplemental RI		Date Started:	OUT. 18,2015	Date Completed: DCT. 18,201
Project Location:	New Rochelle, New Ye	ork		Logged By:	BSHA	λ
Project Number:	3612112221	Task Numbe	r 06101	Checked By:	JPP	Checked Date: 12/7/15
ubcontractor:	Aztech Technologies	Drilling Met	hod: Direct Push			
Development Method:	Pun pa surve	Developmen	t Date: 1017.18,2015		Measuring Po	oint Information
Bucking Posts/Ballards:	NOME					
Jotes:		· · · · · · · · · · · · · · · · · · ·		Measuring Po	int (MP) Type	Top Of Riser
<u>.</u>	·	<u></u>		MP Elevation	(ft):	
Item	Depth BMP (ft)	Elevation (ft)			Desci	iption
urface Casing Elevatio	n Q 💯	76.49	. SI	ope Away		
Fround Surface Elevation		76.49 70				1
tiser Pipe (Top)	~ OIL Bus	76.39 /-		Surface Seal T	ype:	CONCRETE
				└ Lock Identifica	ation	NUNE
				Stickup Casing	g Diameter:	6-INCH
				Backfill/Grout	Туре:	NONE
			↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Riser Pipe Typ	e:	The - SCH 40
				Riser Pipe ID:		1-1NCH)
on of Well Seal	0.5' BWS	75.99		Borehole Diam	ieter:	27/8-11/4
op or non bout	1-1			Type of Seal:		BENISTAL
op of Sand Pack	1.5 84)	74,99				
on of Screen	~ 4,5 RM	N71.99				
op of Bereen	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Screen Type:		SLOTTED PR
				Screen ID:		I-INUA
				Screen Slot Siz	e:	0.010"
				Screen Length:		101
				-		
· · ·				Filter/Sand Pac	k	#/ (Abintana)
ase of Screen	~14.5 BUS	~61.99:		1 ype.		QUMATE.
nd Cap	~14.6 BUS	~ 61.89		Sump: 🦯 I	2.21	- 11 / 60
rilled Depth	18.2° AG	58.29	<b>—</b>	Fallback/Backt	ñ11:	NATTIE
ottom of Exploration	18.2' BM	58,29				(MEATHERED BR
edrock Surface	1481 11	6119				
MUUN DUITAUG	110 17 05	W1.01				NUT TO SCALE
MAC	CTEC		WELL/DIEZC	ΜΈΤΈΡ ΓΟΝΟ	ΤΡΗΟΤΙΟΝ Β	ACRAM - ET USTMOTINT

Project Name:	Industrial Overall - Sup	plemental RI		Date Started: NT. 18.70	S Date Completed: DCT.
Project Location:	New Rochelle, New Yorl	ζ		Logged By: BST	ful
Project Number:	3612112221	Task Number 00	10	Checked By:	Checked Date: 11 3
Subcontractor:	Aztech Technologies	Drilling Method: D	irect Push	or no el	which date yet.
Development Method:	Fun pa surve	Development Date:	Ut. 18,2015	Measuring	Point Information
Bucking Posts/Ballards	NOME		· · · · · · · · · · · · · · · · · · ·		the second
Notes:				Measuring Point (MP) Typ	e: Top Of Riser
				MP Elevation (ft):	·
Item	Depth BMP (ft) F	levation (ft)		Des	cription
Surface Casing Elevation	on		_ Slo	pe Away	
Ground Surface Elevati	01	MIL	a de la companya de la compan	_	
<b></b>	n n l ha		╸╡┠╲╲	Surface Seal Type:	CONCRETE
Riser Pipe (Top)	~ U [ MW)			Lock Identification	LALA
					NUNE
				Stickup Casing Diameter:	6-INCH
			-	Backfill/Grout Type:	NONE
			<b>↓</b>	Riser Pipe Type:	The -sch
				Riser Pipe ID:	1-1NCH)
Top of Well Seal	0.5' BWS		<b></b>	Borehole Diameter:	27/8-1/24/
1				Trans - 601	Phylon
Top of Sand Pack	1.5' 824			Type of Sear:	DEN STAL
	1				
Top of Screen	~ 4.5 MM			Ú	Cratter Day 6
				Screen Type:	SUTH B PTC S
				Screen ID:	1-INUA
				Screen Slot Size:	01010"
					1.0/
				Screen Length:	10'
				Filter/Sand Pack	that I AM
Base of Screen	VILLS MAN			Туре:	++1 110/1stan
	14 1 In			,	WARTZ
End Cap				Sump: $\sim 0.2^{l}$	
Drilled Depth	18.2' 14		·····	Fallback/Backfill:	NATTIE
Bottom of Exploration	18.2' Bhs				(MENTHERED BR
Bedrock Surface	14.8' pres				NOT TO
<i>Ш</i> л <i>к</i> л					
	JIEC	•	WELL/PIEZO	METER CONSTRUCTION	DIAGRAM - FLUSHM

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WELL/PIE	ZOMETER CON	STRUCTION DIAGRAM	LOCATION ID:	(,
	FLUSHM	OUNT	VUU	V - 50 j
Project Name:	Industrial Overall - Su	ipplemental RI	Date Started: $\underline{00T, 10, 10}$	The Completed Der. 21, 2015
Project Location:	New Rochelle, New Yo		Logged By:	staw
Project Number:	3612112221	Task Number 06.0	Checked By:	Checked Date: 11/3/15
Subcontractor:	Aztech Technologies	Drilling Method: Direct Push	No elvurtu	meletryet.
Development Method;	OVER Plomp \$ 5	UPUE Development Date:	— Measuring	Point Information
Bucking Posts/Ballards:	NONE			
Notes:			— Measuring Point (MP) Ty	pe: Top Of Riser
	· · · · · · · · · · · · · · · · · · ·		MP Elevation (ft):	
Item	Depth BMP (ft)	Elevation (ft)	De	scription
Surface Casing Elevation	)n		Slope Away	
Ground Surface Elevati	01		Surface Seal Type:	STITE DOLAD RAY / CANKETT
Riser Pipe (Top)			Lock Identification	JANE
		[1] [] [] [] [] [] [] [] [] [] [] [] [] []		<u>NUNE</u>
			Stickup Casing Diameter:	8-1N4-1
			Backfill/Grout Type:	NONE
			Riser Pipe Type:	SZH 40 PVC
			Riser Pipe ID:	1-1NCH
Top of Well Seal	~ 1.5 Blog		Borehole Diameter:	4-1N 41 x 215-1NCL
	IG NI PLA	•	— Type of Seal:	HOLEPHUA
Top of Sand Pack				(DENTIMITE)
Top of Screen	21.0 00		- Comon Trucci	STATES DW
			- Screen Type:	Storres PVC
			Screen ID:	1-11124
			Screen Slot Size:	0.010 "
			Screen Length:	~5'
<b>D</b> 00	a da al pt		Туре:	##1 INAUSTRIAL
Base of Screen	~20:0 013			QUAPTZ
End Cap	~ Zu, 3' Bly		— Sump:	NA
Drilled Depth	~ 24:5 My		Fallback/Backfill:	~ 0.1 <sup>1</sup>
Bottom of Exploration	~ 24.5' My			
Bedrock Surface	-15,5' Mas	N		NOT TO SCALE
	TTC			
511 Congress Street, Po	DITIAND Maine 04101	WELL/PIE	ZOMETER CONSTRUCTION	I DIAGRAM - FLUSHMOUNT

**.** -

				PROJECT NAME	L DEVE	LOPMENT	RECORD	LOCATI	DI N		PAGE
2	MA	ACT]	EC	PROJECT NAME	Industria	l Overall - Suppl	lemental RI	M	w-501		
	TATT			PROJECT NUMBER		3612112221		STARTT	1625		10/19/5-
5	il 1 Congress St	eet, Portland Maine 0	4101	Nell Installatio	N DATE V	VELL DEVELOPN	lls	END TIM	<u>    1649</u>		10/19/15
WELL	DIAMETER ()	NCHES)	1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	OTH	ER		
CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	TTO	ER		<u> </u>
MEASI	UREMENT PO	INT (MP)	TOP OF	RISER (ŤOR)	TOP	OF CASING (TOC)	)	ОТН	IER		
INITIA DEPTI	L WELL I (BMP)	2.34	FINAL W FT DEPTH (	VELL BMP)	.35 ft	SCREEN LENGTH	2.	.34 ft	PRO STIC	T. CASING CKUP (AGS)	MA FT
INITIA ' (BMP)	L DTW	1.13	FT REMOV	NT ED	9.01 FT	SCREENED INTERVAL (I	вмр) О	то ).З	TOC DIF	TOR FERENCE	FT
WATE COLU	R MN	1.21	FT DEVELO	TER DP. (BMP)	-13 FT	PUMPING DEPTH (BMP	" J	.0 FT	PID Ami	BIENT AIR	3.6 PPM
(initial) CALC GAL/V	well depth - initi ULATED /OL	al depth to water)	FINAL F	(BMP)	13 ft	APPROXIMA RECHARGE	TE	FT/MIN	PID MO	WELL UTH	2.4 <sub>PPM</sub>
(column TOTA	n X well diamet L VOL.	er squared X 0.041)	FINAL F	RECOVERY	0.01 MIN	FLUIDS LOS		GAI	ENI	OF WELL	Ϋ́Ν
(mL pe	r minute X total	minutes X 0.000?6 g	al/mL)		, with	DUNING DRI			SAN	IPLE TAKEN	?
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP: (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
1629	1.13	300	23-42	1-990	6.74	2.95	61.5	162.2	0.25	0.25	· · · · ·
1,633	1.13	300	23.50	1,994	6,70	2.01	8.73	160.7	0.25	0.5	
1636	1-13	300	23.5 <sup>3</sup>	1. <i>99</i> 4	6,69	1.75	2-58	hi.i	0.25	0.75	
1639	1.13	300	23.54	1.995	6-68	1.75	2-11	105-1	0.25	1-0	
1642	1.13	300	23.54	1.996	6.68	1-76	0,75	150.3	0.25	1.25	
1645	1-13	300	3355	1-995	6.68	1.75	0.51	142.7	0-25	1.5	
1648	1-13	300	23-5Y	1.994	6,67	], / A	0.61	117.4	0.25	1.75	
										<u> </u>	
		<u> </u>									
EQUIPME	NT DOCUME	NTATION				WELL DE	VELOPMENT CRI	 TERIA		<u> </u>	
	DEDICATED SUURGE BLOCK	/BMERSIBLE ] ]4"	Y WATER LI PD WQ METE URB. ME OTHER OTHER OTHER	evel meter 15839 R Μοις - 5 Ter Μοιγ-33	<u></u>	Well wate Sediment Total wate Turbidity 10% chan WAS DEV	r clear to the unaided thickness remaining er removed = a minin < SNTUs? ge in field parameter ELOPMENT CRIT	i cyc? in well <1.0% c num of 5x calcu s? 'ERIA MET?	of screen length lated well volue Y	nes plus 5x dril	ling fluids lost?
ADDITIO PURGE W. CONTAIN	VAL OBSERV. ATER ERIZED	ATIONS Y N Yes	NUMBI GENER	ER OF GALLONS	1.9	SKETCH					189 19
NOTES	feder all c	swinging u , the crite	rithin a D Mia met	nge 710%, (	honge			·			
						1					WELL DEVELOPMEN

					WE	LL DEVE	LOPMENT	RECORD				
	211	ъл		EC	PROJECT NAME	Industri	al Overall - Supj	olemental RI	LOCATI MW #	Soc	1	PAGE 1 OF 3
		1017	1UI	EU	PROJECT NUMBER		3612112221		START		1	START DATE
	:	511 Congress S	treet, Portland Maine	04101	WELL INSTALLATIC	ON DATE	WELL DEVELOP	MENT DATE	END TIM	1E 1551	Į	END DATE 10/19/15
	WELL	DIAMETER (	INCHES)	× 1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	ОТІ	IER		1-11100-
	CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	ОТІ	IER		
	MEAS	UREMENT PO	DINT (MP)	TOP OF	RISER (TOR)	TOP	OF CASING (TOC	)	по П	IER		
	INITIA DEPTI	L WELL I (BMP)	13.84	FINAL V FT DEPTH	VELL (BMP)	4.09 <sub>ft</sub>	SCREEN LENGTH		10 FT	PRC STIC	)T. CASING CKUP (AGS)	NA FT
	INITIA (BMP)	L DTW	1.05	SEDIME FT REMOV	ED C	5, 25 <sub>FT</sub>	SCREENED INTERVAL (	BMP)	ТО	TO( DIF	C/TOR FERENCE	FT
	WATE	R MN	12.79 My 2.84	(final wel DTW AF	TER	) .05 <sub>FT</sub>	PUMPING DEPTH (BMI	13.8°	1 - 79 - 79 - FT	PID	RIENT AIR	O.O PPM
	(initial)	well depth - init	ial depth to water)									
	GAL/V	OL	0.5	GAL DEPTH	(BMP)	.27 FT	RECHARGE	RATE O.	3 ft/min	MO	WELL UTH	O, O PPM
	(columr TOTAI PURGI	n X well diamet L VOL. ED	7.75	FINAL R GAL TIME (el	RECOVERY (apsed)	70 <sub>MIN</sub>	FLUIDS LOS DURING DR	T NA	GAL	END	) OF WELL /ELOPMENT	Y N X
	(mL per	minute X total	minutes X 0.00026 g	gal/mL)	·					SAN	IPLE TAKEN	?
	TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
	1537	4.75	250	21.78	2.464	.7.59	1.46	20001	-514-0	0-1	0.1	very silly
	1544	12.80	250	21.34	2.539	7.56	5.87	7 1000	-398.1	0.5	0.6	
	1547	pry	250	12153	2.297			m298-	15 2 2 2 1 2 1 2	2		
	1630	12.2(	250	21-52	2.397	7.58	5-65	298	-241.2	0.5	1.1	
	1634	Dry	250				- 1997 - 1997	414			1.5	
	1717	13.68	250	21.64	2.260	7.60	5-32	71000	-327.9	0.5	2.0	
	1710	Dry									2.1	
	1300	13.81	250	21.60	2.226	7.52	5-78	969	-300.5	0-5	2.6	
ı		Dry				18. AN 1.						
10/19	6852	7.35	250	21.08	2.214	7.58	3.55	71000	-428,4	6.25	2.85	
	0858	14.08	250	21.5 Y	2.285	7.47	5-63	·71000	-367.5	0.25	3.1	
	୦ <b>୧</b> ୩	8.27	250	21-05	2.255	7.61	7.97	7 1000	-294.3	0.2	3-3	
		IT DOCUMEN EDICATED SU URGE BLOCK NILER 2" 2" 2" 100 POS 100 POS 1	    4"	WATER LE <sup>1</sup> PID N WQ METER TURB. MET OTHER OTHER OTHER	vel meter 15839 Mol5-07 er Mo24-3	3	WELL DEV Well water Sediment t Total wate Turbidity < 10% chang WAS DEVE	ELOPMENT CRIT clear to the unaided of hickness remaining in r removed = a minimu s NTUs? e in field parameters? CLOPMENT CRITE	ERIA syc? well <1.0% of m of 5x calcula RIA MET?	screen length? ated well volum Y	es plus 5x drilli N	ng fluids lost?
	ADDITION/ PURGE WA	AL OBSERVA TER		NUMBER	R OF GALLONS		SKETCH					
	CONTAINEI NOTES	Low yie Low yie	Idong turbo t 10%	d rell; paramet	unable to r	1.0 	_					
	Well Develop Checked By:	oer Signature:	M		Print Name: Date:	Ubgen						WELL DEVELOPMENT RECORI

				WEI	L DEVE	LOPMENT	RECORD				
3110-				PROJECT NAME	Industria	al Overall - Suppl	emental RI	LÖCATIC	N ID		
	<b>M</b> <i>P</i>		EC	PROJECT NUMBER		3612112221		START T	ME 14-24		START DATE
51	1 Congress Stre	et, Portland Maine	04101	WELL INSTALLATION	DATE	WELL DEVELOPM	IENT DATE	END TIM	E 1551		END DATE
WELL D	IAMETER (II	NCHES)	[ ∭] 1-IN.	2-IN. [	4-IN.	6-IN.	8-IN.	Отн	ER		
CASING	DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	ОТН	ER		
MEASUI	REMENT POI	NT (MP)	TOP OF F	RISER (TOR)	TOP	OF CASING (TOC)		ОТН	ER		
INITIAL DEPTH	WELL (BMP)	13.84	FINAL W FT DEPTH (I	ELL BMP) [Y	-09 FT	SCREEN LENGTH		O FT	PRO STIC	OT. CASING CKUP (AGS)	№Д <sub>FT</sub>
INITIAL (BMP)	, DTW	1.05	SEDIME: FT REMOVE	D O	15 FT	SCREENED INTERVAL (F	BMP)	то	TOC DIFI	C/TOR FERENCE	FT
WATER COLUM	N	12.74	(final well DTW AF FT DEVELO	depth - initial well depth) FER P. (BMP) 14	.05 FT	PUMPING DEPTH (BMP	) ]'3.	.84 ft	PID Ami	BIENT AIR	Û. O PPM
(initial w CALCU GAL/VC	ell depth - initia	l depth to water) O · S	FINAL R GAL DEPTH (		דר <sub>FT</sub>	APPROXIMA RECHARGE I		3 <sub>ft/min</sub>	PID MOI	WELL UTH	O.O PPM
(column TOTAL PURGE (mL per	X well diameter VOL. D minute X total r	r squared X 0.041) 7.75 ninutes X 0.00026 g	GAL TIME (el: gal/mL)	ECOVERY apsed)	0 <sub>MIN</sub>	FLUIDS LOS DURING DRI	r NA	GAL	END DEV SAM	O OF WELL /ELOPMENT /PLE TAKEN	? Y N Z
FIELD PARA	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP: (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	VOLUME PURGED (gal)	TOTAL GALLONS	COMMENTS
0946	13.17	250	21.57	2.314	7.48	6.53	71000	-289.9	0.25	3.55	
1033	9.92	250	21:18	J.253	7.06	5.35	71000	-295-5	0,25	3.8	
1036	13.70	250	21.56	J-303	7.18	6.58	71000	-2820	0.25	4.05	
1120	9.45	250	21.25	່ງເລາວ	7.)9	7.32	אוסיבי	-290_7	0-25	4.3	
1125	13.89	250	21.44	2.38 <sup>3</sup>	7.16	6.72	41000	-278.3	0.25	4.55	
1212-	8.87	175	21.32	2.222	7.21	5.01	690	-2443	0.3	4.85	
1219	12.27	175	21.52	2.265	7.14	4.54	373	-232-4	0.4	5.25	
309	9.89	150	21.33	2-240	7.20	ધ-૧૧	323	- 236.5	0.25	5-5	
1314	13-42	150	21.66	2.244	7.02	4.64	119	-238.8	0.5	6.0	
1400	8-27	150	21.39	2.234	7.08	5.16	29.1	-190.4	0.15	6.25	
406	11.17	150	21.71	2.269	7.01	3.27	88.1	-255.3	0.15	6.5	
1455	8.87	150	21.50	2.245	7.04	4.47	20-9	-189.3	0.25	6.75	7.0
EQUIPMEN DE SU BA GF OT	T DOCUMEN DICATED SU RGE BLOCK ILLER 2" 2" UNDFOS 2" HER AL ORSE DYA	ITATION BMERSIBLE    4" TIONS	WATER LE PID WQ METER OTHER OTHER OTHER	VEL METER 15839 Mo 15-0 TER Mo 24-3	7	WELL DEV Well wate Sediment to Total wate Turbidity 10% chang WAS DEVI	VELOPMENT CRI r clear to the unaided thickness remaining i r removed = a minim < 5NTUs? ge in field parameters ELOPMENT CRITI	reria eye? n well <1.0% o num of 5x calcul s? ERIA MET?	f screen length? lated well volur Y	nes plus 5x dril	Iing fluids lost?
PURGE WA CONTAINE	TER RIZED		NUMBE	R OF GALLONS	7.8						
Well Develop Checked By:	کھر per Signature:	naye 1 MW		Print Name: Nar Date:	Vogen						WELL DEVELOPMENT RECC

				WEI	L DEVE	LOPMENT	RECORD				이 것이 나라가 되었다. 정말 가 말했다. 가지, <u>이</u> 나라 나라 지 <u>않는 것이 않</u> 다. 지않고 같	
2111	ъл/			PROJECT NAME	Industria	l Overall - Supp	erall - Supplemental RI					
		101	EU	PROJECT NUMBER		3612112221		START	ПМЕ 1534	<u> </u>	START DATE	
5	11 Congress St	reet, Portland Maine	04101	WELL INSTALLATION	N DATE V	VELL DEVELOP	MENT DATE	END TIM	1551		END DATE	
WELL	DIAMETER (	NCHES)	[`?[∕] 1₋īN		4-IN.	6-IN.	8-IN.		HER			
WEEL		(NOURO)										
CASING	G DIAMETER	(INCHES)	4-1N.	6- <u>I</u> N.	8-1N.	10-IN.	12-IN.					
MEASU	IREMENT PO	INT (MP)	TOP OF	RISER (TOR)	TOP	OF CASING (TOC	)	∟т	HER			
INITIA DEPTH	L WELL (BMP)	13.84	FINAL W	VELL BMP) 1억	.09 FT	SCREEN LENGTH	i	0 FT	PRO	T. CASING CKUP (AGS)	N.4 <sub>FT</sub>	
INITIA		· · · · ·		NT [		SCREENED			- ] тос	C/TOR		
(BMP)		1-05	FT REMOV	ED Ø	25 FT	INTERVAL (I	BMP)	TO	DIF	FERENCE	FT	
WATEI	R	12 74	DTW AF	TER	, j. j	PUMPING	. 13	~84	PID			
COLUN (initial v	AN vell depth - initi	al depth to water)	FT DEVELO	0P. (BMP)		DEPTH (BMF	·)	· FT		BIENTAIR		
CALCU GAL/V	ILATED OL	0.5	GAL DEPTH (	ECOVERY BMP)	)7 FT	APPROXIMA RECHARGE	RATE O	3 <sub>ft/min</sub>	PID MO	WELL UTH	O.O PPM	
(column TOTAL	X well diameter	er squared X 0.041)	FINAL R	ECOVERY		FLUIDS LOS	т [		] ENI	OF WELL	Y N	
PURGE	D minute X total	1.75 minutes X 0.00026	GAL TIME (el	apsed)	10 MIN	DURING DRI		GAL	_ DEN	/ELOPMENT 1PLE TAKEN		
FIELD PAR	AMETERS								VOLUME		 T	
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	PURGED (gal)	TOTAL GALLONS	COMMENTS	
1500	13.11	150	ગરપ	2-269	7-01	3. 52	24.2	-225-2	0.25	7.0	7.25	
1545	8.95	150	21.41	2.252	7.do	4.50	22-1	-170.4	0.15	7.5		
1548	1250	150	21.67	2-258	7.01	Y.14	26.2	-188.8	0.25	7.75		
		<sup></sup>							2			
											-	
								<u>presido</u> Entras				
									1 1 1			
									<u> </u>			
							2					
ADDITION	EDICATED SU IRGE BLOCK ALLER 2" CUNDFOS 2" THER AL OBSERVA TER	BMERSIBLE ] ]4"	WATER LE PID WQ METEI TURB. MET OTHER OTHER OTHER	VEL METER 15839 MO15-07 TER MO34-33 R OF GALLONS		Well vate Sediment Total wate Turbidity 10% chan WAS DEVI	r clear to the unaided thickness remaining r removed = a minin < SNTUs? ge in field parameter:	l eye? in well <1.0% ( num of 5x calco s? ERIA MET?	of screen length ulated well volue Y	nes plus 5x dril	Iling fluids lost?	
NOTES	RIZED	Yes See	Gener	ATED	7.8							
Well Develo Checked By:	per Signature.	nt		Print Name: Note Date:	Vogen						WELL DEVELOPMENT RECOI	

21	M A	ACT	FC	PROJECT NAME	Industri	al Overall - Supp	lemental RI	LOCATION	NID ペー 504	>	PAGE OF
	TATT			PROJECT NUMBER		3612112221		START TI	ме 1846		10/26/15
5	11 Congress St	reet, Portland Maine	04101	well installatio しつしい	I IS	well developi 1013	$\hat{b}$ (15	END TIME	8:16	<b></b>	END DATE 10/26/15
WELL	DIAMETER (I	NCHES)	<b>X</b> 1-IN.	2-IN.	4-IN.	6-IN.	8-IN.	OTHE	R		
CASIN	G DIAMETER	(INCHES)	4-IN.	6-IN.	8-IN.	10-IN.	12-IN.	OTHE	R		· · · ·
MEASU	JREMENT PO	INT (MP)	TOP OF I	RISER (TOR)	TOP	OF CASING (TOC)	1	OTHE	er		
INITIA DEPTH	L WELL (BMP)	24.93	FINAL W	YELL BMP)	<u>ૡ</u> ,૧૩ <sub>୮୮</sub>	SCREEN LENGTH		LO FT	PRC STI	OT. CASING CKUP (AGS)	N.4 FT
INITIA (BMP)	L DTW	1.19	SEDIME FT REMOVE		0.0 FT	SCREENED	IMP) 14-9	TO 24.9	TO	C/TOR FERENCE	FT
WATE	. I		(final well DTW AF	depth - initial well depth	) )	PUMPING	·····, [		PID		
COLUN	AN well denth - initi	23,74	FT DEVELO	Р. (ВМР) 2Ч	.9 <sub>FT</sub>	DEPTH (BMP	) גע.	9 FT	AM	BIENT AIR	ひ・ひ PPM
CALCU	JLATED	0.97	FINAL R	ECOVERY BMP)	0.11 FT	APPROXIMA RECHARGE		FT/MIN	PID MO	WELL	1.8 ppm
(column	X well diamete	er squared X 0.041)	FINAL R			FLUIDS LOS	r [		ENI	D OF WELL	Y N
PURGE	D minute X total	5.0 minutes X 0.00026	GAL TIME (els	apsed)	hers min	DURING DRI	LLING	GAL	DE	VELOPMENT	
FIELD PAR	AMETERS								VOLUME	T	
TIME	DTW (ft BMP)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu)	REDOX (mv)	PURGED (gal)	TOTAL GALLONS	COMMENTS
0851	18.27	500	19.42	0.780	8-13	<u></u>	71000	-291.6	1.0	7.0	
6900	21.50	500	19,19	0,363	7.51	2.61	> 1000	-176,8	1.5	1.5	
0906	2 <b>4</b> .94	500	18-85	0.ગ્રવા	7.24	1.16	71000	-371.9	2.5	2.5	
1045	20.13	500	19,41	0.669	7.55	7.31	>1000	96.5			
1050	<i>⊋1.</i> 93	500	19.52	0.682	7.39	6.70	71000	104.8		3.5	
1055	23.60	500	19.54	0.529	7.20	6.89	>1000	91.2		3.8	
1240	20.75	500	20.58	1.343	7.13	6.78	271	46.2			
1245	23.71	505	19.79	1.235	7,13	6,90	>1000	75.3		5.1	
				<u>.</u>							
									- 		
FOUR	TDOCUMEN	ITATION				1 WELL DEX	TI OPMENT CPI	FFDIA			
	EDICATED SU JRGE BLOCK ALLER 2" CUNDFOS 2" THER	BMERSIBLE ] ]4"	★     WATER LE       ▶     PID       ★     WQ METER       ★     TURB. MET       OTHER     OTHER       OTHER     OTHER	VEL METER 1900 15839 	~47 27 33	Well water Sediment t Total wate Turbidity - 10% chang WAS DEVE	r clear to the unaided hickness remaining i r removed = a minim < 5NTUs? ge in field parameters ELOPMENT CRITI	eye? n well <1.0% of s num of 5x calculat s? ERIA MET?	screen length ted well volue Y	mes plus 5x dril	Iling fluids lost?
ADDITION PURGE WA CONTAINE	AL OBSERVA TER RIZED	TIONS Y N Yes	NUMBEI GENERA	R OF GALLONS	5.0	SKETCH					· · ·
NOTES	Dy out remove	9-0 () 65 galle	s well win	unable in the funct	k to dm						
Well Develo	ner Signature	MU		Print Name Nate	Vagon						WELL DEVELOPMENT
n en Develo	p == ==g==atW 7:	•		Date	-			:			

## **APPENDIX B.3**

## WATER SAMPLING FIELD DATA RECORDS

	가 가는 것 같아.		LOW	FLOW GRO	UNDWAT	FER SAMPI	LING RECO	RD		
	PROJECT NAME	Indust	rial Overall - Suppleme	ntal RI	LOC	CATION ID	DAT	E Ja /	10/10	
	PROJECT NUMB	ER	3612112221.06		STA	<u>р 2-</u> rt time 131	Z END	TIME NO	7	-
	sample id 360109	- f2-7-2	SAM LIG	ple time i405	SITE	E NAME/NUMBER ustrial Overall/36010	R PAG	E I OF	1	
WELL DIAN	METER (INCHES)		2 4		18	OTHER				WELL INTEGRITY YES NO N/A
TUBING ID	(INCHES)		1/4 3/8		] 5/8	OTHER			CAP CASING	×
MEASUREN	MENT POINT (MP)	TOP OF	RISER (TOR)		ы — — — — — — — — — — — — — — — — — — —	OTHER			LOCKED COLLAR	
INITIAL D (BMP)	otw 8-	17 <sub>FT</sub>	FINAL DTW (BMP)	9.05	PRC FT STI	)T. CASING CKUP (AGS)	MA	FT	TOC/TOR DIFFERENCE	, site
WELL DE) (BMP)	ртн 20	,77 <sub>FT</sub>	SCREEN LENGTH	10	FT AM	BIENT AIR	0.0	РРМ	REFILL TIME SETTING	R i~A s
WATER COLUMN	12,	6 <sub>FT</sub>	DRAWDOWN VOLUME	0.04	GAL MO	WELL UTH	0.1	PPM	DISCHARGE TIMER SETTI	NG ~A S
CALCULA GAL/VOL (column X)	ATED Os	5 GAL	(mitial DT w- final D) TOTAL VOL. PURGED	I w X well diam. square 3.9	<u>GAL</u> TOT	AWDOWN/ FAL PURGED	0-04/20	1	PRESSURE TO PUMP	NA
FIELD PAR	AMETERS WITH	ROGRAM STAB	LIZATION CRITER	IA (AS LISTED IN T	HE QAPP)	-				
TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (+/- 3%)	E pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv (+/- 10 mv)	) INTAKE DEPTH (ft)	COMMENTS
·	BEGIN PURC	GING	<b>1</b>		- <u>1</u>	r			1	
Ő	8.17	200	19.09	3.066	6-64	7.38	45.6	178.1	16.0	·····
5	8.99	200	20-25	3.365	6.48	3-26	21:9	119.9	16.0	
10	9.02	200	20.55	3.518	6.46	3.10	9.62	124.2	16.0	
15	9.03	200	20,56	3.571	6.46	2.94	7.23	127.3	16.0	
20	9.03	200	20.69	3.584	6.46	2.79	. 4.44	127.5	16.0	
2.5	9.04	200	20.66	3.603	6.45	2.53	2.47	127.9	16.0	
30	9.03	200	20-60	3-614	6.45	2.39	1.47	129.6	16,0	
35	9.04	200	20.86	3-628	6-16	2=21	1.09	128.8	16.0	
40	9.04	200	20.81	3.629	6.46	2.16	1.09	127.0	16.0	
45	9.05	200	30.82	3.625	6.46	2.11	0.80	128.2	16.0	
50	9.05	100	20.67	3.635	6.45	2.13	0.68	127.0	16.0	
	FI	NAL STABILIZ	ZED FIELD PARA	METERS (to app	oropriate sign	ificant figures S	F])	I	TEMP.: nearest deg COND.: 3 SF max pH: nearest tenth (c DO: nearest tenth (c	gree (ex. $10.1 = 10$ ) (ex. $3333 = 3330, 0.696 = 0.696$ ) (x. $5.53 = 5.5$ ) ex. $3.51 = 3.5$ )
FOUIPMENT	DOCUMENTATI	N							ORP: 2 SF (44.1 =	44, 191 = 190)
PERIST SUBMI BLADI WATT. OTHEI OTHEI	TYPE OF PUMP TALTIC ERSIBLE DER ERA RR		ECON FLUIDS USED IQUINOX EIONIZED WATER OTABLE WATER ITRIC ACID EXANE IETHANOL THER	SILICON T TEFLON T TEFLON L HDPE TUE LDPE TUB OTHER	TUBING/PI UBING UBING INED TUBING BING UNG	UMP/BLADDER MAT S. STEI GEOPF TEFLO OTHEF OTHEF	TERIALS EL PUMP MATERIAL NOBE SCREEN N BLADDER R R		WL MET       PID       WQ MET       TURB. M       PUMP       OTHER       FILTERS	ECUJPMENT USED ER ISS39 ER MOIS ~ ~ 7 ETER SOOF ~ ~ 1  NO TYPE
ANALYTIC	AL PARAMETERS	ETER	METHOD	FIELD	PRESER	VATION V	OLUME S	AMPLE	QC COLLECTED	SAMPLE BOTTLI
X	Vo;		82600			<u>&lt;(</u>	Yone	3	~	360109- PZ-
									····	
							·			
PURGE OB PURGE WA CONTAINE	SERVATIONS TER YE RIZED X	S NO	NUMBER OF GALL GENERATED	ONS 3.0	S	KETCH/NOTES	• needs	new	O-Ring	for cap
NO-PURGE UTILIZED	METHOD YE		If yes, purged approxim to sampling or	ately 1 standing volume [ mL for this sample log	prior cation.		(missi	~ <sub>1</sub> )		
Sampler Sign	nature: MA		Print Name: 🖊	tate Vogen						
-					1					

J.

···			LOW	FLOW GROU	UNDWA'I	FER SAMPI	LING RECO	RD		
Γ	PROJECT NAME	Indust	rial Overall - Suppleme	ntal RI	LOC	ATION ID	DAT	E	1. ~	
	PROJECT NUMBI	ER	3612112221.06		STA	TTIME	5 END	<u>10/19</u> TIME	<u>  5</u>	
	SAMPLE ID		SAM	PLE TIME	SITI	1010 NAME/NUMBER	PAG	ון א E	1	
	360109	- PZ-331	5	1140	Ind	ustrial Overall/36010	09	OF	7	]
WELL DIAM	ETER (INCHES)	XI –	2 4	6	8	OTHER			CAR	YES NO N/A
TUBING ID (I	INCHES)	× 1/8	1/4 3/8	1/2	5/8	OTHER			CASING	×
MEASUREM	ENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	
INITIAL D'I (BMP)	rw 3.	,07 <sub>FT</sub>	FINAL DTW (BMP)	11-28	FT STI	)T. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	E FT
WELL DEP (BMP)	тн [7-	89 FT	SCREEN LENGTH	10	PID FT AM	BIENT AIR	0.1	РРМ	REFILL TIMI SETTING	ER NA SEC
WATER COLUMN	14.	8ጋ FT	DRAWDOWN VOLUME	0.3	GAL MO	WELL UTH	0.7	РРМ	DISCHARGE TIMER SETT	ING NA SEC
CALCULAT GAL/VOL		)≂Ġ <sub>GAL</sub>	(initial DTW- final DT TOTAL VOL. PURGED	W X well diam. square	1 X 0.041) <b>DR</b> A GAL TO	WDOWN/ TAL PURGED	0.3/4.	7	PRESSURE TO PUMP	NA PSI
(column X w	ell diameter squared	I X 0.041) PROGRAM STAB	(mL per minute X tota	al minutes X 0.00026 gal	/mL) IE QAPP)					
TIME	DTW (FT) 0.0-0.33 ft	PURGE RATE	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. $O_2 (mg/L)$	TURBIDITY (ntu) $(+/-10\% \le 10$ ntu)	REDOX (mv) (+/- 10 mv)	PUMP INTAKE	COMMENTS
5 5 muidices	Drawdown BEGIN PURG	I SING	(- <i>i</i> - 5 uegrees)	(+/- 3%)	[`	L	L		DEPTH (ft)	<u> </u>
Ö	( 2)	200	20.31	2.467	7.21	2.30	4.68	205.3	12.9	
5	7.52	700	20.67	2.554	7.53	0-67	2.57	194.7	12.9	
ìo	8:52	200	20-68	2.576	7.56	0.58	1.81	194.1	12.9	
15	9.32	200	20.55	2.557	7.57	0.48	1.02	184.5	12.9	
20	9.75	200	20.49	2.541	7.55	0.54	2.19	195.7	12.9	
25	10.09	200	20.43	2.518	7.59	0.47	0.90	192-1	12.9	
30	10.30	200	20.38	2.499	7.61	0.45	0.71	182.7	i2.9	
35	10.47	200	20-35	2-466	7.63	0.39	0.45	172.6	14-9	Drop intake above to dr
40	10.61	200	20.37	2.468	7.63	0.42	0,39	166.9	14-9	· · · · · · · · · · · · · · · · · · ·
ં પડ	10.74	200	20.39	2-465	7.63	0.44	0.45	162.7	14-9	
50	10.84	200	20-37	2.461	7.63	0.45	0.43	1570	14.9	
	FI	NAL STABILI	ZED FIELD PARA	METERS (to app	ropriate sign	ificant figures[S	F])		COND.: 3 SF max pII: nearest tenth (	(ex, 3333 = 3330, 0.696 = 0.696) (ex, 5.53 = 5.5)
			10	J.43	7.6	0.4	0,24	130	TURB: 3 SF max, ORP: 2 SF (44.1 =	rearest tenth (6.19 = 6.2, 101 = 101) = 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC <u>INFE OF PUMP</u> ALTIC RSIBLE ER RA		DECON FLUIDS USED IQUINOX DEIONIZED WATER OTABLE WATER ITRIC ACID JEXANE METHANOL WHER	<ul> <li>✓ SILICON TU TEFLON TU</li> <li>✓ TEFLON LI</li> <li>✓ HDPE TUBI</li> <li>UDPE TUBI</li> <li>OTHER</li> </ul>	<u>TUBING/PI</u> JBING JBING VED TUBING NG NG	JMP/BLADDER MAT	TERIALS EL PUMP MATERIAL JMP MATERIAL JOBE SCREEN N BLADDER	-	'★     WL MET       '★     PID       '★     WQ ME       '★     TURB. M       '★     PUMP       OTHER     FILTER:	EQUIPMENT USED TER $M_{200} - 47$ TER $M_{300} - 47$ METER $M_{300} - 4034 - 33$ -5008 - 41
ANALYTICA	AL PARAMETERS	<u></u>	METHOD	FIELD	PRESER	VATION V	OLUME S	AMPLE	OC.	SAMPLE BOTTLE ID
$\mathbf{X}$	PARAME V	0C	NUMBER 8260 C		MET t			LECTED	COLLECTED	NUMBERS 360109- PZ-33 (5
										<u></u>
					<u> </u>					
								<u> </u>	-,	
PURGE OBS	ERVATIONS				SI	KETCH/NOTES				
PURGE WAT CONTAINER NO-PURGE N UTILIZED	TER YES		NUMBER OF GALL GENERATED If yes, purged approxim to sampling or	Antely 1 standing volume pr mL for this sample loca	ior ation.					
Sampler Signa	ature: MHV		Print Name:	vare Vogen						
Checked By:			Date:							
JII Congre	MAC ss Street, Portlan	d Maine 04101	С					LOW FI	LOW GROU	NDWATER SAMPLING RECORD

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			LOW	FLOW GROU	INDWAT	ER SAMPL	ING RECO	RD		
	PROJECT NAME	Industr	ial Overail - Supplemen	tal RI	LOC	ATION ID	DAT	E	/r-	
	PROJECT NUMBE	CR	3612112221.06		STAI	(72-37 RT TIME 1010	END	<u>тіме</u> \\Ч\	5	
	SAMPLE ID		~ SAMI	PLE TIME	SITE	NAME/NUMBER	PAG	<u>ж</u>	2	
	360109	- PZ-331	>	1140	Indu	strial Overall/36010	9	or OF	~	WELL INTEGRITY
WELL DIAM	IETER (INCHES)	<b>X</b> 1	2 4	6	8	OTHER			САР	YES NO N/A
TUBING ID (	(INCHES)	<u>×</u> 1/8	1/4 3/8	1/2	5/8	OTHER		. <u></u>	CASING LOCKED	<u>⊼</u> <u>∼</u> <u>−</u>
MEASUREM	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	<u>×</u> <u> </u>
INITIAL D' (BMP)	TW 3.	<b>ט 7</b> דז	FINAL DTW (BMP)	11.28	FT STIC	T. CASING CKUP (AGS)	MA	FŤ	TOC/TOR DIFFERENCE	FT
WELL DEF (BMP)	ידא איזי	-89 FT	SCREEN LENGTH	10	PID FT AMB	SIENT AIR	0.1	PPM	REFILL TIME SETTING	ER NA SEC
WATER COLUMN	<u>اب</u>	-87 <sub>FT</sub>	DRAWDOWN VOLUME (initial DTW- final DT	U. 34 C W X well diam. squared	PID <u> <u> </u> </u>	WELL JTH	0 <u>.</u> 7	РРМ	DISCHARGE TIMER SETT	ING NA SEC
CALCULA GAL/VOL (column X v	TED U.	6 GAL	TOTAL VOL. PURGED (mL per minute X tota	4,73 ( minutes X 0.00026 gal/	DRA GAL TOT mL)	WDOWN/ AL PURGED	0-3/4.7		PRESSURE TO PUMP	NA PSI
FIELD PARA	AMETERS WITH P	ROGRAM STAB	LIZATION CRITER	A (AS LISTED IN TH	E QAPP)				PUMP	
TIME 3-5 Minutes	0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	(mS/cm) (+/- 3%)	pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (ntu) (+/- 10% <10 ntu)	REDOX (mv) (+/- 10 mv)	INTAKE DEPTH (ft)	COMMENTS
L	BEGIN PURG	ING			1					
55	10.95	२००५	20-39	2.457	7.63	0.41	0.40	151-6	14-9	
60	11-04	7-00	20.38	2.451	7.63	0.44	0.41	145.4	14.9	· · · · · · ·
65	11.09	7.00	20.37	2.447	7.63	0.44	0.27	141.8	14-9	
70	11.13	200	20.36	2.443	7.63	0.40	0.25	137.4	19.2	
15	11.20	200	20-35	2.937	7.63	0.42	0-24	131.9	19.9	
80	11-21	100	20.35	2.433	7.64	0.070	0.24	120-1	17.9	
85	11.24	200	10	1.130	7.64	0.41	0.29	122-5	1 ( /	
				(i)	677	- (~)	(1)	(nu)		
			20	3-43-	-7	10.4	er4	+30		
	FI	NAL STABILI	ZED FIELD PARA	METERS (to appr	opriate signi	ificant figures[Sl	F])		TEMP.: nearest de COND.: 3 SF max pH: nearest tenth (	egree (ex. 10.1 = 10) (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5.53 = 5.5)
			20	2.43	7.6	0.4	0-24	130	DO: nearest tenth ( TURB: 3 SF max, ORP: 2 SF (44.1 =	(ex. 3.51 = 3.5) nearest tenth (6.19 = 6.2, 101 = 101) < 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC	)N			TURINGAR		FRIAIS	- 4		
	TALTIC ERSIBLE		IQUINOX EIONIZED WATER	SILICON TU	BING BING	S. STEE	EL PUMP MATERIAL		WL MET	TERMJOO - 47
BLADI	DER	P	OTABLE WATER	TEFLON LIN HDPE TUBI	IED TUBING	GEOPR TEFLO	OBE SCREEN N BLADDER		X WQME X TURB.N	TERM015-07
WATT OTHER	ERA {	н н	EXANE IETHANOL	LDPE TUBIN OTHER	ŧG	OTHER OTHER			PUMP OTHER	5008-41
ANALYTIC	AL PARAMETERS		THER	OTHER		OTHER			FILTER	<u>s no. type</u>
	PARAME	TER	METHOD NUMBER	FIELD FILTERED	PRESER MET	VATION V THOD RE	OLUME S QUIRED CO	AMPLE	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
X	VOC	<u> </u>	-8260C	N			Yome _	<u> </u>	N	360109-12-3315
								- <b></b>		
PURGE OB	SERVATIONS					KETCH/NOTES				
PURGE WA	TER YE RIZED X	s <u>NO</u>	NUMBER OF GALL GENERATED	ONS 4.8						
NO-PURGE UTILIZED	METHOD YE	S NO	If yes, purged approxim to sampling or	ately 1 standing volume pri mL for this sample loca	ior tion.					
Sampler Sign	nature: MA		Print Name:	Jak Vogen						
Checked By:			Date:							
	MAC	TE	C					LOW F	LOW GROU	INDWATER SAMPLING RECORD
511 Congr	ess Street, Portlan	d Maine 04101								

			LOW	FLOW GROU	UNDWAT	TER SAMPL	ING RECO	ORD	_	
	PROJECT NAME	Industr	ial Overall - Supplemen	ntal RI	LOC		DA	TE	110	
	PROJECT NUMBE	R	3612112221.06		STA	RT TIME	EN	D TIME	115	
	SAMPLE ID		OKT SAM	PLE TIME	SITE	150 ( NAME/NUMBER	PA	GE .	12	
	360109-1	2-34997	13490	1730	Ind	ustrial Overall/36010	9	I OF	_(	WELL INTECDITY
WELL DIAN	AETER (INCHES)		2 4	6	8	OTHER			CAP	YES NO N/A
TUBING ID	(INCHES)	<b>X</b> 1/8	1/4 3/8	1/2	5/8	OTHER			CASING LOCKED	<u>× </u> <u>×</u> <u></u>
MEASUREN	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	(TOC)	OTHER			COLLAR	×
INITIAL D (BMP)	0TW 6-	68 FT	FINAL DTW (BMP)	8-42	FT STI	T. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	FT
WELL DEI (BMP)	ртн с 1	-25 FT	SCREEN LENGTH		PID FT AMI	BIENT AIR	0.0	PPM	REFILL TIME SETTING	ER M SEC
WATER COLUMN	2.	.57 <sub>ft</sub>	DRAWDOWN VOLUME	0-1	GAL MO	WELL UTH	0.1	PPM	DISCHARGE TIMER SETT	
CALCULA	TED D.	11	(initial DTW- final DT TOTAL VOL.	W X well diam. square	<u>d X 0.</u> 041) DRA	WDOWN/	0-190	allas	PRESSURE	NA
GAL/VOL (column X v	well diameter squared	X 0.041)	(mL per minute X tota	l minutes X 0.00026 ga	<u>GAL</u> 101 l/mL)	AL PURGED			TOPUMP	r5i
FIELD PAR TIME	AMETERS WITH P DTW (FT)	ROGRAM STAB	TEMP. (°C)	IA (AS LISTED IN TH SP. CONDUCTANCE (mS/am)	pH (units)	DISS. O2 (mg/L)	TURBIDITY (ntu	) REDOX (mv)	PUMP	COMMENTS
3-5 Minutes	Drawdown	(mL/min)	(+/- 3 degrees)	(ms/cm) (+/- 3%)	(+/- 0.1 units)	(+/- 10%)	(+/- 10% <10 ntu	) (+/- 10 mv)	DEPTH (ft)	COMMENTS
5	BEGIN PURG	าย0	24		7 1/2	1.79 _	11 1		a. 15	Parent dr.
	Pinemed	dry	allow h	0.960	1-15	Scienty	11.1	-124.4	-(	Ingen i 9
	10-974	·····/	2.0~ 0	156040	iprer					
				-						
	<b>_</b>									
		•								
					<u> </u>				TEMP .: nearest de	gree (ex. 10.1 = 10)
	F 11	MAL STABILIZ	LED FIELD PARA	LVIETERS (to app)	ropriate sign		·))		pH: nearest tenth ( DO; nearest tenth (	(ex, 5.53 = 5.5) (ex, 3.51 = 3.5) (ex, 3.51 = 3.5)
EQUIPMENT	DOCUMENTATIO	N	1		1				ORP: 2 SF (44.1 =	earest temin (6.19 = 6.2, 101 = 101) • 44, 191 = 190)
PERIST	<u>TYPE OF PUMP</u> FALTIC	[가니	<u>ECON FLUIDS USED</u> QUINOX	SILICON TU	<u>TUBING/PI</u> JBING	UMP/BLADDER MAT	<u>ERIALS</u> L PUMP MATERIA	L	WL MET	EQUIPMENT USED TER
SUBMI BLADI	ERSIBLE DER		EIONIZED WATER OTABLE WATER	TEFLON TU TEFLON LI	JBING NED TUBING	PVC PU GEOPR	MP MATERIAL OBE SCREEN		Y PID Y WQ ME	15839 TER
	ERA		EXANE ETHANOL	LDPE TUBI	NG NG	OTHER			PUMP OTHER	5003-41
OTHER			THER	OTHER		OTHER			FILTER:	<u>s no. type</u>
	PARAME	TER	METHOD NUMBER	FIELD FILTERED	PRESEF MET	RVATION V THOD RE	olume Quired Co	SAMPLE OLLECTED	QC COLLECTED	SAMPLE BOTTLE ID NUMBERS
~	VOC		8260C		H	<u>c\</u>	wint_	3	£0	360109-123409
	a a deba d'an amin'ny fanana amin'ny fanana dia 2008–2018. N				-			······		
							. <u> </u>			
PURGE OB	SERVATIONS TER YES	NO	NUMBER OF GALL	ons o.l	S	KETCH/NOTES				
CONTAINE NO-PURGE	RIZED 🔀 METHOD YE		GENERATED If yes, purged approxim	ately 1 standing volume m	rior					
UTILIZED			to sampling or	mL for this sample loc	ation.					
Sampler Sign	nature: MA		Print Name: 🏌	Jate Voyan						
Checked By:			Date:							<u></u> ,
	M AC	TE	C					LOW F	LOW GROU	NDWATER SAMPLING RECOR
511 Congre	ess Street, Portlan	d Maine 04101	$\mathbf{C}$							

			LOW	FLOW GRO	UNDWAT	FER SAMPI	LING REC	CORD		
;	PROJECT NAME	Indust	rial Overall - Sunnleme	ntal RI	LOC	CATION ID	a	ATE		· ·
	PROJECT NUMB	ER	3612112221.06		STA	V2 -35 RT TIME	E	10//7/	<u>15</u> -	
	SAMPLE ID		SAM	PLE TIME	SITE	1625 E NAME/NUMBER	P	AGE	/	
	360109-6	2-3527	<u> </u>	1720	Ind	ustrial Overall/36010	09	) OF	ł	WELL INTECDITY
WELL DIAM	IETER (INCHES)		2 4	6	8	OTHER			CAP	YES NO N/A
TUBING ID	(INCHES)	1/8	1/4 3/8	1/2	5/8	OTHER		<u>.</u>	CASING	<u>→</u> <u>→</u> <u>→</u> <u>→</u>
MEASUREM	IENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASING	G (TOC)	OTHER			COLLAR	<u> </u>
INITIAL D (BMP)	TW	7.34 <sub>FT</sub>	FINAL DTW (BMP)	9.99	FT STI	OT. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	E FT
WELL DEF (BMP)	этн 3	1.56 FT	SCREEN LENGTH	10	FT AM	BIENT AIR	6.0	PPM	REFILL TIM SETTING	ER NA SEC
WATER COLUMN	24	・ , , , FT	DRAWDOWN VOLUME	0.11	GAL MO	WELL UTH	0.1	РРМ	DISCHARGE TIMER SETT	ING MA SEC
CALCULA GAL/VOL	TED Ó	.99 GAL	(mitial DI w- final D. TOTAL VOL. PURGED	4.3	GAL TOT	AWDOWN/ FAL PURGED	0.41	4-3	PRESSURE TO PUMP	~A PSI
(column X w	vell diameter squared	IX 0.041)	(mL per minute X tota	I minutes X 0.00026 g	al/mL)		·			
TIME 3-5 Minutes	DTW (FT) 0.0-0.33 ft Drawdown	PURGE RATE (mL/min)	TEMP. (°C) (+/- 3 degrees)	SP. CONDUCTANCE (mS/cm) (±/- 3%)	pH (units) (+/- 0.1 units)	DISS. O <sub>2</sub> (mg/L) (+/- 10%)	TURBIDITY (r (+/- 10% <10 n	ntu) REDOX (mv) (tu) (+/- 10 mv)	PUMP INTAKE DEPTH (ft)	COMMENTS
	BEGIN PURG	SING	• • • • •	(1.5%)			-1			····
0	8.98	300	21.21	2.516	7.31	6.77	18.3	-131.7	26.6	
5	9.32	300	20.67	2.539	7.40	1.68	19-1	-133.1	26.6	
10	9.64	300	20.15	2.550	7.41	0.70	12-1	-140	26-6	
15	9.76	300	20-20	2-570	7.45	0.61	4-62	-128-2	26 6	
20	9.82	300	20-11	2.584	7.45	0.61	4.07	-117.9	26.6	
25	9.88	300	2002	2-594	7-46	0.59	2-79	-110.4	26.6	
30	9.93	300	19.97	2.602	7.46	0-48	2.47	-167.5	26.6	
35	9.95	300	19.92	3-608	7.46	0.48	1.99	-101.5	26.6	
40	9.96	300	19-89	2.607	7.46	0.38	2.02	-97-7	266	
45	9.91	300	19.85	2-605	7-46	0.38	1.99	-94.4	26.6	
50	9.91	500	19-84	2-600	7.46	0 # -(0	1.4	- 13-8	26.6 TEMP.: nearest de	egree (ex. 10.1 = 10)
	FI	NAL STABILIZ	LED FIELD PARA	METERS (to app	oropriate sign	ificant figures[S	F]) T		COND.: 3 SF max pH: nearest tenth DO: nearest tenth	s (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5.53 = 5.5) (ex. 3.51 = 3.5)
FOURPMENT	DOCUMENTATIC	N .	20	2.60	7-5	0.4	1.4]	-94	TURB: 3 SF max, ORP: 2 SF (44.1 -	nearest tenth (6.19 = 6.2, 101 + 101) = 44, 191 = 190)
	TYPE OF PUMP		ECON FLUIDS USED		TUBING/PI	UMP/BLADDER MAT	FERIALS	141	No. WILME	EOUIPMENT USED
SUBME	ERSIBLE		EIONIZED WATER	TEFLON T	UBING UBING INED TUBING	PVC PL GEOPR	JMP MATERIAL	IAL	Y PID	15859 TER Mais-07
WATTE	ERA		ITRIC ACID EXANE	HDPE TUB	ING	TEFLO	N BLADDER		TURB. I	METER <u>MO34-33</u> ちのあってい
OTHER OTHER	t		ETHANOL THER	OTHER OTHER		OTHER OTHER			OTHER FILTER	<u>s</u> NO, TYPE
ANALYTIC	AL PARAMETERS	TER	METHOD	FIELD	PRESER	RVATION V	OLUME	SAMPLE	QC	SAMPLE BOTTLE ID
	VOC		NUMBER 8260C	- N	> MET  1+	THOD RE -C ( パ	equired いっっし	COLLECTED		0 NUMBERS 360109-P23527
		······			<u> </u>	<u> </u>				
							·			
PURGE OBS	SERVATIONS				<b>S</b>	KETCH/NOTES				<u> </u>
PURGE WAT	TER YES		NUMBER OF GALL GENERATED	.ONS						
NO-PURGE	METHOD YES		If yes, purged approxim to sampling or	ately 1 standing volume p mL for this sample lo	orior cation.					
		- <u></u>	·	1						
Sampler Sign	ature: MMV	/	Print Name:	Vate Vage	m		,			
Checked By:			Date:							
	MAC	CTE	С				λ.	LOW FI	LOW GROU	NDWATER SAMPLING RECOR
511 Congre	ess Street Portlan	d Maine 04101								

								COBB	National Article	
	an Alex Maria		LOW	FLOW GRO	UNDWA	TEKSAMIPI	JING KE	CORD		<u>an a 11 sa katata</u> ini. T
	PROJECT NAME	Indust	rial Overall - Supplemen	ntal RI	LO	$\frac{MW-5C}{MW-5C}$	1	DATE 1013	7 h5	
	PROJECT NUMB	ER	3612112221.06		ST/		56	END TIME	840	
	SAMPLE ID 360109	1 - MW-50	102 SAMI	1840	SIT In	E NAME/NUMBER dustrial Overall/3601(	)9	PAGE	OF	
WELL DIAM	IETER (INCHES)			6	8	OTHER				WELL INTEGRITY YES NO N/A
TUBING ID (	(INCHES)	1/8	1/4 3/8	1/2	5/8	OTHER			CAP CASING	<u>^ ~</u>
MEASUREM	ENT POINT (MP)	TOP OF	RISER (TOR)	TOP OF CASIN	G (TOC)	OTHER			COLLAR	
INITIAL D' (BMP)	wł.	61 FT	FINAL DTW (BMP)	1.61	FT ST	OT. CASING (CKUP (AGS)	N	↓ <sub>FT</sub>	TOC/TOR DIFFERENC	E FT
WELL DEP (BMP)	Э.	.34 <sub>ft</sub>	SCREEN LENGTH	2,34	FT AM	) IBIENT AIR	0.)	PPM	REFILL TIM SETTING	er NA sec
WATER COLUMN	0.	73 <sub>FT</sub>	DRAWDOWN VOLUME	0,0004	GAL MC	) WELL DUTH	0.3	PPM	DISCHARGE TIMER SET	
CALCULA	TED C	0.03	(initial DTW- final DT TOTAL VOL.	W X well diam. squar	ed X 0.041) DR	AWDOWN/	0.0604	+3	PRESSURE	
GAL/VOL (column X w	vell diameter squared	X 0.041)	(mL per minute X tota	1 minutes X 0.00026 g	GAL 10 al/mL)	TAL PURGED				PSI
TIME	DTW (FT) 0.0-0.33 ft	PURGE RATE	TEMP. (°C)	IA (AS LISTED IN I SP. CONDUCTANCI (mS/cm)	HE QAPP)	DISS. O2 (mg/L)	TURBIDITY	(ntu) REDOX	(mv) PUMP INTAKF	COMMENTS
3-5 Minutes	Drawdown BEGIN PURG	(mL/min)	(+/- 3 degrees)	(+/- 3%)	(+/- 0.1 units	(+/- 10%)	(+/- 10% <10	ntu) (+/- 10	DEPTH (ft)	
5	1.63	200	73.40	2.564	7.19	c7		5 129	3	· · ·
ìo	1.62	200	23.41	2-557	6.91	2.14	2.4	2 130	.1	
15	1.62	200	23.39	2-555	6.75	2-03	0.7	3 130	.7	
20	1-62	200	23.36	2.559	6.69	1.69	0.4	2 130	8	
25	1.62	200	23.34	2-566	6.64	1.35	0.4	9 130.	2	
50	1.62	200	23.31	2.579	6.61	1.19	0.3	7 130	<u>,</u> ,	
35	1-62	200	23.30	2.584	6.60	1.14	0.4	7 132	3	
<u> </u>	1.65	200	23.30	2.586	1.59	110	0.2	135 1135 1135		
	1-03		21.30	06			0.0	1 10		
	· Fn	NAL STABILI	ZED FIELD PARA	METERS (to app	propriate sign	nificant figures[S	F])		TEMP.: nearest o COND.: 3 SF ma	legree (ex. 10.1 = 10) x (ex. 3333 = 3330, 0.696 = 0.696) (ex. 5 53 = 55)
			23	2.59	6.6	1.1	0.2	130	DO: nearest tenth TURB: 3 SF max ORP; 2 SF (44.1	(ex, 3.5) = 5.5) (ex, 3.51 = 3.5) (x, arcset seath (6.19 = 6.2, 101 = 101) = 44, 191 = 190)
EQUIPMENT	DOCUMENTATIC	DN E	ECON FLUIDS USED	<u> </u>	TUBING/F	YUMP/BLADDER MAT	ERIALS	•	1********************************	EQUIPMENT USED
X PERIST SUBME	ALTIC RSIBLE	ж Х	IQUINOX EIONIZED WATER	SILICON T TEFLON T	UBING UBING	S. STEE PVC PL	EL PUMP MATE	RIAL	Se WL ME N PID	
BLADD	RA		OFABLE WATER ITRIC ACID EXANE	HDPE TUE	INED TUBING BING BING	TEFLO	OBE SCREEN N BLADDER		TURB.	METER
OTHER OTHER			ETHANOL THER	OTHER OTHER		OTHER OTHER				R
ANALYTICA	AL PARAMETERS PARAME	TER	METHOD	FIELD	PRESE	RVATION V	OLUME	SAMPLE	QC	SAMPLE BOTTLE ID
R	Mar 1	10C	NUMBER <u>840</u>		о ме 	11HOD RE 1 <u>el 3</u> /	QUIRED	COLLECTEI		j <u>see aber</u>
							·	. <u> </u>		
PURGE OBS	SERVATIONS	S NO			- <u> </u>	KETCH/NOTES				
CONTAINER			GENERATED		<u>&gt;</u>					
UTILIZED		Í	to sampling or	mL for this sample lo	cation.					
Sampler Sign:	ature: Mtw		Print Name:	Nate Vogo	m					
Checked By:			Date:							
	MAC	TE	С					LO	V FLOW GROI	UNDWATER SAMPLING RECOR
511 Congre	ss Street. Portlan	d Maine 04101	~							

	GROUNDWATE	R/ PORE WATE	R GRAB SAM	PLING RECORD		
	PROJECT NAME	•	<u>.</u> .	SAMPLE LOCATION	I	DATE
		ustrial Overall - Supplemental	RI	<u></u> <u>55~36</u> )		10/22/15
511 Congress Succe, Formand Manie 04101	PROJECT NUMBER	3612112221.06.01		INIO	ſ	1430
	SAMPLE ID 360609 - 1	Sw - 301010	SAMPLE TIME	SITE NAME/NUMBE Industriall Overall /	R F 360109	PAGE OF
SAMPLE TYPE X GRAB WELL/PIEZO	DMETER GEOPROBE	PORE WATER	OUTFALL	OTHER		VELL INTEGRITY
WELL DIAMETER (INCHES) X 1	2 4 6	8	OTHER		CAP	YES NO N/A
TUBING ID (INCHES)	1/4 3/8 1	/2 5/8	OTHER		LOCKED	
MEASUREMENT POINT (MP) TOP O	FRISER (TOR) TOP C	F CASING (TOC)	OTHER		COLLAR	<u> </u>
INITIAL DTW (BMP) 11.51 FT	FINAL DTW (BMP)	4.89 FT STI	DT. CASING CKUP (AGS)	NA FT	TOC/TOR DIFFERENCE	NA FT
(BMP) H. 89 FT	SCREEN LENGTH	しつ FT AM	BIENT AIR	<u>С.</u> с ррм	REFILL TIMES	NA SEC
COLUMN 3.38 FT	DRAWDOWN VOLUME (initial DTW- final DTW X well di	GAL PID GAL MO am. squared X 0.041)	WELL	2.6 PPM	DISCHARGE TIMER SETTIN	NG NA SEC
CALCULATED GAL/VOL (column X well diameter squared X 0.041)	TOTAL VOL. PURGED (mL per minute X total minutes X (	ひっうち GAL DR. .00026 gal/mL) DR.	AWDOWN/ TAL PURGED	NA	PRESSURE TO PUMP	NA PSI
FIELD PARAMETERS					PUMP	
TIME DTW (FT) PURGE RATE (mL/min)	TEMP. (°C) SP. CONE (mS	DUCTANCE pH (units) S/cm)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (ntu) REDOX (mv)	INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING	10 40 1	78 117	2 34		120	
1413 12-01 150	19.99 1.1	1.0 6.63	>. 5%	840 - 2419	12.7	
	10 11 0.	575 6.01	- 4 • 11	71000 - 111. [	1.1	
SAMPLE OBSERVATIONS: CLEAR			<u>ا</u>	00 ODOR	اا. ب	THER (and notes)
EQUIPMENT DOCUMENTATION					······ ·	
TYPE OF PUMP	LIQUINOX X	TUBING/PL SILICON TUBING	JMP/BLADDER MATE	<u>UALS</u> L PUMP MATERIAL		R LEVEL METER
BLADDER	POTABLE WATER	TEFLON TUBING TEFLON LINED TUBING	GEOPR	MP MATERIAL OBE SCREEN V BLADDER	X PID X WQ ME	$\frac{15639}{51ER}$
WATTERA OTHER	HEXANE X METHANOL	LDPE TUBING OTHER	OTHER		X PUMP OTHER	5008-41
	OTHER	OTHER	OTHER		FILTER	<u> INO TYPE</u>
PARAMETER	METHOD NUMBER	PRESERVATION	VOLUME REO	URED SAMPLE	QC	SAMPLE BOTTLE ID
	82600	METHOD	3 X 40 MI			NUMBERS
			<u> </u>			
		<u></u>				·
	······					······
NOTES Source interference	it 13.9 ft by	5	SKETCH			
- ilaya						
allow						
				•		•
PURGE OBSERVATIONS						
PURGE WATER YES NO	NUMBER OF GALLONS	0-15				
	-SIMMIDD					
NO-PURGE METHOD     YES     NO       UTILIZED     X     X	If yes, purged approximately 1 standing to sampling ormL for this	g volume prior s sample location.				
AND	Nom	Vegen				
Sampler Signature:	Print Name:	,		GROUNDWATER/ POI	RE WATER	GRAB SAMPLING RECOR
Checked By	Date:					
1989 A 1999 A				31		

emental RI FAP Attachment 2 - FDRs\Geoprobe GW

 $i_{ij}m$ 

1\Contract D007619\Projects\Industrial Overall Serv

<b>M</b> M. 511 Con	ACT]	EC Maine 04101	PROJECT NA PROJECT NU	ME Industrial Overa MBER 361	II - Supplemental 12112221.06.01	RI	SAM	PLE LOCATIO SS-40 TTIME 135	8 8 6	DATE 10/22/15 END TIME 1515
			SAMPLE ID	09-CW-4	°ଟ୍ଟା <sub>ऽ</sub> -	SAMPLE TIME	SITE	NAME/NUME	BER 11 / 360109	PAGE (
SAMPLE TYPE WELL DIAME <sup>*</sup> TUBING ID (IN MEASUREMEI	E X GRAB [ TER (INCHES) [ NCHES) [ NT POINT (MP)	WELL/PIEZO	METERGEOP ] 2 4 ] 1/4 3/8 RISER (TOR)	ROBE PORE W	/ATER	]OUTFALL ] OTHER ] OTHER ] OTHER	OTHER		CAP CASING LOCKED COLLAR	WELL INTEGRITY YES NO N/A
INITIAL D? (BMP)	TW	.44 <sub>FT</sub>	FINAL DTW (BMP)	14-86	FT ST	DT. CASING CKUP (AGS)	NA	FT	TOC/TOR DIFFERENCE	e NA FT
WELL DEP (BMP)	тн јч	.86 FT	SCREEN LENGTH	10	PII FT AM	BIENT AIR	0-0	PPM	REFILL TIMI SETTING	ER NA SEC
WATER COLUMN	0.	ዛኔ <sub>FT</sub>	DRAWDOWN VOLUME	0.07	GAL MO	WELL UTH	0-0	ррм	DISCHARGE TIMER SETT	ING NA SEC
CALCULAT GAL/VOL	TED Or	っつ GAL	(initial DTW- final DT TOTAL VOL. PURGED	W X well diam. squared :	X 0.041) GAL TO	AWDOWN/ FAL PURGED	NA		PRESSURE TO PUMP	NA PSI
FIELD PARA	METERS	. 0.041)	(mL per minute X total	minutes X 0.00026 gal/n	nL)				DIDAD	· .
TIME	DTW (FT)	PURGE RATE (mL/min)	TEMP. (°C)	SP. CONDUCTANCE (mS/cm)	pH (units)	DISS. O <sub>2</sub> (mg/L)	TURBIDITY (a	u) REDOX (m	v) INTAKE DEPTH (ft)	COMMENTS
1356 Nov	BEGIN PURC	SING bak	in well	for w	em	Quality	~>			-f
						0 /		progra	y	
		·······								
					··					
MPLE OBSERVA	ATIONS: CLEA CLEA CDOCUMENTA CLEA	AR FION	COLORED	CLOUD	TUBING/PI	TURBID	ERIALS	ODOR		OTHER (see notes)
XMPLE OBSERV/ EQUIPMENT X PERISI SUBM BLADI OTHEF OTHEF ANALYTICA	ATIONS: CLE/ ATIONS: CLE/ DOCUMENTA' PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER VOC	AR FION	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID HEXANE METHANOL OTHER METHOD NUME 8260C	X SILICON TEFLON TEFLON LDPE TU X LDPE TU OTHER 3ER PRE HC1/	Y	TURBID IMP/BLADDER MAT S. ST PVC F GEOP TEFLA OTHE OTHE OTHE OTHE 3 X 40 MI	ERIALS ESEL PUMP MATERIAI ROBE SCREEN ON BLADDER R R QUIRED	ODOR	X WATI X PID X WQ M X TURE PUMI OTHE ELLIT	OTHER (see notes)         EQUIPMENT USED         ER LEVEL METER ^J200 47         IS39         METER _M037 - 67         S METER _M034 - 23         P         SAMPLE AUTOR         SAMPLE BOTTLE ID         NUMBERS         see above
AMPLE OBSERV/ EQUIPMENT X PERIST SUBM BLADI WATTI OTHEF ANALYTICA	ATIONS: CLE/ ATIONS: CLE/ DOCUMENTA' PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC	AR FION	COLORED	CLOUD     X SILICON     TEFLON     TEFLON     DPE TU     DDPE TU     COTHER     OTHER     HCI//     H	Y TUBING / TUBING UNED TUBING BING BING SERVATION METHOD 4 C	TURBID IMP/BLADDER MATI S. STF GEOP TEFL OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE SKETCH	ERIALS SEEL PUMP MATTERIAI ROBE SCREEN ON BLADDER R R QUIRED QUIRED	ODOR	X WATI X PID X WQ N X TURB Y UMM OTHE ELLT QC COLLECTED	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^J200 47 1 5839 METER /J00 73 P 5008 41 ER EKS NO SAMPLE BOTTLE ID NUMBERS  _
AMPLE OBSERV/ EQUIPMENT X PERISI SUBM BLADI WATTI OTHEF ANALYTICA	ATTONS: CLEA DOCUMENTAT DE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC 0.110 0.25	AR FION X X S TER TER	COLORED	X SILICON TEFLON TEFLON UDPETU X LOPETU OTHER OTHER HCI/	Y TUBING // TUBING TUBING LINED TUBING BING BING SERVATION METHOD 4 C	TURBID	ERIALS EEL PUMP MATERIAI ROBE SCREEN ON BLADDER R R QUIRED	ODOR	X WATI X PID X WQ M X TURB VITHE COLLECTED	OTHER (see notes)
AMPLE OBSERV/ EQUIPMENT X DELADI BLADI UNTES	ATIONS: CLEA	AR FION X X S TER J Y Y Hows	COLORED	ER PRE 1	Y TUBING // TUBING LINED TUBING BING // Comparison	TURBID	ERIALS ERIALS ERI PUMP MATTERIAI ROBE SCREEN ON BLADDER R R R QUIRED	ODOR	X WATI X PID X WQ N X TURK Y PUMI OTH OTH EILT QC COLLECTED	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^A J 200 47 1 5 8 39 METER _MO_1- 67 
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI OTHER OTHER ANALYTICA	ATIONS: CLEA CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS: CLEATIONS CLEATION CLEATIO	NR FION X X S S TER More S	COLORED	SER PRE	Y TUBING // TUBING LINED TUBING BING SERVATION METHOD 4 C	TURBID IMP/BLADDER MAT S. ST GEOP GEOP TEFLA OTHE OTHE OTHE OTHE OTHE OTHE OTHE OTHE SKETCH	ERIALS SEL PUMP MATE VMP MATERIAI ROBE SCREEN ON BLADDER R R R R QUIRED	ODOR	X WATI X PID X WQN X TURE PUMI OTHE ELLT	OTHER (see notes)
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI WATTI OTHEF OTHEF ANALYTICA NOTES PURGE OBSERV PURGE WATER CONTAINERIZED	ATIONS: CLEA ATIONS: CLEA DECUMENTAT PEOFPUMP TALTIC ERSIBLE DER R R L PARAMETER PARAME VOC 0A (LC A (LC A (LC) A (LC) VOC VATIONS VATIONS YES D	NR FION X X S TER Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID METHOD NUME 8260C 00000000000000000000000000000000000	Single NS	Y	TURBID IMP/BLADDER MATI S. ST GEOP GEOP TEFLA OTHE OTHE OTHE 3 X 40 MI 3 X 40 MI SKETCH	ERIALS ERIALS ERIALS UMP MATERIAI ROBE SCREEN ON BLADDER R R	ODOR	X WATI	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^AJ200477 1 5 8 39 METER _MO_1- 67 SAMPLE AU34 - 67 P 5 CO2841 ER ERS NOTYPE SAMPLE BOTTLE ID NUMBERS     
AMPLE OBSERV/ EQUIPMENT X PERIS SUBM BLADI WATTI OTHEF OTHEF ANALYTICA NOTES PURGE OBSERV PURGE WATER CONTAINERIZEI NO-PURGE METI UTILIZED	ATTONS: CLEA DOCUMENTAT PE OF PUMP TALTIC ERSIBLE DER ERA R L PARAMETER PARAME VOC 0 \\\c 0 \\ 1. 2 S VATIONS D YES D YES HOD YES	NR FION X X S TER FER Now S	COLORED CON FLUIDS USED LIQUINOX DEIONIZED WATER NITRIC ACID METHANOL OTHER METHOD NUME 8260C  QUIDER OF GALLO GENERATED If yes, purged approximant to sampling or	CLOUD  X SILICON TEFLON TEFLON UDPETU OTHER BER PRE HCI/ SIG Sigle NS O^'7 NL Coffic Sigle NS O^_7 NL Coffic Sigle NS O1	Y TUBING/PI TUBING LINED TUBING BING SERVATION METHOD 4 C  JCA	TURBID	ERIALS SEEL PUMP MATTERIAI ROBE SCREEN ON BLADDER R R R QUIRED	ODOR	X WATI	OTHER (see notes) EQUIPMENT USED ER LEVEL METER ^J200477 1 \$ 8 39 METER _M034 - 67 s. METER _M034 - 73 P \$ 500841 ER ER SAMPLE BOTTLE ID NUMBERS     

			GROUN	DWATER/ POR	E WATER	R GRAB SAM	PLING REC	ORD			
ANON A			PROJECT N	ME			SAMPI	E LOCATION		DATE .	
🌌 M	ACI	EC		Industrial Overall	- Supplemental R	I	1	4w-50	1	د/01	7/15
511 Co	ongress Street. Portland	Maine 04101	PROJECT NU	MBER			START	TIME OF3	2	END TIME	1622
			SAMPLE ID		112221.06.01	SAMPLE TIME	SITE N/	ME/NUMBER		PAGE	1000
			3601	09- MW-50	410	1620	Ind	ustriall Overall / 3	60109	1	OF
SAMPLE TYPI	e 🖾 grab	Wellpiezow	ieter Geo	PROBE PORE WA	TER	OUTFALL	OTHER			WELL INTEGH	
WELL DIAME	TER (INCHES)		2 4	6	8	OTHER			CAP CASING	<u>×</u>	
TUBING ID (IN	(CHES)	1.8	1.4 3.8		58	OTHER			LOCKED	<u> </u>	<u> </u>
MEASUREME	NT POINT (MP)	TOP OF I	RISER (TOR)	TOP OF CASING (TO	) ()	OTHER					
INITIAL DTV (BMP)	* <u>1</u>	-65 FT	FINAL DTW (BMP)	8.18	FT STIC	T. CASING XUP (AGS)	NA	FT	TOC/TOR DIFFERENCE		FT
WELL DEPT (BMP)	тн iч	-ບໆ <sub>FT</sub>	SCREEN LENGTH	10	FT AMB	BIENT AIR	0-9	PPM	REFILL TIME SETTING	R	NA SEC
WATER COLUMN	1:	እ.ሣዛ <sub>FT</sub>	DRAWDOWN VOLUME	0.3	GAL MOU	WELL JTH	3.4	ррм	DISCHARGE TIMER SETTI	NG	NA SEC
CALCULATE	ED (7	.5	(mitial DTW- final DT TOTAL VOL.	W X well diam. squared X 0.	U41) DRA	WDOWN/	0.3/1	, 57	PRESSURE	<b>—</b>	MA north
GAL/VOL (column X wel	I diameter squared X 0	.041)	(mL per minute X tota	minutes X 0.00026 gal mL)	GAL TOT	AL PURGED	0,0,0	·	IOPUMP	L	V PSI
FIELD PARAM	AETERS	PURCERATE							PUMP		
TIME	DTW (FT)	(mL min)	TEMP. (°C)	(mS/cm)	: pH (units)	DISS. O <sub>2</sub> (mg L)	TURBIDITY (ntu)	REDOX (mv)	INTAKE DEPTH (ft)		COMMENTS
	BEGIN PURGI	NG	2					1	1	1	
0831	5.72	250	41.21	2.480	7.55	2.75	49.0	-397.2			
0835	10-17	250	21-34	2.510	7.43	1-38	52.2	- 405.6			
0831	14.17	150	21.72	2-501	7.40	2.45	156	-340.2		Projed	<i>∽</i>
1627	8-12	250	21.69	2.442	7.38	2-46	9.98	-167.1	10	Post	sampy
							<u>.</u>			1	
SAMPLE OBSERV	CLE	AR <u>7</u>	_COLORED	CLOUDY		TURBID		ODOR		OTHER (see no	tes)
TY	THE OF PUMP		CON FLUIDS USED		TUBING PL	MP BLADDER MATH	RIALS			EQUIPMENT I	USED
SUBME	RSIBLE		QUINOX EIONIZED WATER	TEFLON TUE	SING SING	PVC PU	MP MATERIAL		PID WOME		9
WATTE	IRA		TRIC ACID	HDPE TUBIN	10 10 10 10 10 10 10 10 10 10 10 10 10 1	TEFLON	BLADDER		TURB.	METER	1075-07 1074 - 33
OTHER OTHER			ETHANOL THER	OTHER OTHER		OTHER OTHER			OTHER FILTER	<u></u>	TYPE
ANALYTICAL	PARAMETERS										
	PARAM	ETER	METHOD NUN	IBER PRES	ERVATION ETHOD	VOLUME RE	QUIRED	SAMPLE DLL <u>E</u> CTED	QC COLLECTED	SAM	IPLE BOTTLE ID NUMBERS
×	Vi o	1260C	82600		HC 1	3×4	oml_	¥	<u>_~</u>	<u> </u>	e abou
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									·····		
			<u></u>			<u> </u>				<u> </u>	
NOTES	- Reco	inter to	171	ft bhac	SI	KETCH					
	1	160.		0,-0,							
	ク	1070									
	- Dwge	tubing	+ Sav	ple, take							
	r a	samp	<i>wat</i>	guality							
	reasu	tenen+		Ŭ							
PURGE OBSERV	ATIONS	· · ·									
	VE	NO NO	NIMBEROFONI								
PURGE WATER CONTAINERIZED	5 <del>x</del>		GENERATED	<u> </u>							
	10D V <sup>EC</sup>	- <u> </u>									
NO-PURGE METH UTILIZED			If yes, purged approxim to sampling or	ately 1 standing volume prior mL for this sample location.							
							•				
Sampler Signature:				Jak Voc.							
cumptor organization y			Print Name:	our oga							

	GROUNDWATER/ FOR	E WATEK GRAD SAWIPI	LING KECORD	dat ng polon ng tangangan di kang panggang pangang
	PROJECT NAME	· · · · ·	SAMPLE LOCATION	DATE
SIL Congress Street Portland Maine ()4101	Industrial Overall	Supplemental RI		
	3612	12221.06.01	1512	1521
	SAMPLEID 360109 - MW - 505	22 SAMPLE TIME 1515	SITE NAME/NUMBER Industriall Overall / 360109	
SAMPLE TYPE 🔀 GRAB 💽 WELL PIEZOMETEI	R GEOPROBE PORE WAT	TER OUTFALL OT	THER	WELL INTEGRITY
WELL DIAMETER (INCHES) X 1 2	4 6	8 OTHER	CAP	YES NO N'A
TUBING ID (INCHES)	3.8	5 8 OTHER	LOCKEI	
MEASUREMENT POINT (MP) TOP OF RISE	R (TOR) TOP OF CASING (TO	C) OTHER		·
INITIAL DTW (BMP) J. U FT (BM	AL DTW (P)	PROT. CASING FT STICKUP (AGS)	NA FT DIFFERENC	E FT
(BMP) 24.93 FT LET	NGTH 10	PID FT AMBIENT AIR	O . O PPM SETTING	ER NA SEC
WATER COLUMN 14.83 FT VOI	AWDOWN LUME	PID WELL MOUTH	7-3 DISCHARGE	
CALCULATED GAL/VOL (olumn X well diameter crusted X 0.041) (Diameter crusted X 0.041)	TAL VOL. RGED ner minute X total minute X 0.00026 cal mL	GAL TOTAL PURGED	0.3/0.6 PRESSURE TO PUMP	NA <sub>PSI</sub>
FIELD PARAMETERS				
TIME DTW (FT) PURGE RATE (mL min)	TEMP. (°C) SP. CONDUCTANCE (mS cm)	pH (units) DISS. O <sub>2</sub> (mg.L) T	PUMP URBIDITY (ntu) REDOX (mv) INTAKE DEPTH (ft)	COMMENTS
BEGIN PURGING				-
1518 14.02 250	19.19 1.750	7.69 5-90	17.5 154.2 21.9	3
SAMPLE OBSERVATIONS: CLEAR X COU		TIBED	0008	
EQUIPMENT DOCUMENTATION				
TYPE OF PUMP         DECON           PERISTALTIC         LQUIN           VENERISTATIC         X	NOX SILICON TUB	TUBING PUMP BLADDER MATERI ING S. STEEL P	ALS UMP MATERIAL WATE	EQUIPMENT USED ER LEVEL METER M 200 ~ 47
BLADDER POTAE	BLE WATER TEFLON LINE	ED TUBING GEOPROB	E SCREEN WQ M LADDER TURE	$\frac{(5057)}{\text{(ETER}} = \frac{1005}{2} \frac{37}{2}$
WATTERA HEXAN	ANOL LDPE TUBIN	OTHER OTHER	PUMI OTHE	SUUB-41
ANALYTICAL PARAMETERS	CTHER	OTHER		ERS NO TYPE
PARAMETER	METHOD NUMBER PRES	ERVATION VOLUME REQU	IRED SAMPLE QC	SAMPLE BOTTLE ID
Voc	8260C 1.	CI 3x10	ent Y N	see abit ~?
	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	······································	
well developed on	10/26/15	SKEICH		
- Dward dry	for 5 well volu	ue 5		
P - Jost	after Divicion			
- take sample	take post sam	nh		
Later and	3	r		
Bor	··/			
PURCE OBSERVATIONS	· · ·			
	0.6			
PURGE WATER YES NO NU	MBER OF GALLONS NERATED			
UTILIZED	es, purged approximately 1 standing volume prior ampling ormL for this sample location.			
Sampler Signature:	Prine Name Nate Vogen			
Charled Da	Peter		GROUNDWATER/ PORE WA	ATER GRAB SAMPLING RECORD
IC NECKED DY	Date:			

.

P:/Projects/nysdec1/Contract D007619/Projects/Industrial Overall Service Corporation - RI\_FS\4.0\_Deliverables\4.2\_Work\_Plans\Supplemental RI FAP/Attachment 2 - FDRs\Geoprobe GW Grab,Pore Water.xlsx

#### **APPENDIX B.4**

## SOIL VAPOR GRAB SAMPLING FIELD DATA RECORDS

## Soil Vapor and Air Field Data Record

					Ambi	ent Air	S	oil Vapo	r			
Location(1)	Type (2)	Depth	Excavation	Sampling Method (4)	$O_2$				PID (nnhy)	Date/Time	Sample ID	Comment
		(ieet)		Ivietiida (4)	(% VOI)	(% VOI)	(% VOI)	(% VOI)	(pppv)	10.00.45		
RP-01	SA	9.2	NA	PRT						10-26-15	SA-RP01-09	Manhole at intersection of Relyea and Bartels Place
	_									1400		
BP-01	SΔ	84	NA	PRT						10-26-15	SA-BP01-08	Bartels Place manhole (MH-01) in front of Bulfamante
51 01	5/1	0.1								1417	5/1010100	
	<u>د</u> ۸	0.0		DDT						10-26-15	SA DS01 10	Pine Street manhole (MH-03) immediately adjacent to
P3-01	SA	9.0	INA	PRI						1435	5A-P301-10	Pearlgreen Parking lot
26.02		10.0								10-26-15	64 5602 44	
PS-02	SA	10.6	NA	PRI						1445	SA-PS02-11	Pine Street manhole (MH-04) at turn of the sewer line
										10-26-15		Upgradient background sample at manhole outside 35
PS-03	SA	7.6	NA	PRI						1500	SA-PS03-08	Pine Street
										10-26-15		
PS-04	SA	10.0	NA	PRT						1507	SA-PS04-10	Pine Street manhole (MH-05) in front of 21 Pine St
										10-26-15		
PS-05	SA	11.6	NA	PRT						1515	SA-PS05-12	Pine Street manhole (MH-06) in front of 12 Pine St
						<u> </u>			·	10-26-15		HS-508 Sample location adjacent to IO building
BP-02	SVG	3.0	GP	PPS	20.9	0.6	20.9	0.4	1268	1537	SVG-BP02-03	nost sample (20.9 / 0.2 / 657 ppby)
	-									10-26-15		HS-507 Sample location adjacent to IO building
BP-03	SVG	3.0	GP	PPS	20.9	0.6	20.9	0.4	673	1600	SVG-BP03-03	nost sample (20.0 / 0.4 / 228 ppby)
										10.00 15		post sample (20.97 0.47 828 ppbv)
BP-04	SVG	3.0	GP	PPS	20.9	0.4	20.9	0.4	1E+05	10-26-15	SVG-BP04-03	HS-506 Sample location adjacent to IO building
										1610		post sample (20.9 / 0.2 / 113 ppmv)
BP-05	SVG	3.0	HD, SV	PPS	20.9	0.4	20.9	0.4	615	10-27-15	SVG-BP05-03	Eastern most point on sewer line (8.8 ft west of
			.,	-						1018		connection to main line); post sample (19.1 / 1.6 / 799)

## Notes:

ppm- parts per million ppbv-parts per billion per volume PID- photo ionization detector ug/m<sup>3</sup> - micrograms per cubic meter PCE - Tetrachloroethene TCE - Trichloroethene (1) Sample Location
BP- Bartels Place
PS -Pine Street
MR- MetroNorth Property
ST#- Structure 1 or 10

## (2) Sample Type

SVG- Soil Vapor Grab SA- Sewer Line Air IAS- Indoor Air Screening AA- Ambient Air (3)(4) Sampling MethodExcavatioPPS- push point samplern MethodPRT- post run tubingSV- ShopHSS- Hapsite ScreeningVacAK- Air

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## Soil Vapor and Air Field Data Record

					Ambi	ent Air	S	oil Vapo	r			
Location(1)	Type (2)	Depth	Excavation	Sampling	<b>O</b> <sub>2</sub>	CO <sub>2</sub>	<b>O</b> <sub>2</sub>	CO <sub>2</sub>	PID	Date/Time	Sample ID	Comment
		(feet)	Method (3)	Method (4)	(% vol)	(% vol)	(% vol)	(% vol)	(ppbv)			
BP-06	SVG	3.0	HD SV	DDS	20.9	0.4	8.2	11	3158	10-27-15	SVG-BP06-03	42.4 ft west of building tie in, associated with potential
51 00	540	5.0	110, 51		20.5	0.4	0.2		5150	1048	510 51 66 65	lateral (PL-02); post sample (6.6 / 9.2 / 3771)
BP-07	SVG	3.0	HD SV	PPS	20.9	0.2	20.6	0.6	3535	10-27-15	SVG-8P07-03	60.9 ft west of building tie in, associated with potential
51 67	570	5.0	110, 31	115	20.5	0.2	20.0	0.0		1105	510 8107 05	lateral (PL-03); post sample (20.9 / 0.6 / 2382)
BD-08	SVG	3.0		DDS	20 9	0.2	10.4	2.4	1365	10-27-15		108.1 ft west of building tie in, potential lateral (PL-05)
BI -08	300	5.0	110, 31	113	20.5	0.2	10.4	2.4	1303	1117	3VG-DI 08-03	to 25 Bartels Place; post sample (0.7 / 3.4 / 1488)
BP-09	SVG	3.0	HD SV	PPS	20.9	0.2	5 /	1 8	192/	10-27-15	SV/G-8P09-03	111.2 ft west of building tie in, potential lateral (PL-05)
65	570	5.0	110, 51	115	20.5	0.2	5.4	1.0		1127	576 81 65 65	to 16 Bartels Place; post sample (8.4 / 1.6 / 2042)
BP-10	SVG	3.0	HD SV	PPS	20.9	0	12.2	1 8	990	10-27-15	SV/G-BP10-03	155.7 ft west of building tie in (MH-01), NE side;
51 10	500	5.0	110, 31	115	20.5	0	12.2	1.0		1145	500 81 10 05	post sample (9.5 / 2.2 / 3005)
BP-11	SVG	3.0	HD SV	PPS	20.9	0	5 1	16	211/	10-27-15	SV/G-BP11-03	155.7 ft west of building tie in (MH-01), NW side;
51 11	570	5.0	110, 51	115	20.5	<u> </u>	5.1	4.0		1157	576 5111 05	post sample (11.6 / 2.6 / 2743)
BP-12	SVG	3.0	HD SV	PPS	20.9	0	65	2	3098	10-27-15	SV/G-BP12-03	155.7 ft west of building tie in (MH-01), SW side;
DI 12	500	5.0	110, 31	115	20.5	0	0.5	5	5050	1210	500 81 12 05	post sample (5.7 / 3.0 / 1069)
BP-13	SVG	10	HD SV	PPS	20.9	0	17/	03	2/88	10-27-15	SV/G-BP13-0/	188.7 ft west of building tie in, in front of 29 Bartels
51 13	500	4.0	110, 31	115	20.5	0	17.4	0.5	2400	1228	510 8 15 04	Place; post sample (11.8 / 1.6 / 3730)
BP-14	SVG	25	HD SV	PPS	20.9	0.2	20.9	0.2	3052	10-27-15	SVG-BP14-03	218.7 ft west of building tie in, in front of 31 Bartels
	500	2.5	110, 31	115	20.5	0.2	20.5	0.2	5052	1404	500 81 14 05	place; post sample (19.8 / 0.0 / 2484)
BP-15	SΔ	2.0	HD SV	PRT	20.9	0	20.9	0.2	2689	10-27-15	SA-BP15-03	Storm sewer at corner of Clear Channel Outdoor and
DI 13	54	2.0	110, 31		20.5	0	20.5	0.2	2005	1423	5A DI 15 05	the MNR property; post (20.9 / 0.0 / 2109)
BP-16	SVG	2.5	HD SV	PPS	20.9	0.2	17 1	2	2058	10-27-15	SVG-BP16-03	Sample 7 ft east of BP-07, IO side of sewer line;
5, 10	500	2.5			20.5	0.2		-	2000	1533	546 BI 10 05	post sample (16.7 / 2.2 / 2384)

## Notes:

ppm- parts per million ppbv-parts per billion per volume PID- photo ionization detector ug/m<sup>3</sup> - micrograms per cubic meter PCE - Tetrachloroethene TCE - Trichloroethene (1) Sample Location BP- Bartels Place

PS -Pine Street MR- MetroNorth Property ST#- Structure 1 or 10

## (2) Sample Type

SVG- Soil Vapor Grab SA- Sewer Line Air IAS- Indoor Air Screening AA- Ambient Air (3)(4) Sampling MethodExcavationPPS- push point samplerMethod SV-PRT- post run tubingShop VacHSS- Hapsite ScreeningAK- Air KnifeHA- Hand

October 2015

## Soil Vapor and Air Field Data Record

					Ambie	ent Air	Soil Vapor					
Location(1)	Type (2)	Depth (feet)	Excavation Method (3)	Sampling Method (4)	O <sub>2</sub> (% vol)	CO₂ (% vol)	O <sub>2</sub> (% vol)	CO₂ (% vol)	PID (ppbv)	Date/Time	Sample ID	Comment
BP-17	SVG	3.0	HD, SV	PPS	20.9	0.2	12.4	3	1267	10-27-15 1548	SVG-BP17-03	16 ft west of BP-07 between 21 and 23 Bartles Place; post sample 99.5 / 3.6 / 1280)
BP-18	SVG	3.0	HD, SV	PPS	20.9	0.4	1.7	2.6	11300	10-27-15 1706	SVG-BP18-03	7 ft west of BP-07; post sample (0.4 / 8.4 / 6640)
PS-06	SVG	5.8	HD, SV	PPS	20.9	0	20	1.6	7045	10-28-15 1130	SVG-PS06-06	Adjacent to brick wall for Pearlgreen; Post sample (20.0 / 1.4 / 6944)
PS-07	SVG	5.8	HD, SV	PPS	20.9	0	20.9	0	6247	10-28-15 1153	SVG-PS07-06	4 ft south of manhole MH-04; post sample (20.9 / 0.0 / 7053)
PS-08	SA	6.2	NA	PRT	20.9	0	20.9	0	7910	10-28-15 1220	SA-PS08-06	Catch basin sample from storm sewer in front of Pearlgreen; post sample (20.9 / 0.0 / 7910)
PS-09	SVG	2.9	HD, SV	PPS	20.9	0	NA	NA	8071	10-28-15 1229	SVG-PS09-03	53.4 ft south of MH-04; associated with potential lateral PL-01; post sample (16.7 / 3.6 / 2939)
PS-10	SVG	2.9	HD, SV	PPS	20.9	0	11.5	2.4	5837	10-28-15 1250	SVG-PS10-03	129.4 ft south of MH-04, associated with potential pipe break (PB-02); post sample (11.3 / 3.2 / 5772)
PS-11	SVG	1.5	HD, SV	PPS	20.9	0.2	20.8	0.4	7400	10-28-15 1305	SVG-PS11-02	172.1 ft south of MH-04, located just north of manhole MH-05; post sample unavailable due to water in tubing
PS-12	SVG	1.0	HD, SV	PPS	20.9	0.2	16.6	2.2	5042	10-28-15 1340	SVG-PS12-01	209.2 ft south of MH-04; shallow sample point due to hammer drill failure; post sample (17.5 / 2.8 / 5230)
PS-13	SVG	1.0	HD, SV	PPS	20.9	0.2	20.9	0.4	600	10-28-15 1405	SVG-PS13-01	264.7 ft south of MH-04; adjacent to MH-06; post sample (16.4 /2.8 / 700)
PS-14	SVG	1.3	HD, SV	PPS	20.9	0.2	18.6	0.6	500	10-28-15 1415	SVG-PS14-01	313.5 ft south of MH-04; shallow sample point due to hammer drill failure; post sample (20.9 / 0.0 / 500))

Notes:	
NOLC3.	

ppm- parts per million ppbv-parts per billion per volume PID- photo ionization detector ug/m<sup>3</sup> - micrograms per cubic meter

PCE - Tetrachloroethene

TCE - Trichloroethene

(1) Sample Location BP- Bartels Place PS -Pine Street MR- MetroNorth Property ST#- Structure 1 or 10

(2) Sample Type SVG- Soil Vapor Grab SA- Sewer Line Air IAS- Indoor Air Screening AA- Ambient Air (3)(4) Sampling MethodExcavationPPS- push point samplerMethod SV-PRT- post run tubingShop VacHSS- Hapsite ScreeningAK- Air KnifeHA- Hand

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## APPENDIX C

## MANIFESTS FOR OFF-SITE TRANSPORT AND DISPOSAL OF WASTE MATERIALS

Provide prime of type: (Form designed for use on ellite (12-pitch) typewriter.)					For	m Abbibwar	OMB No	2050-0030
UNIFORM HAZARDOUS     1. Generator ID Number	2. Page 1 of 3. E	nergency Response	e Phone	4. Manifest	Tracking N	lumber	. Omb Ho.	2000-0005
WASTE MANIFEST NYR000208967		(908) 3	54-021		416	5825	6 .	IK –
5. Cenarator's Name and Miching Address INDUSTRIAL OVERALL UP	NTEORM CON	rator's Site Advices	different	han maling addre	55)			
10 BARTELS PLACE								
NEW ROCHELLE, NY 10801								
Generator's Phone: (508) 402-9564	1							
6. Groeperter 1 Com any Game				U.S. FPAID	Number			
CLEAN VENTURE INC.				N.T.A	0000	7107		
r Transporter & Company Name	• *** *** \$* **************************		ilitetti talette le ere le tittere danta ari-	U.S. EPAID	Number	d A.Z. Man		
				1				
8. Designated Facility Name and Site Address Cycle Chem Inc.				U.S. EPA ID I	Number			
217 South First Street								
Elizabeth, NJ 07206								
Facility's Phone: (908) 355-5800				L MID	00000	0047		
98. 9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number,		10 Contai	nore			0040		
HM and Packing Group (If any))		No.	TVITA	Quantity	WLAVol.	13.	Waste Codes	\$
ROI NAJ077 HAZARDOUS WASTE, SOLTD, N.O.S.	(F001	1			truit di.	5001	FRAD	~
P F002) 9 PG III (RD F001 10# F002 10#	) FRGH 17	10	hk.	PAA	10	F 691	F002	R
	) CODH 17	1 3	וייטן	100				
RO2 NA3082 HAZARDOUS WASTE, LIDUID, N.O.S	5 (F001					E001	5000	
5 F002) 9 PG III (RD F001 10# F002 10#)	) FRGH 17		Dh	A	1	1001	FUUZ	
	/	* I		19.50	13		1	
3.							j,	
			Ì				1000 - D 1000	15 1 14
4.	······							
							3 4	
						-		
14. Speed Harding Instructions and Additions' alternation LDR. Op. E 11.0	047007/0	549497102	21/07/7	7/817	(1)00(			
BORINGS, DRILLING SOTIS (2) TD-Y PURGE F	SECON HAT	D	-10//0	20/2/ (	TINO	c-1 90	16.	
	COOR WAR	-13						1
15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this (	consignment are fully	and accurately des	cribed above	a by the omnor shi	inning name	and ore size		
marked and labeled/placarded, and are in all respects in proper condition for transport according to activity the activity of the second secon	ording to applicable in	ternational and natio	onal governm	iental regulations.	If export sh	ipment and I :	am the Prima	gea, rv
I capores, i cardiy that the contents of this consignment conform to the terms of the attached i certify that the waste minimization statement identified in 40 CFR 282 27(a) /if Lam a large	EPA Acknowledgme	nt of Consent.	0 mianthi na	name of the Associ				·
Generator/a/Olliona's Printed/Typed Nanas	Signature		n quantity ge	rierator) is true.		6.Pau	41. 10	
Nou Vaion	1	INL	-			INDE 1		reer
16. International Shipments		Usa				10	1 21	
Z Transporter signature (for exports only)	Export from U.S.	Port of ent	ry/exit:	. All provide the result of				-
Interported agristation (of exports of my).     Interported agristation of the end		Dete leavin	g U,S,:					
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5 Lollier Munutt	Signature	VI VI	Len			Mon	an Day	Year
Transporter 2 Printed/Typed Name		how 1				1	121	12
XX	Signature					Mon	th Day	Year
18% Discrepancy indication Space Quantity Type		Residue		Partial Rele	ction	Ī	Full Reian	tion
12-2 AND DOD DOUD DOUG						540		
1501100 000 1,0008,0009		lanilest Reference	Number:					
TION MIRENTING FROMES (OF LODIES IN T				U.S. EPA ID NI	umber			
Family": Phone:								
Foci aquatra di Attestate Palisty (di Generato)	· · · · · · · · · · · · · · · · · · ·					Mor	alla Ciery	Year
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatm	tent, dispositi, and re	cycling systems)				i	L	
2.				4				
HI41 H141	3.			-				
	3.							
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered	3. I by the manifest exce	pl as noted in Item	18ø					
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered	3. I by the manifest exce Signalpro	pt as noted in Item	18a			Mog	th 🕖 Day 💯	Year
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered Printed/Typod Name HEREN ET COS	3. I by the manifest excr Signature	pt as noted in Item	18a Q:			Mon	th / Daw	1 Yeller

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

# CleanVenture/CycleChem

CVCC 170806

er C D A I Cont No.	Str Tre Sta Tre Type D//)	ate Trans. (D-NJ Daca ansporter's Prior ate Trans. ID-HJ Deca ansporter's Phor accy's Phore ( 1 Total Quantity	IDEPE 11 No 12 ( (90) 10 EPE 11 No 14 ( 10 C- 14 ( 10 C- 14 ( 10 C- 14 ( 10 C- 14 ( 10 C- 14 ( 14 ( 16 C) 14 ( 16 C) 14 ( 16 C) 15 C ( 16 C) 16 C) 16 C ( 16 C) 16 C ( 16 C) 16 C) 16 C ( 16	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
er <u> Û [J   6  </u> Cont No. //(.	Str Tra Str Tra Tra Fau ntulners Type	ate Trans. ID-NJ Dace ansporter's Phor ate Trans. ID-NJ Dece ansporter's Phor accuy's Phore Cuantity	IDEPE 11 No 10 ( ( 90) 10 EPE 11 No 10 ( ( 905) ) : 10 ( ( 905) ) : 10 ( 10 EPE 10 EPE 11 No 10 EPE 10 EPE 1	1 1 109 5 0 355 3 003 Waster
er O ( ) ; A 1 Cont No.	Str Tra Sta Lý Fau ntulners Type	ate Trans. (D-fJJ Dacs ansporter's Phor ate Trans. ID-fJJ Deca ansporter's Phor cody's Phore ( Total Quantity	DEPE 11 No 10 ( ( 90) 10 EPE 11 No 10 ( ( 90) 10 EPE 11 No 10 ( 90) 10 EPE 11 No 10 EPE 10 EPE	10.9 5.0_355 - 3.0_355 - 3.00 Watter Master
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## APPENDIX D

#### SITE SURVEY DATA

		SAMPLE LO	DCATIONS 2	2-3-14	
Det	Northing	Fasting	Ground		Doco
2001		C90294 1	<b>Elev.</b>	PIPE ELEV.	Desc.
2001	756635.4	689284.1	77.71	-	A3
2014	756641.5	689308.5	/8.64	-	B3
2017	/56645.1	689319.2	80.05	-	SS 23
2018	756658.1	689306.9	78.40	-	B2
2025	756666.6	689324.1	78.42	-	C1
2026	756658.6	689326.3	81.06	-	C2A
2027	756652.7	689320.8	80.86	-	C2
2028	756654.1	689329.7	80.15	-	SS 212
2035	756676.1	689339.3	81.69	-	D1
2041	756681.6	689348.3	81.14	-	SS 211
2042	756692.0	689351.6	84.67	-	SS 208
2049	756699.5	689370.9	86.68	-	SS 210
2059	756682.1	689358.2	80.14	-	SS 216
2060	756672.3	689352.7	79.59	-	SS 215
2062	756661.2	689342.9	79.72	-	SS 214
2063	756682.5	689404.7	81.83	_	G1
2064	756679.4	689421.4	82.11	_	H1
2065	756685.4	689390.2	81 49		F1
2066	756659.0	689403.2	80.01		62
2000	756662.1	689387.8	79.96		F2
2007	756660.2	689387.8	79.90	-	F2
2000	750009.2	689370.8	79.79	-	E2
2069	756644.5	689387.5	79.05	-	F3
2070	756664.0	689351.9	79.08	-	D2
2071	/56632.5	689372.5	/8.14	-	GS/
2072	756638.7	689364.5	77.70	-	E3
2073	756645.6	689349.0	77.60	-	D3
2074	756619.7	689357.9	76.92	-	GS25
2075	756625.0	689348.8	76.39	-	D4
2076	756610.3	689347.5	76.14	-	GS8
2077	756639.1	689330.2	76.81	-	C3
2078	756629.8	689317.6	76.23	-	C3A
2079	756596.3	689337.0	75.67	-	C5
2080	756602.6	689344.5	75.98	-	D5
2081	756592.4	689358.4	76.70	-	E5
2082	756584.7	689359.1	76.59	-	PZ-22
2083	756601.5	689350.8	76.50	-	PZ-19
2084	756583.4	689347.0	75.76	-	D6
2087	756555.1	689362.3	76.25	76.12	MW-24
2088	756551.9	689362.1	76.14	75.83	MW-24B
2089	756545.6	689365.3	76.29	_	E8
2090	756544.4	689346.3	74.95	-	D8
2091	756562.0	689347.6	75.42	-	D7
2092	756577.8	689325.4	75.08	_	C6
2093	756560.4	689328.6	74.78	_	C7
2094	756545.7	689331.5	74.55		C8
2095	756518 5	689334 5	74 34	_	C9
2096	756521.7	689347.4	74 97		09
2000	756525.0	689359 7	75.64		E9
2007	756526.0	689369.6	76.41		P7-21
2000	756614.4	689333.0	75.83		<u>-</u> - <u>-</u>
1140	750014.4	689535.0	75.05	-	
2000	750008.5	689308.1	70.20	-	
2099	756654.2	689380.3	79.30	-	IVI VV-25B
2100	756648.1	689385.2	79.15	-	IVI W-25
2300	756634.2	689586.4	91.46	91.22	MW-27B
2303	756584.0	689330.8	75.24	74.66	MW-30B
2309	756648.0	689310.3	78.52	78.03	MW-29B
2311	756646.5	689298.3	77.86	-	GS-30
2312	756659.9	689308.7	78.30	-	GS-31
	756673.2	689320.5	UNK	-	GS-32
2314	756666.1	689351.0	79.25	-	SLUDGE AREA 2
2315	756673.6	689363.3	79.72	-	SLUDGE AREA 1
	756606.1	689328.4	UNK	-	SLUDGE 3 CONF
2318	756574.3	689289.1	74.21	-	MPIP
2320	756560.6	689292.0	72.60		MPIP
2317	756687.2	689235.3	78.30	-	PZ-29
2321	756580.3	689289.3	72.66	-	CB-02**

\*Horizontal Coordinates reference to the New York State Plane Coordinate System, East Zone (3101) based on NAD 83 (2011). Vertical Datum is NAVD88. Horizontal and Vertical control was established by NYSNET RTK.

\*\*The well is Cinder Block lined, Sump = 66.76'.

		Sample L	ocations 1	10-26-15	
			Ground	PVC Riser	
Pnt.	Northing	Easting	Elev.	Pipe Elev.	Desc.
3202	756514.49	689400.36	78.96	-	HS-506/BP-03
3205	756515.86	689407.23	79.63	-	HS-507/BP-02
3206	756516.83	689406.98	79.59	-	HS-508/BP-01
3207	756515.63	689404.11	79.28	-	SAN-16
3208	756507.66	689404.46	79.24	-	SAN-17
3209	756495.35	689403.60	79.33	-	SAN-18
3210	756491.39	689399.74	78.98	-	SAN-19
3211	756490.37	689386.39	77.85	-	
3212	756487.80	689367.62	76.20	-	
3213	756486.72	689360.89	75.59	-	PL-02
3214	756484.57	689346.28	74.30	-	PL-03
3215	756481.87	689331.93	73.17	-	
3216	756479.23	689315.72	71.81	-	PL-04
3217	756476.78	689299.54	70.48	-	PL-05
3218	756476.38	689297.01	70.26	-	PL-06
3219	756474.58	689284.94	69.39	-	SAN-21
3220	756469.99	689255.22	67.60	-	SAN-22
3221	756469.30	689251.72	67.38	-	MH-01
3228	756654.12	689380.21	79.27	78.97	MW-25B
3229	756600.87	689235.16	79.29	-	SS-407
3230	756607.04	689246.49	79.05	-	SS-405
3231	756612.86	689254.98	79.00	-	SS-403
3232	756619.08	689270.32	78.19	-	SS-400
3233	756616.36	689266.74	78.37	-	SS-401
3234	756611.63	689258.61	78.58	-	SS-402
3235	756606.00	689251.24	78.79	-	SS-404
3236	756602.74	689248.22	78.97	-	SS-406
3237	756597.08	689238.77	79.06	-	SS-408
3242	756565.80	689465.06	76.49	76.30	MW-504/GS-504
3243	756616.82	689402.42	76.44	76.27	MW-501/GS-501
3245	756617.84	689386.98	76.49	-	GS-502
3246	756632.92	689397.80	76.56	-	GS-500
3247	756615.49	689377.08	76.55	-	GS-503
3248	755937.12	688983.35	55.17	-	MH-04/PS-02
3249	755951.45	688980.69	55.04	-	MH-03/PS-03
3250	755919.78	688971.63	54.55	-	
3251	755894.89	688954.42	53.82	-	PL-01
3252	755878.34	688942.91	53.52	-	PB-01
3253	755833.71	688912.22	52.79	-	SAN-04
3254	755802.96	688891.11	52.46	-	PB-02
3256	755721.85	688835.10	51.57	-	MH-06/PS-05
3258	756556.92	689491.61	87.13	-	MW-505/GS-505
*Hori	zontal Coordii	nates referenc	e to the N	low Vork Stat	P Plane

*"norizontal Coorainates reference to the New York State Plane* Coordinate System, East Zone (3101) based on NAD 83 (2011). Vertical Datum is NAVD88. Horizontal and Vertical control was established by NYSNET RTK.







OFFSITE SAMPLE LOCATIONS

OFFSITE SAMPLE LOCATION MAP

PB-01 SAN-04 PB-02 I-06/PS-05 505/GS-505

504/GS-504 501/GS-501 GS-502 GS-500 GS-503 I-04/PS-02

SS-400 SS-401 SS-402 SS-404 SS-406 SS-408

	SAMPL		4-25-13	
Pnt.	Northing	Easting	Elev.	Desc.
318	756596.7	689334.7	75.65	SS-208
319	756608.7	689326.6	76.15	SS-200
320	756615.1	689322.2	75.99	GS-18
321	756625.2	689314.1	76.98	SS-209
322	756604.1	689320.5	76.81	SS-202
323	756597.0	689324.4	75.45	SS-203
324	756601.7	689330.5	75.97	SS-201
357	756608.5	689296.5	73.73	SS-105
358	756608.3	689290.1	74.45	SS-205
374	756609.8	689307.9	73.94	SS-101
375	756602.8	689303.9	73.22	SS-206
377	756603.2	689312.6	74.68	SS-102
395	756600.6	689278.0	71.56	SS-107
396	756578.9	689275.4	71.07	SS-108
399	756601.1	689285.2	72.77	SS-106
400	756596.6	689290.9	72.71	SS-207
401	756585.7	689299.7	72.87	SS-104
402	756589.1	689313.8	73.47	SS-100
403	756602.7	689303.8	73.25	SS-206

\*Horizontal Coordinates reference to the New York State

Plane Coordinate System, East Zone (3101) based on NAD

83 (2011). Vertical Datum is NAVD88. Horizontal and

Vertical control was established by NYSNET RTK.

SAN-22

MH - 01

BARTELS PLACE

K

SAN-21

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PL-06 PL-05



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BR-102



BLDG. 1

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SAMPLE LOCATIONS 4-7-15								
Pnt.	Northing	Easting	Ground Elev.	PVC RISER PIPE ELEV.	Desc.			
3027	756616.6	689289.6	77.87	-	SS-302			
3028	756620.3	689295.5	77.56	-	SS-301			
3029	756625.5	689300.0	78.27	-	SS-300			
3057	756520.9	689349.5	75.29	75.03	BR-101			
3059	756466.2	689344.0	74.03	73.84	BR-102			
3062	756496.5	689381.5	77.28	-	GS/GW-40			
3063	756511.6	689394.9	78.32	78.06	PZ-39 RIM			
3065	756511.7	689398.1	78.76	78.51	PZ/GS-38			
3068	756526.1	689402.6	76.82	76.59	PZ/GS-34			
3069	756528.6	689395.4	76.86	76.62	PZ/GS-35			
3071	756541.0	689380.0	76.78	76.45	PZ/GS-36			
3074	756536.7	689440.2	76.71	76.35	PZ/GS-33			
3075	756537.1	689397.8	76.79	-	GS-37			

\*Horizontal Coordinates reference to the New York State Plane Coordinate System, East Zone (3101) based on NAD 83 (2011). Vertical Datum is NAVD88. Horizontal and Vertical control was established by NYSNET RTK.

> THE UNDERSIGNED SURVEYOR HEREBY CERTIFIES TO THE PEOPLE OF THE STATE OF NEW YORK ACTING THROUGH THE COMMISIONER OF THE DEPARTMENT OF ENVIROMENTAL CONSERVATION THAT THIS IS AN ACCURATE MAP OF AN ACTUAL SURVEY COMPLETED <u>6/12/2013</u>. SUBJECT TO ANY STATE OF FACTS AN ACCURATE ABSTRACT DATED AFTER 3/14/2013 MAY SHOW.





# NEW DESCRIPTION OF THE SURVEYED PROPERTY

A NEW DESCRIPTION WAS PREPARED WITH BEARINGS REFERENCE TO TRUE NORTH AT THE 74°30' MERIDIAN OF WEST LONGITUDE.

ALL THAT TRACT OR PARCEL OF LAND, SITUATE IN THE CITY OF NEW ROCHELLE, COUNTY OF WESTCHESTER AND STATE OF NEW YORK, BEING LOTS 9,10,11,12, GORE C AND PORTIONS OF LOTS 7,8,13 AND GORE B ON A CERTAIN MAP ENTITLED "MAP OF PROPERTY BELONGING TO THE ESTATE OF MARIA R. LAWTON, DECEASED, AT NEW ROCHELLE, NEW YORK", DATED APRIL 16, 1884 AND FILED IN THE OFFICE OF THE CLERK OF THE COUNTY OF WESTCHESTER, DIVISION OF LAND RECORDS, JANUARY 12, 1886 IN VOLUME 6 OF MAPS AT PAGE 58, AND BEING MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT FORMED BY THE INTERSECTION OF THE SOUTHWESTERLY SIDE OF CENTRE AVENUE AND THE NORTHWESTERLY SIDE OF RELYEA PLACE (FORMERLY GUION PLACE) AS SHOWN ON SAID MAP;

THENCE FROM SAID POINT OF BEGINNING N 70°46'10" W ALONG THE WESTERLY SIDE OF SAID CENTRE AVENUE A DISTANCE OF 90.67' LANDS NOW OR FORMERLY OF CONSOLIDATED RAIL CORP.;

THENCE SOUTHWESTERLY ALONG THE SOUTHERLY LINE OF SAID CONSOLIDATED RAIL CORP. THE FOLLOWING (3) COURSES AND DISTANCES; (1) ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 2270.98', A DISTANCE OF 113.83' TO A POINT; (2) THENCE N 70°46'10" W A DISTANCE OF 11.62' TO A POINT; (3) THENCE S 82°13'34" W, A DISTANCE OF 25.00' TO A POINT ON THE DIVIDING LINE OF LOTS 14 AND 13 ON SAID MAP;

THENCE SOUTHERLY ALONG THE SAID DIVISION LINE BETWEEN LOTS 14 AND 13, S 08°17'10" E, A DISTANCE OF 99.40' TO A POINT ON THE NORTHERLY LINE OF BARTELS PLACE (FORMERLY FRANKLIN STREET);

THENCE EASTERLY ALONG THE SAID NORTHERLY LINE OF BARTELS PLACE, N 81°42'50" E, A DISTANCE OF 150.00'TO A POINT ON THE NORTHWESTERLY SIDE OF SAID RELYEA PLACE:

THENCE NORTHERLY ALONG THE SAID EASTERLY LINE OF RELYEA PLACE, N 19°12'50" E, A DISTANCE OF 130.21'TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 0.523 ACRES OF LAND, MORE OR LESS.

SUBJECT TO ANY EASEMENTS, RIGHT-OF-WAYS, AND/OR RESTRICTIONS OF RECORD, WHICH MAY AFFECT THIS PROPERTY.

# REFERENCES:

1. ABSTRACT OF TITLE PREPARED BY <u>REDVISION</u>, DATED <u>3/14/2013</u>.

# NOTES:

1. HORIZONTAL COORDINATES REFERENCED TO THE NEW YORK STATE PLANE COORDINATE SYSTEM (NYSNET), EAST ZONE (3101) BASED ON NAD 83 (2011).

2. VERTICAL DATUM BASED ON NAVD 88 (NYSNET).

3. UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM A COMBINATION OF FIELD MEASUREMENTS, AVAILABLE MAPS, RECORDS AND INFORMATION PROVIDED BY THE OWNER, THEREFORE THEIR LOCATION AND TYPE OF USE SHOULD BE CONSIDERED APPROXIMATE ONLY, THERE ALSO MAY BE OTHER FACILITIES, STRUCTURES OR UTILITIES THE EXISTENCE OF WHICH IS PRESENTLY UNKNOWN.

_	REF.		
	Boundary & Partial Topographic Survey Map	Part of	TOWN New Rochelle
	Bartels Place	County of <u>Westchester</u> Scale of 1 inch = $10'$	State of New York Date <u>9/23/13 - REV. 2/14/14 -</u> <u>REV. 4/16/15 - 11/5/15</u>
	"Unauthorized alteration or addition to a survey man bearing a licensed	PHONE: (315) 432-9823 FAX: (315) 432-9826	Project No. 109.005-2
	land surveyor's seal is a violation of activity frap bearing a herised New York State Education Law." "Copies from the original of this survey map not marked with an original of the of the land surveyor's inked seal or his embossed seal shall not be considered a valid true copy."	6390 FLÝ ROAD EAST SYRACUSE, N.Y. 13057 www.PrudentEng.com	

## **APPENDIX E**

## DATA USABILITY SUMMARY REPORTS
# CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

# **1.0 INTRODUCTION**

Soil and groundwater samples were collected in October 2015 at the Industrial Overall Uniform Corporation Site (Site) in New Rochelle, New York, and shipped to TestAmerica Buffalo Laboratory located in Amherst, New York, for analysis. Samples were analyzed by one or more of the following methods:

- Volatile Organic Compounds (VOCs) by Method 8260C
- Percent Moisture/Solids by Method D2216

Results were reported in the following sample delivery groups (SDG):

- 480-89582-1
- 480-89781-1
- 480-90144-1

Sample event information included in this chemistry review is presented in the following Tables:

- Table 1 Summary of Samples and Analytical Methods
- Table 2 Summary of Analytical Results
- Table 3 Summary of Qualification Actions.

Laboratory deliverables included:

 Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005).

The Category A review included the following evaluations. Data review checklists are provided as Attachment A.

- Lab Report Narrative Review
- Data Package Completeness and COC records (Table 1 verification)
- Sample Preservation and Holding Times
- QC Blanks
- Field Duplicate Evaluation
- Matrix spike and Matrix Spike Duplicate (MS/MSD) Evaluation
- Reporting Limits
- Electronic Data Qualification and Verification

The following laboratory data qualifiers or data review qualifiers are used in the final data presentation:

U = target analyte is not detected at or above the reporting limit J = concentration is estimated

Industrial Overall Uniform Corporation NYSDEC – Site No. 360109 MACTEC Engineering and Consulting, P.C.

Project No. 3612112221.06

Based on information received from the AMECFW technical lead; the following field sample IDs were changed and updated in the electronic database (TEDs) during the Category A review: Sample 360109-US5061016 was changed to 360109-GS506016, and all samples reported by the lab with "US" in the field IDs were changed to "GS" in the field IDs to match the chain of custody documentation.

# 2.0 POTENTIAL DATA LIMITATIONS

Based on the Category A Review conducted the data meet the data quality objectives; however, the following potential limitations were identified:

- Matrix spikes were performed on a subset of samples by the laboratory as batch quality control samples. The laboratory qualified a subset of results with percent recoveries and/or RPDs outside of lab limits. MS/MSD results were evaluated and if qualified estimated (J/UJ) during the review are presented in Table 3. MS/MSD results indicate that tetrachloroethene results are potentially biased high.
- All aqueous samples (PZ) and groundwater samples 360109-MW-50522 and 360109-MW-50410 were analyzed at dilutions due to high concentrations of one or more of the following target analytes:

1,1,1-trichloroethane 1,1-dichloroethene tetrachloroethene trichloroethene cis-1,2-dichloroethene 1,1-dichloroethane Target compounds have elevated reporting limits as indicated in Table 2.

- Results for tetrachloroethene in samples <u>360109-SS-407006</u> and <u>360109-SS-401011</u> were qualified non-detect (U) based on blank contamination.
- Results for all target analytes in the initial undiluted analyses of samples 360109-GS506011, 360109-GS506011D, 360109-GS506016, and 360109-GS507012 were qualified estimated (J/UJ) based on two or more surrogate recoveries that were below 70 percent. Low biases are indicated for these analytes.

## **Reference:**

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

Data Validator: Julie Ricardi

Julie Rinandi

Date: 11/18/2015

Industrial Overall Uniform Corporation NYSDEC – Site No. 360109 MACTEC Engineering and Consulting, P.C.

Project No. 3612112221.06

Reviewed by: Christian Ricardi, NRCC-EAC

RICAN 0 Date: 11/18/2015

# TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

					Method Class	VOCs	Solids
					Analysis Method	SW8260C	D2216
.					Fraction	N	N
SDG	Media	Location	Sample ID	Sample Date	Qc Code	Param_Count	Param_Count
480-89582-1	SOIL	DC-1	360109-DC001	10/18/2015	FS	48	2
480-89582-1	ISOIL	DC-2	360109-DC002	10/18/2015	FS	48	2
480-89582-1	SOIL	DC-3	360109-DC003	10/18/2015	FS	48	2
480-89582-1	SOIL	DC-4	360109-DC004	10/18/2015	FS	48	2
480-89582-1	SOIL	SS-500	360109-GS-500003	10/17/2015	FS	48	2
480-89582-1	SOIL	SS-500	360109-GS-500007	10/17/2015	FS	48	2
480-89582-1	SOIL	SS-500	360109-GS-500008	10/17/2015	FS	48	2
480-89582-1	SOIL	SS-501	360109-GS-501001	10/17/2015	FS	48	2
480-89582-1	SOIL	SS-502	360109-GS-502003	10/17/2015	FS	48	2
480-89582-1	SOIL	SS-504	360109-GS-504001	10/18/2015	FS	48	2
480-89582-1	SOIL	SS-504	360109-GS-504005	10/18/2015	FS	48	2
480-89582-1	SOIL	SS-504	360109-GS-504008	10/18/2015	FS	48	2
480-89582-1	SOIL	SS-505	360109-GS-505003	10/18/2015	FS	. 48	2
480-89582-1	SOIL	SS-505	360109-GS-505009	10/18/2015	FS	48	2
480-89582-1	SOIL	SS-505	360109-GS-505012	10/18/2015	FS	48	2
480-89582-1	GW	PZ-22	360109-PZ-2216	10/18/2015	FS	48	
480-89582-1	GW	PZ-33	360109-PZ-3315	10/18/2015	FS	48	
480-89582-1	GW	PZ-34	360109-PZ-3409	10/17/2015	FS	48	
480-89582-1	GW	PZ-34	360109-PZ-3409D	10/17/2015	FD	48	
480-89582-1	GW	PZ-35	360109-PZ-3527	10/17/2015	FS	48	
480-89582-1	BW	QC	QC-TB10172015-XX	10/17/2015	ТВ	48	
480-89781-1	SOIL	GW-301	360109-GW-30114	10/22/2015	FS	48	
480-89781-1	SOIL	GW-408	360109-GW-40815	10/22/2015	FS	48	
480-89781-1	SOIL	MH-001	360109-MH001010	10/20/2015	FS	48	2 .
480-89781-1	SOIL	SS-301	360109-SS-301006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-301	360109-SS-301006D	10/22/2015	FD	48	2
480-89781-1	SOIL	SS-301	360109-SS-301010	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-301	360109-SS-301012	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-400	360109-SS-400000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-400	360109-SS-400005	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-400	360109-SS-400012	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-401	360109-SS-401000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-401	360109-SS-401006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-401	360109-SS-401011	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-402	360109-SS-402000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-402	360109-SS-402006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-402	360109-SS-402011	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-403	360109-SS-403000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-403	360109-SS-403006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-403	360109-SS-403012	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-404	360109-SS-404000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-404	360109-SS-404006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-404	360109-SS-404011	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-405	360109-SS-405000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-405	360109-SS-405008	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-405	360109-SS-405012	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-406	360109-SS-406000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-406	360109-SS-406006	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-406	360109-SS-406011	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-407	360109-SS-407000	10/22/2015	FS	48	
480-89781-1	SOIL	SS-407	360109-SS-407006	10/22/2015	FS	48	

# TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

					Method Class	VOCs	Solids
					Analysis Method	SW8260C	D2216
					Fraction	N	N
SDG	Media	Location	Sample ID	Sample Date	Qc Code	Param_Count	Param_Count
480-89781-1	SOIL	SS-407	360109-SS-407006D	10/22/2015	FD	48	2
480-89781-1	SOIL	SS-407	360109-SS-407012	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-408	360109-SS-408000	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-408	360109-SS-408007	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-408	360109-SS-408011	10/22/2015	FS	48	2
480-89781-1	SOIL	SS-506	360109-GS-506003	10/21/2015	FS	48	2
480-89781-1	SOIL	SS-506	360109-GS-506011	10/21/2015	FS	48	2
480-89781-1	SOIL	SS-506	360109-GS-506011D	10/21/2015	FD	48	2 .
480-89781-1	SOIL	SS-506	360109-GS-506016	10/21/2015	FS	48	2
480-89781-1	SOIL	SS-507	360109-GS-507003	10/21/2015	FS	48	2
480-89781-1	SOIL	SS-507	360109-GS-507009	10/21/2015	FS	48	· 2
480-89781-1	SOIL	SS-507	360109-GS-507012	10/21/2015	FS	48	2
480-89781-1	SOIL	SS-508	360109-GS-508013	10/21/2015	FS	48	2
480-89781-1	NA-S	QC	QC-TB10202015-XX	10/20/2015	TB	48	-
480-89781-1	NA-S	QC	QC-TB102215-XX	10/22/2015	TB	48	
480-90144-1	GW	MW-501	360109-MW-50102	10/27/2015	FS	48	
480-90144-1	GW	MW-504	360109-MW-50410	10/27/2015	FS	48	
480-90144-1	GW	MW-505	360109-MW-50522	10/27/2015	FS	48	
480-90144-1	NA-S	QC	QC-TB102615-XX	10/26/2015	ТВ	48	
480-90144-1	BW	QC	QC-TB102715-XX	10/27/2015	ТВ	48	
480-90144-1	SOIL	SS-503	360109-GS-503003	10/26/2015	FS ·	48	2
480-90144-1	SOIL	SS-503	360109-GS-503006	10/26/2015	FS	48	2

NOTES:

GW = groundwater

BW = blank water

NA-S = solid

FS = field sample

FD = field duplicate

TB = trip blank

Param\_Count = number of target analytes reported

		SDG	480-89582-1	480-89582-1	480-89582-1	480-89582-1
		Location	P7_99	P7_33	P7-34	P7_34
	Sa	nnle Date	10/18/2015	10/18/2015	10/17/2015	10/17/2015
	38	Sample ID	360100-07-2216	360100-07-3315	360100-P7-3/00	360100-07-3/000
	· · · · · · · · · · · · · · · · · · ·		500103-1 2-2210 FS	EQ	500109-1 Z-0408	500103-12-3403D
Class	Parameter	Unite	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1 1 1-Trichloroethane		50 LL	570	200 U	200 11
VOC	1 1 2 2 Tetrachloroethane		50 U	111	200 U	200 U
VOCs	1 1 2-Trichloro-1 2 2-Trifluoroethane	ug/l	50 U	22	200 U	200 U
VOCs	1 1 2-Trichloroethane	ug/l	50 U	111	200 U.I	320 J
VOC	1 1-Dichloroethane		50 U	29	200 U	200 11
VOC	1 1-Dichloroethene	ug/l	50 U	800	200 U	200 U
	1 2 4-Trichlorobenzene	ug/l	50 U	1	200 0	200 U
VOC	1 2-Dibromo-3-chloropropane	ug/l	50 U	11	200 U	200 U
VOCs	1.2 Dibromosthano	ug/l	50 U	10	200 U	200 0
VOCs	1.2 Dichlorobonzono	ug/i	50 U	10	200 U	200 0
VOCs	1.2 Dichloroothana	ug/i	50 U	2	200 U	200 U
VOCS	1,2-Dichloropropapa	ug/l	50 U	2 1   l	200 U	200 U
VOCS	1,2-Dichloropropane	ug/i	50 0	10	200 U	200 0
VOCS	1,3-Dichlorobenzene	ug/i	50 0	10	200 0	200 0
IVOCS	1,4-Dichlorobenzene	ug/i	50 0	10 10	200 0	200 0
VOCS		ug/i	000 U	5.1	2000 0	
VOCS	4 Method 2 pentanena	ug/i	250 0	50	1000 0	
VOCs	4-Melnyi-z-pentanone	ug/i	200 0	50 050	F00 U	
VOUS	Acetic acid, methyl ester	ug/i	130 U	2.5 0		
VOCS	Acetone	ug/i	500 0			
VOUS	Benzene	ug/i	50 0			
VOUS	Bromodicnioromethane	ug/i	50 0		200 0	200 0
VOUS	Bromotorm	ug/i	50 0	10	200 U	200 U
VOCs	Bromomethane	ug/i	50 UJ		200 U	200 U
VOCs	Carbon disulfide	ug/I	50 U		200 U	200 0
VOCs	Carbon tetrachloride	ug/l	50 0	10	200 U	200 U
VOCs	Chlorobenzene	ug/i	50 U		200 U	200 U
VOCs	Chloroethane	ug/l	50 U	10	200 U	200 U
VOCs	Chloroform	ug/l	50 0	2.8	200 U	200 U
VOCs	Chloromethane	ug/l	50 U	10	200 U	200 U
VOCs	Cis-1,2-Dichloroethene	ug/l	50 U	10	27000	25000
VOCs	Cis-1,3-Dichloropropene	ug/l	50 U	10	200 U	200 U
VOCs	Cyclohexane	ug/l	50 U	10	200 U	200 U
VOCs	Dibromochloromethane	ug/l	50 0	10	200 U	200 U
VOCs	Dicniorodifluoromethane	ug/l	50 U		200 U	200 U
VOCs	Ethylbenzene	ug/l	50 0	10	200 U	200 U
VOCs	Isopropylbenzene	ug/l	50 U	10	200 U	200 U
VOCs	Methyl cyclohexane	ug/l	50 U	0.21 J	200 U	200 U
VOCs	Methyl Tertbutyl Ether	ug/l	50 U	10	200 U	200 U
VOCs	Methylene chloride	ug/l	50 U	10	200 U	200 U
VOCs	Styrene	ug/l	50 U	10	200 U	200 U
VOCs	Tetrachloroethene	ug/l	5,700 J	130	17,000	16,000
VOCs	Toluene	ug/l	50 U	10	200 U	200 U
VOCs	trans-1,2-Dichloroethene	ug/l	50 U	10	200 U	200 U
VOCs	trans-1,3-Dichloropropene	ug/l	50 U	10	200 U	200 U
VOCs	Trichloroethene	ug/l	50 U	2000	13000	12000
VOCs	Trichlorofluoromethane	ug/l	50 U	10	200 U	200 U
VOCs	Vinyl chloride	ug/l	50 U	10	1600	1500
VOCs	Xylenes, Total	ug/l	100 U	2 U	400 U	400 U

## NOTES:

ug/l = microgram per liter

 $U_{\rm s}$  = microgram per kilogram U = not detected at the reported quanitation limit

		SDG	480-895	82-1	480-895	82-1
		Location	PZ-3	5	QC	
	Sa	mple Date	10/17/2	015	10/17/2	015
		Sample ID	360109-P2	Z-3527	QC-TB1017	2015-XX
		Qc Code	FS		ТВ	
Class	Parameter	Units	Result (	Qualifier	Result (	Qualifier
VOCs	1.1.1-Trichloroethane	ug/l	17		1 U	
VOCs	1.1.2.2-Tetrachloroethane	ug/l	1 U		1 Ü	
VOCs	1.1.2-Trichloro-1.2.2-Trifluoroethane	ug/l	1 Ū		1 1	
VOCs	1.1.2-Trichloroethane	ug/l	36		10	
VOCs	1.1-Dichloroethane	ug/l	3.5	1	10	1
VOCs	1.1-Dichloroethene	ug/l	32		10	
VOCs	1.2.4-Trichlorobenzene	ug/l	1 U		10	
VOCs	1.2-Dibromo-3-chloropropane	ua/l	1 U		11	
VOCs	1 2-Dibromoethane		1 1		11	i l
VOCs	1 2-Dichlorobenzene		1 1	[	11	
VOCs	1 2-Dichloroethane		0.25.1		1	
VOCs	1 2-Dichloropropane		0.200	1	1 1	
VOCs	1.3-Dichlorobenzene		10	ĺ	11	
VOCs	1 4-Dichlorobenzene		11		11	1.
VOCs	2-Butanone		10	' I	101	
VOCs	2-Hexanone		51		51	í l
VOCs	4-Methyl-2-pentanone		51	, 	51	í l
VOC	Acetic acid methyl ester		251	ĺ	251	, i
VOC	Acetone		10 1	, 	101	1
VOC	Benzene		11	, 		
VOC	Bromodichloromethane		1	, I		, ,
	Bromoform	ug/l	10	, I		,
VOCa	Bromomothano	ug/l		, I		, ;*
VOC	Carbon disulfide	ug/l		i	1	,
VOC	Carbon tetrachlorido	ug/l	1	, I	11	1
	Chlorobonzono	ug/l	.11	, 1	1	, I
	Chloroethane	ug/i	11	, I	1	'.
VOCe	Chloroform		1	, I	1	
VOC	Chloromethano		1	, I	1	,
VOC	Cis. 1.2 Dichloroothono		20	)	1	i l
	Cis 1.3 Dichloropropopo		23	, <u>-</u>		<u>'</u>
VOCs	Cycloboxopo		1	) 		, ·
VOCs	Dibromochloromothono			, I		, I
VOCS	Dichlorodifluoromothana			, I		,
VOCs	Ethylhonzono			) I	1 11	, ,
VOCs	Isopropylbopzopo			, I	1	, l
VOCs	Methyl cyclobexapo		0.211	)	1	1
VOCS	Methyl Torthufyl Ethor	ug/i	0.21 J			, I
VOCS			0.21,0	1	0.61	,
VOCS	Sturopo	ug/i		,	0.010	r l
VOCS	Totrachloroothone		2 000	,		
Voca			2,900	r		,   1
VOCS	trans 1.2 Dichloroothana			,		ן י
VOCS	trans 1.2 Dichloropropono		1	, 1		ן ו
VOCS	Trichloroothono			,		ן נ
VOCS	Trichlorofluoromethene		20		1	ן נ
VOCS	Vinyl ebleride			, I		ן נ
Voca	Yulanes Total			,		ן י
1 V L /				,		

## NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

	· · · · · · · · · · · · · · · · · · ·	SDG	480-89582-1	480-89582-1	480-89582-1	480-89582-1	480-89582-1	480-89582-1
		Location	DC-1	DC-2	DC-3	DC-4	QC	SS-500
	Sa	ample Date	10/18/2015	10/18/2015	10/18/2015	10/18/2015	10/17/2015	10/17/2015
		Sample ID	360109-DC001	360109-DC002	360109-DC003	360109-DC004	QC-TB10172015-XX	360109-GS-500003
		Qc Code	FS	FS	FS	FS	TB	FS
Class	Parameter	Units	Result Qualifier					
VOCs	1,1,1-Trichloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,1,2-Trichloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,1-Dichloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,1-Dichloroethene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,2-Dibromoethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,2-Dichlorobenzene	ug/kg	55 U	- 120 U	130 U	120 U	50 U	31 U
VOCs	1,2-Dichloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,2-Dichloropropane	ug/kg	55 U	. 120 U	130 U	120 U	50 U	31 U
VOCs	1,3-Dichlorobenzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	1,4-Dichlorobenzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	2-Butanone	ug/kg	270 U	600 U	650 U	610 U	250 U	150 U
VOCs	2-Hexanone	ug/kg	270 U	600 U	650 U	610 U	250 U	150 U
VOCs	4-Methyl-2-pentanone	ug/kg	270 U	600 U	650 U	610 U	250 U	150 U
VOCs	Acetic acid, methyl ester	ug/kg	64	120 U	1300	140	50 U	31 U
VOCs	Acetone	ug/kg	270 U	600 U	650 U	610 U	250 U	150 U
VOCs	Benzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Bromodichloromethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Bromoform	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Bromomethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Carbon disulfide	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Carbon tetrachloride	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Chlorobenzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Chloroethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Chloroform	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Chloromethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Cyclohexane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Dibromochloromethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Dichlorodifluoromethane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Ethylbenzene	ug/kg	55 U	51 J	130 U	120 U	50 U	31 U
VOCs	Isopropylbenzene	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Methyl cyclohexane	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Methyl Tertbutyl Ether	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U
VOCs	Methylene chloride	ug/kg	55 U	120 U	130 U	120 U	50 U	31 U

		SDG	480-89	9582-1	480-8	9582-1	480-8	9582-1	480-89	9582-1	480-89	9582-1	480-89	9582-1
		Location	DC	C-1	DC-2		DC-3		DC-4		Q	С	SS-500	
	Sample Date		10/18	10/18/2015		10/18/2015		8/2015	10/18/2015		10/17/2015		10/17/2015	
		Sample ID	360109	360109-DC001		-DC002	360109	-DC003	360109	-DC004	QC-TB10172015-XX		360109-G	S-500003
		Qc Code	F	S	F	S	FS		F	S	Т	В	F	S
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	55	U	160		130	Ú I	120	U	50	U	31	U
VOCs	Tetrachloroethene	ug/kg	1,200		270		380		120	U	50	U	28	J
VOCs	Toluene	ug/kg	55	U	120	U	130	U	120	U	50	U	31	U
VOCs	trans-1,2-Dichloroethene	ug/kg	55	U	120	U	130	U	120	U	50	U	31	U
VOCs	trans-1,3-Dichloropropene	ug/kg	55	U	120	U	130	U	120	U	50	U	31	U
VOCs	Trichloroethene	ug/kg	55	U	120	U	130	U	120	U	50	U	31	U
VOCs	Trichlorofluoromethane	ug/kg	55	U	120	U	130	U	120	U	50	U	31	U
VOCs	Vinyl chloride	ug/kg	55	U	120	U	130	υ	120	U	50	U	31	U
VOCs	Xylenes, Total	ug/kg	110	U	180	J.	260	U	240	U	100	U	61	U
Solids	Percent Moisture	Percent	4.6		3.1		49		48				9.1	
Solids	Percent Solids	Percent	. 95		97	4	51		52				91	

# NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

	· • • •	SDG	480-89582-1	480-89582-1	480-89582-1	480-89582-1	480-89582-1	480-89582-1
		Location	SS-500	SS-500	SS-501	SS-502	SS-504	SS-504
		Sample Date	10/17/2015	10/17/2015	10/17/2015	10/17/2015	10/18/2015	10/18/2015
		Sample ID	360109-GS-500007	360109-GS-500008	360109-GS-501001	360109-GS-502003	360109-GS-504001	360109-GS-504005
		Qc Code	FS	FS	FS	FS	FS	FS
Class	Parameter	Units	Result Qualifier					
VOCs	1,1,1-Trichloroethane	ug/kg	30 U	36 U	48 U	51 U	110	110
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethar	ne ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,1,2-Trichloroethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,1-Dichloroethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1.1-Dichloroethene	ug/kg	30 U	36 U	48 U	51 U	77	35
VOCs	1,2,4-Trichlorobenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
vocs	1,2-Dibromoethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,2-Dichlorobenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,2-Dichloroethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1,2-Dichloropropane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1.3-Dichlorobenzene	ua/ka	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	1.4-Dichlorobenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	2-Butanone	ua/ka	150 U	180 U	240 U	260 U	160 U	160 U
VOCs	2-Hexanone	ug/kg	150 U	180 U	240 U	260 U	160 U	160 U
VOCs	4-Methyl-2-pentanone	uq/kg	150 U	180 U	240 U	260 U	160 U	160 U
VOCs	Acetic acid, methyl ester	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Acetone	ug/kg	150 U	180 U	· 240 U	260 U	160 U	160 U
VOCs	Benzene	ua/ka	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Bromodichloromethane	uq/kq	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Bromoform	uq/kq	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Bromomethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Carbon disulfide	ua/ka	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Carbon tetrachloride	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Chlorobenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Chloroethane	ug/kg	30 U	36 U	48 UJ	51 U	32 U	31 U
VOCs	Chloroform	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Chloromethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	13 J	36 U	48 U	51 U	32 U	31 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Cyclohexane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Dibromochloromethane	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Dichlorodifluoromethane	ug/kg	30 U	36 U	48 UJ	51 U	32 U	31 U
VOCs	Ethylbenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Isopropylbenzene	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Methyl cyclohexane	ug/kg	94	26 J	48 U	51 U	32 U	31 U
VOCs	Methyl Tertbutyl Ether	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U
VOCs	Methylene chloride	ug/kg	30 U	36 U	48 U	51 U	32 U	31 U

		<b>SDG</b> 480-89582-1		480-8	9582-1	480-8	9582-1	480-89	582-1	480-89582-1		480-8	9582-1	
		Location	SS-500		SS-	500	SS-501		SS-502		SS-504		SS-	-504
		Sample Date	10/17/2015	10/17/2015		/2015	10/17/2015		10/17/2015		10/18/2015		10/18/2015	
		Sample ID	360109-GS-500	007	360109-G	S-500008	360109-GS-501001		360109-G	S-502003	360109-G	S-504001	360109-G	S-504005
		Qc Code	FS		F	S	F	S	F.	S	F	S	F	S
Class	Parameter	Units	Result Quali	fier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	30 U	1	36	U	48	U	51	U	32	U	31	U
VOCs	Tetrachloroethene	ug/kg	30 U		36	U	3,300	J	. 46	J	150		5	J
VOCs	Toluene	ug/kg	30 U	1	36	U	48	U	51	U	32	U	31	U
VOCs	trans-1,2-Dichloroethene	ug/kg	30 U		36	U	48	U	51	U	32	U	31	U
VOCs	trans-1,3-Dichloropropene	ug/kg	30 U	,	36	U	48	U	51	U	32	U	31	U
VOCs	Trichloroethene	ug/kg	30 U		36	U	- 48	U	51	U	2800		970	
VOCs	Trichlorofluoromethane	ug/kg	30 U		36	U	48	UJ	51	U	32	U	31	U
VOCs	Vinyl chloride	ug/kg	30 U		36	U	48	U	51	U	32	U	31	U
VOCs	Xylenes, Total	ug/kg	59 U		72	U	97	U	100	U	63	U	63	U
Solids	Percent Moisture	Percent	9		5		12		10		10		9	
Solids	Percent Solids	Percent	91	1	95		88		90		90		91	

## NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

		SDG	480-89	9582-1	480-89582-1	480-89582-1	480-89582-1
а		Location	SS-	504	SS-505	SS-505	SS-505
	Sa	mple Date	10/18	/2015	10/18/2015	10/18/2015	10/18/2015
	:	Sample ID	360109-G	S-504008	360109-GS-505003	360109-GS-505009	360109-GS-505012
		Qc Code	F	S	FS	FS	FS
Class	Parameter	Units	Result	Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1,1,1-Trichloroethane	ug/kg	190		38 U	39 U	74
VOCs	1.1.2.2-Tetrachloroethane	uq/kq	31	U	38 U	39 U	39 U
VOCs	1.1.2-Trichloro-1.2.2-Trifluoroethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	1,1,2-Trichloroethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	1,1-Dichloroethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	1.1-Dichloroethene	ug/kg	160		38 U	39 U	21 J
VOCs	1,2,4-Trichlorobenzene	ug/kg	31	U	38 U	39 U	39 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	31	U	38 U	39 U	39 U
VOCs	1.2-Dibromoethane	ua/ka	31	U	38 U	39 U	39 U
VOCs	1,2-Dichlorobenzene	ug/kg	31	U	38 U	39 U	39 U
VOCs	1,2-Dichloroethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	1.2-Dichloropropane	ua/ka	31	U	38 U	39 U	39 U
vocs	1.3-Dichlorobenzene	ua/ka	31	U	38 U	39 U	39 U
VOCs	1.4-Dichlorobenzene	ua/ka	31	U	38 U	39 U	39 U
VOCs	2-Butanone	uq/ka	160	U	190 U	190 U	190 U
VOCs	2-Hexanone	ua/ka	160	υ	190 U	190 U	190 U
VOCs	4-Methyl-2-pentanone	uq/ka	160	Ů	190 U	190 U	190 U
VOCs	Acetic acid, methyl ester	ua/ka	31	U	38 U	39 U	39 U
VOCs	Acetone	ua/ka	160	U	190 U	190 U	190 U
VOCs	Benzene	ug/kg	31	U	38 U	39 U	39 U
VOCs	Bromodichloromethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Bromoform	ug/kg	31	U	38 U	39 U	39 U
VOCs	Bromomethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Carbon disulfide	ug/kg	31	U :	38 U	39 U	39 U
VOCs	Carbon tetrachloride	ug/kg	31	U	38 U	39 U	39 U
VOCs	Chlorobenzene	ug/kg	31	U	38 U	39 U	39 U
VOCs	Chloroethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Chloroform	ug/kg	31	U	38 U	39 U	39 U
VOCs	Chloromethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	31	U	38 U	39 U	39 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	31	U	38 U	39 U	39 U
VOCs	Cyclohexane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Dibromochloromethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Dichlorodifluoromethane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Ethylbenzene	ug/kg	31	U	38 U	39 U	.39 U
VOCs	Isopropylbenzene	ug/kg	31	U	38 U	39 U	39 U
VOCs	Methyl cyclohexane	ug/kg	31	U	38 U	39 U	39 U
VOCs	Methyl Tertbutyl Ether	ug/kg	31	U	38 U	39 U	39 U
VOCs	Methylene chloride	ug/kg	31	U	38 U	39 U	39 U

		SDG	480-89	582-1	480-89582-1		480-89582-1		480-89582-1	
		Location	SS-	504	SS-505		SS-505		SS-505	
		Sample Date	Date 10/18/201		10/18/2015		10/18/2015		10/18/2015	
		Sample ID	360109-G	360109-GS-504008		360109-GS-505003		360109-GS-505009		S-505012
		Qc Code	F:	S <sup>i</sup>	F 'F	FS		FS		S
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	31	U	38	U	39	U	39	U
VOCs	Tetrachloroethene	ug/kg	5	J	38	U	39	U	39	U
VOCs	Toluene	ug/kg	31	U	38	U	39	U	39	U
VOCs	trans-1,2-Dichloroethene	ug/kg	31	U	38	U	39	U	39	U
VOCs	trans-1,3-Dichloropropene	ug/kg	31	U	38	U	39	U	39	U
VOCs	Trichloroethene	ug/kg	1200		38	U	39	U	420	
VOCs	Trichlorofluoromethane	ug/kg	31	U .	38	U	39	U	39	U
VOCs	Vinyl chloride	ug/kg	31	U	38	U	39	U	39	U
VOCs	Xylenes, Total	ug/kg	63	U .	76	U	78	U	78	U
Solids	Percent Moisture	Percent	8.7	· .	7.6		9.5		11	•
Solids	Percent Solids	Percent	91		92		90		89	

# NOTES:

ug/I = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

		SDG	480-89781-1	480-89781-1	480-89781-1	
		Location	GW-301	GW-408	QC	
	S	ample Date	10/22/2015	10/22/2015	10/22/2015	
		Sample ID	360109-GW-30114	360109-GW-40815	QC-TB102215-XX	
		Qc Code	FS	FS	ТВ	
Class	Parameter	Units	Result Qualifier	Result Qualifier	Result Qualifier	
VOCs	1,1,1-Trichloroethane	ug/l	10.	1 U	1 U	
VOCs	1,1,2,2-Tetrachloroethane	ug/l	1 U	1 U	10	
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	e ug/l	1 U	1 U	10	
VOCs	1,1,2-Trichloroethane	ug/l	. 1U	1 U	10	
VOCs	1,1-Dichloroethane	ug/l	1 U	1 U	10	
VOCs	1,1-Dichloroethene	ug/l	1 U	1 U	10	
VOCs	1,2,4-Trichlorobenzene	ug/l	1 U	1 U	1.0	
VOCs	1,2-Dibromo-3-chloropropane	ug/l	1 U	1 U	10	
VOCs	1,2-Dibromoethane	ug/l	10	1 U	10	
VOCs	1,2-Dichlorobenzene	ug/l	1 U	1 U	1 U ·	
VOCs	1,2-Dichloroethane	ug/l	1 U	1 U <sup>·</sup>	1 U	
VOCs	1,2-Dichloropropane	ug/l	1 U	1 U	10	
VOCs	1,3-Dichlorobenzene	ug/l	1 U	1 U	10	
VOCs	1,4-Dichlorobenzene	ug/l	1 U	1 U	10	
VOCs	2-Butanone	ug/l	10 U	10 U	10 U *	
VOCs	2-Hexanone	ug/l	5 U	5 U	5 U	
VOCs	4-Methyl-2-pentanone	ug/l	5 U	5 U	5 U	i.
VOCs	Acetic acid, methyl ester	ug/l	2.5 U	2.5 U	2.5 U	
VOCs	Acetone	ug/l	10 U	11 J	10 U *	
VOCs	Benzene	ug/l	1 U	1. U	1 U	
VOCs	Bromodichloromethane	ug/l	10	10	1 U	
VOCs	Bromoform	ug/l	10	1 U	10	
VOCs	Bromomethane	ug/I	10	10	1 U	Ĺ
VOCs	Carbon disulfide	ug/l	10	1 U	10	Ĺ
VOCs	Carbon tetrachloride	ug/l	10.	10	10	Ĺ
VOCs	Chlorobenzene	ug/l	10	10	10	Ĺ
VOCs	Chloroethane	ug/l	10,	10	10	ĺ
VOCs	Chloroform	ug/l	1	10	10	ĺ
VOCs	Chloromethane	ug/l	10	10	10	ĺ
VOCs	Cis-1,2-Dichloroethene	ug/l	110	1.0	10	ĺ
VOCs-	Gis-1,3-Dichloropropene	ug/l	1-0	11-0	1-0	
VOCs	Cyclonexane	ug/i	10	10	10	
VOCs	Dibromochloromethane	ug/l		10	10	
VOCs	Dichlorodifluoromethane	ug/I		10	10	
IVOUS	Etnyibenzene	ug/i	10		10	
VOUS		ug/i	10		10	
VOUS	Methyl Cyclonexane	ug/i	10	10	10	
VOUS		ug/i	10	10	10	
VOUS		ug/i	10	10	10	
VOUS		ug/i	10	10	10	
VOUS	Teluene	ugn	500	6	10	
VOUS	trong 1.2 Diphore there	ug/i				
VOCS	trans-1,2-Dichloroethene	ug/I	3.0			1
VOCS	Trichleresthene	ug/i				
VOCS	Trichlorofluoromothene	ug/l	1 11	U.O.J -		
VOCs	Vipyl chlorido					ŀ
VOC			211		211	l
IVUUS		1 (1(1))				

# NOTES:

ug/I = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

		SDG	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
		Location	MH-001	QC	SS-301	SS-301	SS-301	SS-301
	:	Sample Date	10/20/2015	10/20/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
		Sample ID	360109-MH001010	QC-TB10202015-XX	360109-SS-301006	360109-SS-301006D	360109-SS-301010	360109-SS-301012
		Qc Code	FS	TB	FS	FD	FS	∖ FS
Class	Parameter	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1,1,1-Trichloroethane	ug/kg	92 J	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethan	e ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,1,2-Trichloroethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,1-Dichloroethane	ug/kg	180	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,1-Dichloroethene	ug/kg	150 U	4.9 U	45 U	52 U .	45 U	47 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	150 U	4.9 U	45 UJ	52 UJ	45 UJ	47 U
VOCs	1,2-Dibromoethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,2-Dichlorobenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,2-Dichloroethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VQCs	1,2-Dichloropropane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,3-Dichlorobenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	1,4-Dichlorobenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	2-Butanone	ug/kg	730 U	24 U	230 U	260 U _	230 U	240 U
VOCs	2-Hexanone	ug/kg	730 U	24 U	230 U	260 U	230 U	240 U
VOCs	4-Methyl-2-pentanone	ug/kg	730 U	24 U	230 U	260 U	230 U	240 U
VOCs	Acetic acid, methyl ester	ug/kg	700	4.9 U	45 U	52 U	45 U	47 U
VOCs	Acetone	ug/kg	810	9.9 J	230 U	260 U	230 U	240 U
VOCs	Benzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Bromodichloromethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Bromoform	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Bromomethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Carbon disulfide	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Carbon tetrachloride	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Chlorobenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Chloroethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Chloroform	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Chloromethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	100 J	4.9 U	45 U	52 U	45 U	60
VOCs	Cis-1,3-Dichloropropene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Cyclohexane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Dibromochloromethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Dichlorodifluoromethane	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Ethylbenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Isopropylbenzene	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Methyl cyclohexane	ug/kg	98 J	4.9 U	45 U	52 U 📍	45 U	47 U
VOCs	Methyl Tertbutyl Ether	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U
VOCs	Methylene chloride	ug/kg	150 U	4.9 U	45 U	52 U	45 U	47 U

		SDG	SDG 480-89781-1		480-89781-1		480-89	9781-1	480-89	9781-1	480-8	9781-1	480-89781-1	
		Location	MH	-001	C	QC		SS-301		301	SS-	-301	SS-	-301
		Sample Date	10/20	)/2015	10/20	)/2015	10/22	/2015	10/22/2015		10/22/2015		10/22	2/2015
		Sample ID	360109-N	/H001010	QC-TB102	202015-XX	360109-S	S-301006	360109-SS	S-301006D	360109-SS-301010		360109-S	S-301012
		Qc Code	F	S	т	В	F	S	F	D	· F	S .	. FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	150	U	4.9	U	45	U	52	U	45	U	47	U
VOCs	Tetrachloroethene	ug/kg	150	U	2	JB	2,600		3,000		95		290	
VOCs	Toluene	ug/kg	150	U	4.9	U	45	U	52	52 U		45 U		U
VOCs	trans-1,2-Dichloroethene	ug/kg	38	J	4.9	U	45	U	52	52 U		U	47	U
VOCs	trans-1,3-Dichloropropene	ug/kg	150	U	4.9	U	45	45 U 52 U		45	U	47	U	
VOCs	Trichloroethene	ug/kg	150	U	4.9	U	47		55		45	U	20	J
VOCs	Trichlorofluoromethane	ug/kg	150	U	4.9	U	45	U	52	U	45	U	47	U
VOCs	Vinyl chloride	ug/kg	140	J	4.9	U	45	U	52	U	45	U	47	U
VOCs	Xylenes, Total	ug/kg	290	U	9.7 U		91	U	100	U	90	U	95	U
Solids	Percent Moisture	Percent	56				13		16		11		12	
Solids	Percent Solids	Percent	44				87		84		89		88	

# NOTES:

ug/l = microgram per liter ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

SD		SDC	100 00701 1	190 90791 1	490 90791 1	180.80781-1	180-80781-1	180-80781-1
		Jeastion	400-09701-1	400-09701-1	400-09701-1	400-03701-1 SS 401	900-03701-1	SS 101
		Location	33-400	10/22/2015	40/02/2015	10/22/2015	10/22/2015	10/22/2015
		Sample Date					10/22/2010	260100 66 401011
		Sample ID	360109-55-400000	360109-55-400005	500109-55-400012	300109-55-401000	500109-55-401000	500109-55-401011
		QC Code			F3 Desult Ouslifier	FO Desult Ouslifier	FO Deput Ouclifier	FO Deput Ouclifier
Class	Parameter	Units	Result Qualifier	Result Qualifier	Result Qualifier			
VOUS	1,1,1-1 richloroethane	ug/kg	510	49 0	42 0	56 U	47 0	
VOUS	1,1,2,2-1 etrachioroethane	ug/kg	510	49 0	42.0	56 U	47 0	
VOCs	1,1,2-1 richloro-1,2,2-1 ritluoroethan	ie ug/kg	51 U	49 0	42 0	56 U	47 0	4.4 0
VOCs	1,1,2-1 richloroethane	ug/kg	510	49 0	42 0	56 0	47 0	4.4 0
VOCs	1,1-Dichloroethane	ug/kg	51 U	49 0	42 0	56 0	47 0	4.4 0
VOCs .	1,1-Dichloroethene	ug/kg	51 U	49 0	42 0	56 U	47 0	4.4 0
VOCs	1,2,4-Trichlorobenzene	ug/kg	51 U	49 0	42 0	56 0	470	4.4 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	51 UJ	49 UJ	42 UJ	56 UJ	47 UJ	4.4 0
VOCs	1,2-Dibromoethane	ug/kg	51 U	49 U	42 U	56 U	47 0	4.4 0
VOCs	1,2-Dichlorobenzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	1,2-Dichloroethane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	1,2-Dichloropropane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	1,3-Dichlorobenzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 0
VOCs	1,4-Dichlorobenzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	2-Butanone	ug/kg	250 U	250 U	210 U	280 U	240 U	22 U
VOCs	2-Hexanone	ug/kg	250 U	250 U	210 U	280 U	240 U	22 U
VOCs	4-Methyl-2-pentanone	ug/kg	250 U	250 U	210 U	280 U	240 U	22 U
VOCs	Acetic acid, methyl ester	ug/kg	200	49 U	42 U	150	47 U	4.4 U
VOCs	Acetone	ug/kg	250 U	250 U	210 U	280 U	240 U	7 J
VOCs	Benzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Bromodichloromethane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Bromoform	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Bromomethane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Carbon disulfide	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Carbon tetrachloride	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Chlorobenzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Chloroethane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Chloroform	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Chloromethane	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Cis-1.2-Dichloroethene	ua/ka	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Cis-1.3-Dichloropropene	ua/ka	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Cvclohexane	uq/kq	33 J	49 U	42 U	56 U	47 U	4.4 U
VOCs	Dibromochloromethane	ua/ka	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Dichlorodifluoromethane	ua/ka	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Ethylbenzene	ug/ka	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCs	Isopropylbenzene	ug/kg	51 U	49 U	42 U	56 U	47 U	4.4 U
VOCe	Methyl cyclohexane		99	49 U	42 U	56 U	47 U	4.4 U
VOC	Methyl Tertbutyl Ether		51 U	49 11	42 U	56 U	47 U	4.4 U
VOCs	Methylene chloride	ua/ka	51 U	49 U	42 U	56 U	47 U	4.4 U

		SDG	480-89781-1		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	
		Location	SS-400	SS-400		SS-400	SS-401	SS-401	SS-401	
		Sample Date	10/22/2015	1	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	
		Sample ID	360109-SS-4000	00	360109-SS-400005	360109-SS-400012	360109-SS-401000	360109-SS-401006	360109-SS-401011	
		Qc Code	FS		FS	FS	FS	FS	FS	
Class	Parameter	Units	Result Qualif	ier	Result Qualifier					
VOCs	Styrene	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	Tetrachloroethene	ug/kg	4,300		600	62	4,400	1,900	8 U	
VOCs	Toluene	ug/kg	38 J		49 U	42 U	56 U	47 U	4.4 U	
VOCs	trans-1,2-Dichloroethene	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	trans-1,3-Dichloropropene	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	Trichloroethene	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	Trichlorofluoromethane	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	Vinyl chloride	ug/kg	51 U		49 U	42 U	56 U	47 U	4.4 U	
VOCs	Xylenes, Total	ug/kg	92 J		99 U	84 U	110 U	95 U	8.9 U	
Solids	Percent Moisture	Percent	11		13	11 15		14	13	
Solids	Percent Solids	Percent	89		87	89	85	86	87	

#### NOTES:

ug/I = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

J = estimated concentration

Prepared by: BJS 11/10/2015 Checked by: JAR 11/11/2015

	SD		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
		Location	SS-402	SS-402	SS-402	SS-403	SS-403	SS-403
	Ş	Sample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
		Sample ID	360109-SS-402000	360109-SS-402006	360109-SS-402011	360109-SS-403000	360109-SS-403006	360109-SS-403012
		Qc Code	FS	FS	FS	FS	FS	FS
Class	Parameter	Units	Result Qualifier					
VOCs	1,1,1-Trichloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethan	e ug/kg	73 U	45 U	4 U	43 U	44 U	50 U -
VOCs	1,1,2-Trichloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,1-Dichloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,1-Dichloroethene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	73 UJ	45 UJ	4 U	43 UJ	44 UJ	50 UJ
VOCs	1,2-Dibromoethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,2-Dichlorobenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,2-Dichloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,2-Dichloropropane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,3-Dichlorobenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	1,4-Dichlorobenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	2-Butanone	ug/kg	370 U	230 U	20 U	220 U	220 U	250 U
VOCs	2-Hexanone	ug/kg	370 U	230 U	20 U	220 U	220 U	250 U
VOCs	4-Methyl-2-pentanone	ug/kg	370 U	230 U	20 U	220 U	220 U	250 U
VOCs	Acetic acid, methyl ester	ug/kg	73 U	45 U	4 U	43 <u>U</u>	44 U	50 U
VOCs	Acetone	ug/kg	370 U	230 U	21	220 U	220 U	250 U
VOCs	Benzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Bromodichloromethane	ug/kg	· 73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Bromoform	ug/kg	73 U	45 U	4 U	43 U	44 U	50 UJ
VOCs	Bromomethane	ug/kg	73 Ų	45 U	4 U	43 U	44 U	50 U
VOCs	Carbon disulfide	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Carbon tetrachloride	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Chlorobenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Chloroethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 UJ
VOCs	Chloroform	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Chloromethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Cyclohexane	ug/kg	. 81	45 U	4 U	43 U	44 U	50 U
VOCs	Dibromochloromethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Dichlorodifluoromethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 UJ
VOCs	Ethylbenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Isopropylbenzene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Methyl cyclohexane	ug/kg	260	45 U	4 U	43 U	44 U	50 U
VOCs	Methyl Tertbutyl Ether	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U
VOCs	Methylene chloride	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U

	S		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	
		Location	SS-402	SS-402	SS-402	SS-403	SS-403	SS-403	
		Sample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	
		Sample ID	360109-SS-402000	360109-SS-402006	360109-SS-402011	360109-SS-403000	360109-SS-403006	360109-SS-403012	
		Qc Code	FS	FS	FS	FS	FS	FS	
Class	Parameter	Units	Result Qualifier	Result Qualifier					
VOCs	Styrene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U	
VOCs	Tetrachloroethene	ug/kg	14,000	36 J	61	630	300	15 J	
VOCs	Toluene	ug/kg	39 J	45 U .	4 U	43 U	44 U <sup>-</sup>	50 U	
VOCs	trans-1,2-Dichloroethene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U	
VOCs	trans-1,3-Dichloropropene	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U	
VOCs	Trichloroethene	ug/kg	- 73 U	45 U	4 U	43 U	44 U	50 U	
VOCs	Trichlorofluoromethane	ug/kg	73 U	45 U	4 U	43 U	44 U	50 UJ	
VOCs	Vinyl chloride	ug/kg	73 U	45 U	4 U	43 U	44 U	50 U	
VOCs	Xylenes, Total	ug/kg	79 J	91 U ·	8.1 U	87 U	88 U	100 U	
Solids	Percent Moisture	Percent	13	11	17	11	11	17	
Solids	Percent Solids	Percent	87	89	83	89	89	83	

#### NOTES:

ug/l = microgram per liter ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

[	SDO		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
-		Location	SS-404	SS-404	SS-404	SS-405	SS-405	SS-405
	S	ample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
	-	Sample ID	360109-SS-404000	360109-SS-404006	360109-SS-404011	360109-SS-405000	360109-SS-405008	360109-SS-405012
		Qc Code	FS	FS	FS	FS •	FS	FS
Class	Parameter	Units	Result Qualifier					
VOCs	1,1,1-Trichloroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,1,2-Trichloroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,1-Dichloroethane	ug/kg	70 U	49 U	· 46 U	80 U	50 U	44 U
VOCs	1,1-Dichloroethene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	70 UJ	49 UJ	46 UJ	80 U	50 UJ	44 UJ
VOCs	1,2-Dibromoethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,2-Dichlorobenzene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,2-Dichloroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,2-Dichloropropane	ug/kg	70 U	49 U	46 U	80 U	· 50 U	44 U
VOCs	1,3-Dichlorobenzene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	1,4-Dichlorobenzene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	2-Butanone	ug/kg	350 U	250 U	230 U	400 U	250 U	220 U
VOCs	2-Hexanone	ug/kg	350 U	250 U	230 U	.400 U	250 U	220 U
VOCs	4-Methyl-2-pentanone	ug/kg	350 U	250 U	230 U	400 U	250 U	220 U
VOCs	Acetic acid, methyl ester	ug/kg	280	49 U	46 U	80 U	50 U	44 U
VOCs	Acetone	ug/kg	350 U	250 U	230 U	400 U	250 U	220 U
VOCs	Benzene	ug/kg	36 J	49 U	46 U	80 U	50 U	44 U
VOCs	Bromodichloromethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Bromoform	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VÓCs	Bromomethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Carbon disulfide	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Carbon tetrachloride	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Chlorobenzene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Chloroethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Chloroform	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Chloromethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Cyclohexane	ug/kg	170	49 U	46 U	80 U	50 U	44 U
VOCs	Dibromochloromethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Dichlorodifluoromethane	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Ethylbenzene	ug/kg	43 J	49 U	46 U	80 U	50 U	44 U
VOCs	Isopropylbenzene	ug/kg	33 J	49 U	46 U	80 U	50 U	44 U
VOCs	Methyl cyclohexane	ug/kg	530	49 U	46 U	190	50 U	44 U
VOCs	Methyl Tertbutyl Ether	ug/kg	70 U	49 U	46 U	80 U	50 U	44 U
VOCs	Methylene chloride	uq/kq	70 U	49 U	46 U	80 U	50 U	44 U

		SDG 480-897		781-1	480-89781-1		480-8	9781-1	480-8	9781-1	480-8	9781-1	480-8	9781-1
		Location	ocation SS-404		SS-	404	SS-	-404	SS-	405	SS-	-405	SS-	-405
		Sample Date	10/22/	/2015	10/22	2/2015	10/22/2015		10/22/2015		10/22/2015		10/22	2/2015
		Sample ID	360109-S	S-404000	360109-S	S-404006	360109-S	S-404011	360109-S	S-405000	360109-SS-405008		360109-5	S-405012
		Qc Code	F	S	F	S	F	S	ļ F	S	F	S	F	S
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	70	U	49	U	46	U	80	U	50	U	44	U
VOCs	Tetrachloroethene	ug/kg	6,300		160		880		5,600		220		270	
VOCs	Toluene	ug/kg	160		49	U	46	U	23	23 J		50 U		U
VOCs	trans-1,2-Dichloroethene	ug/kg	70	U	49	U	46	Ų	80	80 U		U	44	U
VOCs	trans-1,3-Dichloropropene	ug/kg	70	U	49	U	46	U	80 U		50	U	44	U
VOCs	Trichloroethene	ug/kg	70	U	49	U	46	U	80	U	50	U	44	U
VOCs	Trichlorofluoromethane	ug/kg	70	U	49	U	46	U	80	U	50	U	44	U
VOCs	Vinyl chloride	ug/kg	70	U	49	U	46	U	80	U	50	U	44	U
VOCs	Xylenes, Total	ug/kg	360		99 U		93	U	160	U	100	U	89	U
Solids	Percent Moisture	Percent	13		16		13 21		16		13			
Solids	Percent Solids	Percent	87		84		87		79		84		87	

# NOTES:

ug/l = microgram per liter ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

	SDG		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
		Location	SS-406	SS-406	SS-406	SS-407	SS-407	SS-407
	ę	Sample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015
		Sample ID	360109-SS-406000	360109-SS-406006	360109-SS-406011	360109-SS-407000	360109-SS-407006	360109-SS-407006D
		Qc Code	FS	FS	FS	FS	FS	FD
Class	Parameter	Units	Result Qualifier					
VOCs	1,1,1-Trichloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethan	e ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,1,2-Trichloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,1-Dichloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,1-Dichloroethene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,2-Dibromoethane	ug/kg	48 U	54 U.	57 U	89 U	52 U	48 U
VOCs	1,2-Dichlorobenzene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,2-Dichloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,2-Dichloropropane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,3-Dichlorobenzene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	1,4-Dichlorobenzene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	2-Butanone	ug/kg	240 U	270 U	290 U	450 U	260 U	240 U
VOCs	2-Hexanone	ug/kg	240 U	270 U	290 U	450 U	260 U	240 U
VOCs	4-Methyl-2-pentanone	ug/kg	240 U	270 U	290 U	450 U	260 U	240 U
VOCs	Acetic acid, methyl ester	ug/kg	61	54 U	57 U	89 U	52 U	48 U
VOCs	Acetone	ug/kg	240 U	270 U	290 U	510	260 U	240 U
VOCs	Benzene	ug/kg	11 J	54 U	57 U	340	52 U	48 U
VOCs	Bromodichloromethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Bromoform	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Bromomethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Carbon disulfide	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Carbon tetrachloride	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Chlorobenzene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Chloroethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Chloroform	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Chloromethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Cis-1,2-Dichloroethene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Cis-1,3-Dichloropropene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Cyclohexane	ug/kg	48 U	54 U	57 U	1200	52 U	48 U
VOCs	Dibromochloromethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Dichlorodifluoromethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Ethylbenzene	ug/kg	48 U	54 U	57 U	310	52 U	48 U
VOCs	Isopropylbenzene	ug/kg	48 U	54 U	57 U	160	52 U	48 U
VOCs	Methyl cyclohexane	ug/kg	110	54 U	57 U	4100	52 U	48 U
VOCs	Methyl Tertbutyl Ether	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U
VOCs	Methylene chloride	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U

	SD		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	
		Location	SS-406	SS-406	SS-406	SS-407	SS-407	SS-407	
		Sample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/22/2015	
		Sample ID	360109-SS-406000	360109-SS-406006	360109-SS-406011	360109-SS-407000	360109-SS-407006	360109-SS-407006D	
		Qc Code	FS	FS	FS	FS	FS	FD	
Class	Parameter	Units	Result Qualifier						
VOCs	Styrene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	Tetrachloroethene	ug/kg	540	380	750	1,100	52 U	48 U	
VOCs	Toluene	ug/kg	48	54 U	57 U 1400		52 U	48 U	
VOCs	trans-1,2-Dichloroethene	. ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	trans-1,3-Dichloropropene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	Trichloroethene	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	Trichlorofluoromethane	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	Vinyl chloride	ug/kg	48 U	54 U	57 U	89 U	52 U	48 U	
VOCs	Xylenes, Total	ug/kg	80 J	110 U	110 U	2900	100 U	96 U	
Solids	Percent Moisture	Percent	13	19 .	20	10	16	14	
Solids	Percent Solids	Percent	87	81	80	90	84	86	

# NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

Γ.	SDO		480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
		Location	SS-407	SS-408	SS-408	SS-408	SS-506	SS-506
		Sample Date	10/22/2015	10/22/2015	10/22/2015	10/22/2015	10/21/2015	10/21/2015
		Sample ID	360109-SS-407012	360109-SS-408000	360109-SS-408007	360109-SS-408011	360109-GS-506003	360109-GS-506011
		Qc Code	FS	FS	FS	FS	FS	FS -
Class	Parameter	Units	Result Qualifier	Result Qualifier.	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1,1,1-Trichloroethane	ug/kg	66 U	51 U	45 U	46 U	43 U	33 J
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethar	ne ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,1,2-Trichloroethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,1-Dichloroethane	ug/kg	66 U	51 U	45 U	46 U	43 U	32 J
VOCs	1,1-Dichloroethene	ug/kg	66 U	51 U	45 U	46 U	43 U	150 J
VOCs	1,2,4-Trichlorobenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,2-Dibromoethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,2-Dichlorobenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	240 J
VOCs	1,2-Dichloroethane	ug/kg	66 U	51 U	_ 45 U	46 U	43 U	30 UJ
VOCs	1,2-Dichloropropane	ug/kg	66 U	51 U	45 U	46 U	43 U	-30 UJ
VOCs	1,3-Dichlorobenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	1,4-Dichlorobenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	320 J
VOCs	2-Butanone	ug/kg	330 U	250 U	230 U	230 U	220 U	150 UJ
VOCs	2-Hexanone	ug/kg	330 U	250 U	230 U	230 U	220 U	150 UJ
VOCs	4-Methyl-2-pentanone	ug/kg	330 U	250 U	230 U	230 U	220 U	150 UJ
VOCs	Acetic acid, methyl ester	ug/kg	200	51 U	45 U	46 U	43 U	30 UJ
VOCs	Acetone	ug/kg	330 U	250 U	230 U	230 U	220 U	150 UJ
VOCs	Benzene	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Bromodichloromethane	ug/kg	66 U	51 U	45 U	46 U	43 U _	30 UJ
VOCs	Bromoform	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Bromomethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Carbon disulfide	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Carbon tetrachloride	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Chlorobenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs .	Chloroethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Chloroform	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Chloromethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Cis-1,2-Dichloroethene	ug/kg	. 65 J	51 U	45 U	46 U ·	43 U	87000
VOCs	Cis-1,3-Dichloropropene	ug/kg	66 U	51 U	45 U	46 U	43 0	30 UJ
VOCs	Cyclohexane	ug/kg	66 U	51 U	45 U	46 U	43 U	480 J
VOCs	Dibromochloromethane	ug/kg	66 U	51 U	45 U	46 U	43 0	30 UJ
VOCs	Dichlorodifluoromethane	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Ethylbenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	8700
VOCs	Isopropylbenzene	ug/kg	66 U	51 U	45 U	46 U	43 U	1100 J
VOCs	Methyl cyclohexane	ug/kg	66 U	27 J	45 U	46 U	43 U	2700 J
VOCs	Methyl Tertbutyl Ether	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ
VOCs	Methylene chloride	ug/kg	66 U	51 U	45 U	46 U	43 U	30 UJ

	SDG 480-897		781-1	480-89781-1		480-89781-1		480-89781-1		480-89781-1		480-89781-1		
		Location	00 00+ \_22	107	\$5-408			-408	SS-4	108	SS-	506	SS-	506
		Commis Data	40/00/	40/00/0045		12015	10/00/2015		10/22/2015		10/21	12015	10/21	/2015
		Sample Date	10/22/	2015	10/22	/2015	10/22	2/2015	10/22/	2015	10/21	2015	10/21	72013
		Sample ID	360109-55	5-407012	360109-S	S-408000	360109-5	S-408007	360109-5	5-408011	360109-G	5-506003	360109-6	5-506011
		Qc Code	FS	5	F	S	F	-s ∣	F	5	-T	S	F	S
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	66	υ	51	U	45	U	46	U	43	U	30	UJ
VOCs	Tetrachloroethene	ug/kg	35 .	J	400		270		490		43	U	250,000	
VOCs	Toluene	ug/kg	66	U ·	51	U	45 U		46 U		43 U		240	J
VOCs	trans-1,2-Dichloroethene	ug/kg	66	U	51	U	45 U		46	U	43	U	240	J
VOCs	trans-1,3-Dichloropropene	ug/kg	66	U	51	U	45	U	46 U		43 U		30	UJ
VOCs	Trichloroethene	ug/kg	33 、	J	51	U	45	U	46 U		43	U	300000	
VOCs	Trichlorofluoromethane	ug/kg	66	U	51	U	45	U	46	U	43	U	30	UJ
VOCs	Vinyl chloride	ug/kg	66	U	51	U	45	U	46	U	43	U	1800	J
VOCs	Xylenes, Total	ug/kg	130	U	100	U	91	U	92	U	86	U	270	J
Solids	Percent Moisture	Percent	21		13		13		15		17		10	
Solids	Percent Solids	Percent	79		87		88		85		83		90	

## NOTES:

ug/l = microgram per liter ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

		SDG	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1	480-89781-1
		Location	SS-506	SS-506	SS-507	SS-507	SS-507	SS-508
	Sa	ample Date	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015	10/21/2015
	· · · ·	Sample ID	360109-GS-506011D	360109-GS-506016	360109-GS-507003	360109-GS-507009	360109-GS-507012	360109-GS-508013
		Qc Code	FD	FS	FS	FS	FS	FS
Class	Parameter	Units	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1,1,1-Trichloroethane	ug/kg	. 32 J	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,1,2,2-Tetrachloroethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,1,2-Trichloroethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,1-Dichloroethane	ug/kg	31 J	52 UJ	46 U	27 U	14 J	34 U
VOCs	1,1-Dichloroethene	ug/kg	130 J	52 UJ	46 U	27 U	80 J	34 U
VOCs	1,2,4-Trichlorobenzene	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,2-Dibromo-3-chloropropane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,2-Dibromoethane	ug/kg	37 UJ	52 UJ	46 U	27 U 🐋	41 UJ	34 U
VOCs	1,2-Dichlorobenzene	ug/kg	180 J	150 J	46 U	27 U	260 J	34 U
VOCs	1,2-Dichloroethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,2-Dichloropropane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,3-Dichlorobenzene	ug/kg	37 UJ	· 52 UJ	46 U	27 U	41 UJ	34 U
VOCs	1,4-Dichlorobenzene	ug/kg	250 J	250 J	46 U	34	240 J	34 U
VOCs	2-Butanone	ug/kg	190 UJ	260 UJ	230 U	140 U	200 UJ	170 U
VOCs	2-Hexanone	ug/kg	190 UJ	260 UJ	230 U	140 U	200 UJ	170 U
VOCs	4-Methyl-2-pentanone	ug/kg	190 UJ	260 UJ	230 U	140 U	200 UJ	170 U
VOCs	Acetic acid, methyl ester	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Acetone	ug/kg	190 UJ	260 UJ	230 U	140 U	200 UJ	170 U
VOCs	Benzene	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Bromodichloromethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Bromoform	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Bromomethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Carbon disulfide	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Carbon tetrachloride	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Chlorobenzene	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Chloroethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Chloroform	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Chloromethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 0
VOCs	Cis-1,2-Dichloroethene	ug/kg	62000	4900 J	46 U	330	11000	14 J
VOCs	Cis-1,3-Dichloropropene	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Cyclohexane	ug/kg	540 J	520 J	46 U	27 U	41 UJ	34 U
VOCs	Dibromochloromethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34.0
VOCs	Dichlorodifluoromethane	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Ethylbenzene	ug/kg	8000	3800 J	46 U	910	6600	34 U
VOCs	Isopropylbenzene	ug/kg	830 J	790 J	46 U	77	790 J	34 U
VOCs	Methyl cyclohexane	ug/kg	3300 J	4800 J	46 U	2100	8400	34 U
VOCs	Methyl Tertbutyl Ether	ug/kg	37 UJ	. 52 UJ	46 U	27 U	41 UJ	34 U
VOCs	Methylene chloride	ug/kg	37 UJ	52 UJ	46 U	27 U	41 UJ	34 U

	······	SDG		781-1	480-8	9781-1	480-89781-1		480-89	9781-1	480-8	9781-1	480-8	9781-1
		Location	SS-	506	SS-	-506	SS-507		SS-507		SS	-507	SS-	-508
	:	Sample Date	10/21/	2015	10/21	/2015	10/21	1/2015	10/21/2015		10/21	/2015	10/21	/2015
		Sample ID	360109-GS	-506011D	360109-0	S-506016	360109-GS-507003		360109-G	S-507009	360109-0	S-507012	360109-G	S-508013
		Qc Code	FI	C	F	S	F	S	FS		FS		F	:S
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene	ug/kg	37	UJ	52	UJ	46	U	27	U	41	UJ	34	U
VOCs	Tetrachloroethene	ug/kg	330,000		390,000		180		39		41 UJ		34	U
VOCs	Toluene	ug/kg	180	J	270	J	46	46 U 580			2200 J		34 U	
VOCs	trans-1,2-Dichloroethene	ug/kg	240	J	63	J	46	U	9.3	J	120 J		34	U
VOCs	trans-1,3-Dichloropropene	ug/kg	37	UJ	52	UJ	46	U	27	U	41	UJ	34 U	
VOCs	Trichloroethene	ug/kg	250000		47000		34	J	15	J	41	UJ	34	U
VOCs	Trichlorofluoromethane	ug/kg	37	UJ	52	UJ	46	U	27	U	41	UJ	34	U
VOCs	Vinyl chloride	ug/kg	910	J	24	24 J		U	440		1800	J	15	J
VOCs	Xylenes, Total	ug/kg	97	J	890 J		92	U	880		1400 J		68	U
Solids	Percent Moisture	Percent	11		9.2		18		11		11		8.8	
Solids	Percent Solids	Percent	89		91		82		89		89		91	

### NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

J = estimated concentration

Prepared by: BJS 11/10/2015 Checked by: JAR 11/11/2015

	SDG	480-90144-1	480-90144-1	480-90144-1	480-90144-1	480-90144-1
	Location	MW-501	MW-504	MW-505	QC	QC
	Sample Date	10/27/2015	10/27/2015	10/27/2015	10/26/2015	10/27/2015
	Sample ID	360109-MW-50102	360109-MW-50410	360109-MW-50522	QC-TB102615-XX	QC-TB102715-XX
	Qc Code	FS	FS	FS	ТВ	TB
	Units	ug/l	ug/l	ug/l	ug/kg ·	ug/l
Method Class	Parameter	Result Qualifier				
VOCs	1,1,1-Trichloroethane	1 U	160	910	340 U	1 U
VOCs	1,1,2,2-Tetrachloroethane	1 U	100 U	100 U	340 U	1 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane	1 U	100 U	100 U	340 U	1 U
VOCs	1,1,2-Trichloroethane	1: U	100 U	100 U	340 U	1 U
VOCs	1,1-Dichloroethane	1 U	56 J	100 U	340 U	1 U
VOCs	1,1-Dichloroethene	1 U	180	460	340 U	1 U
VOCs	1,2,4-Trichlorobenzene	1 U	100 U	100 U	340 U	1 U
VOCs	1,2-Dibromo-3-chloropropane	1: U	100 U	100 U	340 U	1 U
VOCs	1,2-Dibromoethane	1: U	100 U	100 U	340 U	10
VOCs	1,2-Dichlorobenzene	1 U	100 U	100 U	340 U	1 U
VOCs	1,2-Dichloroethane	1 U	100 U	100 U	340 U	1 U
VOCs	1,2-Dichloropropane	1 U	100 U	100 U	340 U	1 U
VOCs	1,3-Dichlorobenzene	1 U	100 U	100 U	340 U	1 U
VOCs	1,4-Dichlorobenzene	1 U	100 U	100 U	340 U	10
VOCs	2-Butanone	10 U	1000 U	1000 U	1700 U	10 U
VOCs	2-Hexanone	5 U	500 U	500 U	1700 U	5 U
VOCs	4-Methyl-2-pentanone	5 U	500 U	500 U	1700 U	5 U
VOCs	Acetic acid, methyl ester	2.5 U	250 U	250 U	340 U	2.5 U
VOCs	Acetone	10 U	1000 U	1000 U	1700 U	10 U
VOCs	Benzene	1 U	100 U	100 U	340 U	10
VOCs	Bromodichloromethane	1 U	100 U	100 U	340 U	1 U
VOCs	Bromoform	1 U	100 U	100 U	340 U	10
VOCs	Bromomethane	1 U	100 U	100 U	340 U	1 U
VOCs	Carbon disulfide	1 U	100 U	100 U	340 U	1 U
VOCs	Carbon tetrachloride	1 U	100 U	100 U	340 U	10
VOCs	Chlorobenzene	1 U	100 U	100 U	340 U	1 U
VOCs	Chloroethane	1 U	100 U	100 U	340 U	10
VOCs	Chloroform	1 U	100 U	100 U	340 U	10
VOCs	Chloromethane	1 U	100 U	100 U	340 U	10
VOCs	Cis-1,2-Dichloroethene	1 U	100 U	100 U	340 U	10
VOCs	Cis-1,3-Dichloropropene	1 U	100 U	100 U	340 U	10
VOCs	Cyclohexane	1 UJ	100 U	100 U	340 U	10
VOCs	Dibromochloromethane	1 U	100 U	100 U	340 U	10
VOCs	Dichlorodifluoromethane	1 U	100 U	100 U	340 U	10
VOCs	Ethylbenzene	1 U	100 U	100 U	340 U	10
VOCs	Isopropylbenzene	1 U	100 U	100 U	340 U	10
VOCs	Methyl cyclohexane	1 U	100 U	100 U	340 U	10
VOCs	Methyl Tertbutyl Ether	1 U	100 U	100 U	340 U	10
VOCs	Methylene chloride	1 U	100 U	100 U	340 U	10

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Prepared by: BJS 11/18/2015 Checked by: JAR 11/18/2015

	SDG	480-90144-1	480-90144-1	480-90144-1	480-90144-1	480-90144-1
	Location	MW-501	MW-504	MW-505	QC	QC
	Sample Date	10/27/2015	10/27/2015	10/27/2015	10/26/2015	10/27/2015
	Sample ID	360109-MW-50102	360109-MW-50410	360109-MW-50522	QC-TB102615-XX	QC-TB102715-XX
	Qc Code	FS	FS	FS	TB	TB
	Units	ug/l	ug/l	ug/l	ug/kg	ug/l
Method Class	Parameter	Result Qualifier				
VOCs	Styrene	1 U	100 U	100 U	340 U	1 U
VOCs	Tetrachloroethene	11	100 U	100 U	340 U	1 U
VOCs	Toluene	1 U	100 U	100 U	340 U	1 U
VOCs	trans-1,2-Dichloroethene	1 U	100 U	100 U	340 U	1 U
VOCs	trans-1,3-Dichloropropene	1 U	100 U	100 U	340 U	1 U
VOCs	Trichloroethene	1 U	2400	5700	340 U	1 U
VOCs	Trichlorofluoromethane	1 U	100 U	100 U	340 U	1 U
VOCs	Vinyl chloride	1 U	100 U	100 U	340 U	1 U
VOCs	Xylenes, Total	2 U	200 U	200 U	680 U	2 U
Solids	Percent Moisture					
Solids	Percent Solids					

NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

	SDG	480-90144-1	480-90144-1	480-90144-1	480-90144-1
	Location	SS-503	SS-503	SS-503	SS-503
	Sample Date	10/26/2015	10/26/2015	10/26/2015	10/26/2015
	Sample ID	360109-GS-503003	360109-GS-503003	360109-GS-503006	360109-GS-503006
	Qc Code	FS	FS	FS	FS
	Units	Percent	ug/kg	Percent	ug/kg
Method Class	Parameter	Result Qualifier	Result Qualifier	Result Qualifier	Result Qualifier
VOCs	1,1,1-Trichloroethane		44 U		44 U
VOCs	1,1,2,2-Tetrachloroethane		44 U		44 U
VOCs	1,1,2-Trichloro-1,2,2-Trifluoroethane		44 U		44 U
VOCs	1,1,2-Trichloroethane		44 U		44 U
VOCs	1,1-Dichloroethane		44 U		44 U
VOCs	1,1-Dichloroethene		44 U		44 U
VOCs	1,2,4-Trichlorobenzene		44 U		44 U
VOCs	1,2-Dibromo-3-chloropropane		44 U		44 U
VOCs	1,2-Dibromoethane	i i	44 U		44 U
VOCs	1,2-Dichlorobenzene		44 U		44 U
VOCs	1,2-Dichloroethane		44 U		44 U
VOCs	1,2-Dichloropropane		44 U		44 U
VOCs	1,3-Dichlorobenzene		44 U		44 U
VOCs	1,4-Dichlorobenzene		44 U		44 U
VOCs	2-Butanone		220 U		220 U
VOCs	2-Hexanone	-	220 U		220 U
VOCs	4-Methyl-2-pentanone		220 U	н. -	220 U
VOCs	Acetic acid, methyl ester		44 U		44 U
VOCs	Acetone		220 U		220 U
VOCs	Benzene		44 U		44 U
VOCs	Bromodichloromethane	-	44 U		44 U
VOCs	Bromoform		44 U		44 U
VOCs	Bromomethane		44 U		44 U
VOCs	Carbon disulfide		44 U		44 0
VOCs	Carbon tetrachloride		44 U		44 U
VOCs	Chlorobenzene		44 U		44 U
VOCs	Chloroethane		44 U		44 U
VOCs	Chloroform		44 U		44 U
VOCs	Chloromethane		44 U		44 U
VOCs	Cis-1,2-Dichloroethene		44 U		44 U
VOCs	Cis-1,3-Dichloropropene		44 U		44 U
VOCs	Cyclohexane		44 U		44 U
VOCs	Dibromochloromethane		44 U		44 U
VOCs	Dichlorodifluoromethane		44 U		44 U
VOCs	Ethylbenzene		44 U		44 U
VOCs	Isopropylbenzene		44 U		44 U
VOCs	Methyl cyclohexane		. 44 U		44 U
VOCs	Methyl Tertbutyl Ether		44 U		44 U
<b>VOCs</b>	Methylene chloride	-	44 U		44 U

Prepared by: BJS 11/18/2015 Checked by: JAR 11/18/2015

SDG		480-90	144-1	480-90144-1		480-90144-1		480-90	144-1
	Location	SS-5	03	SS-503		SS-503		SS-	503
	10/26/2015		10/26/2015		10/26/2015		10/26/2015		
	360109-GS-503003		360109-G	S-503003	360109-G	S-503006	360109-G	S-503006	
	Qc Code	FS	5	FS		F	S	F	S
	Percent		ug/kg		Percent		ug/kg		
Method Class	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Styrene			44	υ			44	1 U
VOCs	Tetrachloroethene			44	ιU			29	) J
VOCs	Toluene			44	U			44	ιυ
VOCs	trans-1,2-Dichloroethene			44	U I			44	1U
VOCs	trans-1,3-Dichloropropene			44	υ			44	1U
VOCs	Trichloroethene			44	FU			44	tU
VOCs	Trichlorofluoromethane			44	ŧ U			44	1U
VOCs	Vinyl chloride			44	U U			44	1U
VOCs	Xylenes, Total			87	'U			88	3 U 🛛
Solids	Percent Moisture	8.7				10	0		
Solids	Percent Solids	91				. 9	0		

NOTES:

ug/l = microgram per liter

ug/kg = microgram per kilogram

U = not detected at the reported quanitation limit

# TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

Arbityse         Lab Sample ID         Field Sample ID <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>M - 11 - 1 - 11 - 11</th> <th></th> <th></th> <th></th>									M - 11 - 1 - 11 - 11			
BLG         Idea Part (ab particle in part of any part of		Analysis						Validated	Validation		11-34	Labelat
480-488-21         Vir220U         480-488-2	SDG	Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Qualifier	Result	Qualifier	Val Reason Code	Units	
add:dbbc://dbc         add//dbc	480-89582-1	SW8260C	480-89582-17	360109-PZ-3409	1,1,2-I richloroethane	200	0	200	01		ug/i	TALBELO
480.48822         SW2280C         480.48827         SW2280C         480.48871.53         380.108.548000         1.2.018700000000000000000000000000000000000	480-89582-1	SW8260C	480-89582-18	360109-PZ-3409D	1,1,2-1 richloroethane	320		320	J		ug/i	TALBELO
date         date <th< td=""><td>480-89582-1</td><td>SW8260C</td><td>480-89582-20</td><td>360109-PZ-2216</td><td>Bromomethane</td><td>50</td><td>0 -</td><td>50</td><td>01</td><td>MS-L, MS-RPD</td><td>ug/i</td><td>TALBELO</td></th<>	480-89582-1	SW8260C	480-89582-20	360109-PZ-2216	Bromomethane	50	0 -	50	01	MS-L, MS-RPD	ug/i	TALBELO
480-68822         SW2280C         480-88822-SW2280C         380109-GS-501001         Charactanae         481 UF1         481 UH         MS-L         UB/R         TABFLO           480-68822         SW2280C         480-8822-SW2280C         480-8822-SW2280C         MS-H, MS-RPD         Ug/R         TABFLO           480-68822         SW2280C         480-8822-SW2280C         480-8822-SW2280C         MS-H, MS-RPD         Ug/R         TABFLO           480-68827-SW2280C         480-8871-SW2280C         480-8871-SW228	480-89582-1	SW8260C	480-89582-20	360109-PZ-2216	Tetrachloroethene	5700	F1 ^	5,700	J	CCV%D, MS-H	ug/i	TALBELO
440-69862-1 (SW280C)         480-69862-5         360109-CS-501001         Dichlorodituoromethane         430 PT         430 JPT         430 JW         MS-L         up/kg         TALBFLO           480-69862-5         SW0820C         480-89862-5         SW0820C         480-89862-5         SW0820C         480-89862-5         SW0820C         480-89871-5         SW0109-SS-407005         up/kg         TALBFLO           480-98971-1         SW0820C         480-89871-5         SW0109-SS-407005         12-Ditromo-3-chitocryprane         42 U*         44 UJ         LCS-L         up/kg         TALBFLO           480-98971-1         SW0260C         480-89711-23         380109-SS-404000         12-Ditromo-3-chitocryprane         44 U*         44 UJ         LCS-L         up/kg         TALBFLO           480-98771-1         SW0260C         480-89771-12         380109-SS-404000         12-Ditromo-3-chitocryprane         44 U*         44 UJ         LCS-L         up/kg         TALBFLO           480-98771-1         SW0260C         480-89771-23         380109-SS-403000         12-Ditromo-3-chitocryprane         44 U*         44 U         LCS-L         up/kg         TALBFLO           480-98771-1         SW0260C         480-89771-23         380109-SS-403000         12-Ditromo-3-chitocryprane         40 U* <td< td=""><td>480-89582-1</td><td>SW8260C</td><td>480-89582-5</td><td> 360109-GS-501001</td><td>Chloroethane</td><td>48</td><td>U F1</td><td>48</td><td>UJ</td><td>MS-L</td><td>ug/kg</td><td>TALBELO</td></td<>	480-89582-1	SW8260C	480-89582-5	360109-GS-501001	Chloroethane	48	U F1	48	UJ	MS-L	ug/kg	TALBELO
440-69822-1 (SW280C)         480-39582-5         300109-CS-01100         Tetrachonochromethane         430 UP 2 P1         3,300 J         MS-H, MS-HPU         UPNG         TALBELO           480-69822-1 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C)         480-89781-2 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C)         480-89781-2 (SW280C)         480-89781-2 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C)         480-89781-1 (SW280C)         480-89781-2 (SW280C) <td>480-89582-1</td> <td>SW8260C</td> <td>480-89582-5</td> <td>360109-GS-501001</td> <td>Dichlorodifluoromethane</td> <td>48</td> <td></td> <td>48</td> <td>ÚJ</td> <td>MS-L</td> <td>ug/kg</td> <td>TALBELO</td>	480-89582-1	SW8260C	480-89582-5	360109-GS-501001	Dichlorodifluoromethane	48		48	ÚJ	MS-L	ug/kg	TALBELO
480-8882-1 (SW8200C         480-8882-5         (SW8200C         480-8882-1         (SW8200C         480-88878-1         (SW8200C         480-8878-1         (SW8200C	480-89582-1	SW8260C	480-89582-5	360109-GS-501001	Tetrachloroethene	3300	F2 F1	3,300	J	MS-H, MS-RPD	ug/kg	TALBELO
480-89781-1         SW2200C         480-89781-1         SW2200C         480-89781-2	480-89582-1	SW8260C	480-89582-5	360109-GS-501001	Trichlorofluoromethane	48	UF1	48	UJ	MS-L.	ug/kg	TALBELO
480-69781-1         SW22000         490-69781-2         300109-85-405000         1,2.Dibrom-3-chicorpopane         44 U *         45 U *	480-89781-1	SW8260C	480-89781-15	360109-SS-407006	Tetrachloroethene	12	J	52	U	BL2	ug/kg	TALBELO
440-49781-1         SW02600         440-49781-2         SW0109-SS-403012         Tichicrocifiucromethane         50 U         50 U         MS-L         Ug/K         TALBFLO           440-49781-1         SW02600         440-49781-1         SW02600         440-49781-1         SW02600         440-4	480-89781-1	SW8260C	480-89781-22	360109-SS-405008	1,2-Dibromo-3-chloropropane	50	0*	50	UJ	LCS-L	ug/kg	TALBELO
480-49781-1         SW8280C         480-89781-2         360109-SS-40400         1,2-Dibromo-3-chicorpopane         70         V         70         UU         LCS-L         ug/kg         TALBFLO           480-49781-1         SW8280C         480-89781-2         360109-SS-404011         1,2-Dibromo-3-chicorpopane         461         U*         461         UL         LCS-L         ug/kg         TALBFLO           480-89781-1         SW8280C         480-89781-2         360109-SS-403006         1,2-Dibromo-3-chicorpopane         441         U*         441         UL         LCS-L         ug/kg         TALBFLO           480-89781-1         SW8280C         480-89781-2         360109-SS-403012         1,2-Dibromo-3-chicorpopane         501         U*         501         UL         LCS-L         ug/kg         TALBFLO           480-49781-1         SW8280C         480-89781-2         360109-SS-403012         Chicorothane         501         501         MS-L         ug/kg         TALBFLO           480-49781-1         SW8280C         480-89781-3         360109-SS-403012         Trichicordinoremethane         501         U         50         UM         MS-L         ug/kg         TALBFLO           480-49781-1         SW8280C         480-89781-3         360109-S	480-89781-1	SW8260C	480-89781-23	360109-SS-405012	1,2-Dibromo-3-chloropropane	44	U *	44	UJ	LCS-L	ug/kg	TALBFLO
480-88781-1         SW8280C         480-88781-2         360109-SS-404006         1,2-Dibromo-3-chicorpopane         49 U*         49 U         LCS-L         ug/kg         TALBFLO           480-88781-1         SW8280C         480-88781-2         360109-SS-403000         1,2-Dibromo-3-chicorpopane         43 U*         43 U         LCS-L         ug/kg         TALBFLO           480-88781-1         SW8280C         480-88781-2         360109-SS-4030012         1,2-Dibromo-3-chicorpopane         44 U*         43 U         LCS-L         ug/kg         TALBFLO           480-88781-1         SW8280C         480-88781-2         360109-SS-403012         Bromono-3-chicorpopane         50 U         50 U         MS-L         ug/kg         TALBFLO           480-88781-1         SW8280C         480-88781-2         360109-SS-403012         Chicroelhane         50 U         50 U         MS-L         ug/kg         TALBFLO           480-89781-1         SW8280C         480-88781-29         360109-SS-403012         Tretrachloroethane         50 U         50 U         50 U         MS-L         ug/kg         TALBFLO           480-89781-1         SW8280C         480-88781-3         360109-SS-403001         1, 2-Dibromo-3-chicropropane         75 U*         73 U*         73 U         LS-L         ug	480-89781-1	SW8260C	480-89781-24	360109-SS-404000	1,2-Dibromo-3-chloropropane	70	U *	. 70	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1         SW220C         480-89781-2         360109-SS-404011         1,2-Ditormo-3-chloropropane         43         U*         46         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-28         360109-SS-403006         1,2-Ditormo-3-chloropropane         44         U*         44         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-29         360109-SS-403012         Ditormo-3-chloropropane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-29         360109-SS-403012         Ditorodfhoromethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         380109-SS-403012         Totkorofflooromethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         380109-SS-400012         Totkorofflooromethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3	480-89781-1	SW8260C	480-89781-25	360109-SS-404006	1,2-Dibromo-3-chloropropane	49	U *	49	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1         SW2260C         480-89781-2         360109-SS-403000         1,2-Dibromo-3-chloropropane         4J         4J         4J         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-29         360109-SS-403012         Diromo-3-chloropropane         50         U         50         UL         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-29         360109-SS-403012         Chloroethane         50         U         50         UL         MS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-29         360109-SS-403012         Tetrachroothane         50         U         50         UL         MS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-3         380109-SS-402012         Tetrachroothane         50         U         50         UL         MS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-3         380109-SS-402006         12-Dibromo-3-chloropropane         50         U         50         UL         MS-L         ug/kg         TALBFLO           480-89781-1         SW2260C         480-89781-3         360109-SS-402006 <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-26</td> <td>360109-SS-404011</td> <td>1,2-Dibromo-3-chloropropane</td> <td>46</td> <td>U *</td> <td>46</td> <td>บา</td> <td>LCS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-26	360109-SS-404011	1,2-Dibromo-3-chloropropane	46	U *	46	บา	LCS-L	ug/kg	TALBFLO
4ge.38781-1         SW220C         490-88781-28         360109-SS-403012         1,2-Dibromo-3-chloropropane         44    U*         44    U*         44    U         LCS-L         ug/kg         TALBFLO           480-88781-1         SW220C         480-88781-29         360109-SS-403012         Dirbormo-3-chloropropane         50    U         50    U         MS-L         ug/kg         TALBFLO           480-88781-1         SW220C         480-89781-29         360109-SS-403012         Dirborot-3-chloropropane         50    U         50    U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-29         360109-SS-403012         Tretrachloroethane         50    U         50    U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         360109-SS-403012         Tretrachloroethane         50    U         50    U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         360109-SS-402000         1,2-Dibromo-3-chloropropane         73    U*         73    U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         360109-SS-401000         1,2-Dibromo-3-chloropropane         47    U*         47    U	480-89781-1	SW8260C	480-89781-27	360109-SS-403000	1,2-Dibromo-3-chloropropane	43	U *	43	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1         SW28200         480-89781-29         360109-SS-403012         Bromoform         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-29         360109-SS-403012         Chioroethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-29         360109-SS-403012         Tiertachioroethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-29         360109-SS-403012         Tiertachioroethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-3         360109-SS-402000         1,2-Dibromo-3-chioropropane         73         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chioropropane         45         U *         45         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW28200         480-89781-33         360109-SS-4001000         1,2-Dibromo	480-89781-1	SW8260C	480-89781-28	360109-SS-403006	1,2-Dibromo-3-chloropropane	44	U *	44	ΟJ	LCS-L	ug/kg	TALBFLO
480-89781-1         SW280C         480-89781-29         380109-SS-403012         Bromoform         50         U         50         U         MS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-29         380109-SS-403012         Dichlorodifluoromethane         50         U         50         U         MS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-29         380109-SS-403012         Tictrachloroethane         50         U         50         U         MS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-30         380109-SS-403012         Tictrachloroethane         50         U         MS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-3         380109-SS-402000         1,2-Dibromo-3-chloropropane         45         U         LCS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-33         380109-SS-401000         1,2-Dibromo-3-chloropropane         47         U *         47         U         LCS-L         Ug/kg         TALBFLO           480-89781-1         SW280C         480-89781-3         380109-SS-400000         1,2-Dibromo-3-chloropropane         51<	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	1,2-Dibromo-3-chloropropane	50	U *	50	UJ	LCS-L	ug/kg	TALBFLO
4abe-89781-1         SW2800C         4abe-89781-29         360109-SS-403012         Chloroethane         50         U         50         UJ         MS-L         Ug/kg         TALBFLO           480-89781-1         SW2800C         480-89781-29         360109-SS-403012         Tetrachloroethene         15         J F1         15         J         MS-L         Ug/kg         TALBFLO           480-89781-1         SW2800C         480-89781-29         360109-SS-403012         Tetrachloroethene         50         U         50         UJ         MS-L         Ug/kg         TALBFLO           480-89781-1         SW28200C         480-89781-33         360109-SS-402000         1.2-Dibrono-3-chloropropane         73         U'         73         UL         LCS-L         Ug/kg         TALBFLO           480-89781-1         SW28200C         480-89781-33         360109-SS-401000         1.2-Dibrono-3-chloropropane         47         U'         47         UL         LCS-L         Ug/kg         TALBFLO           480-89781-1         SW28200C         480-89781-33         360109-SS-400005         1.2-Dibrono-3-chloropropane         47         U'         47         UL         LCS-L         Ug/kg         TALBFLO           480-89781-1         SW28200C         480-	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	Bromoform	50	U	50	UJ	MS-L	ug/kg	TALBFLO
480-89781-1         SW2200C         490-89781-29         360109-SS-403012         Dichlorodifluoromethane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW2200C         480-89781-29         360109-SS-403012         Trichorofluoromethane         50         U         50         UU         MS-L         ug/kg         TALBFLO           480-89781-1         SW2200C         480-89781-33         360109-SS-402000         1,2-Dibromo-3-chloropropane         73         U*         73         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2200C         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         45         U*         45         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2200C         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         47         U*         47         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2200C         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         49         U*         49         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2200C	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	Chloroethane	50	U	50	UJ	MS-L	ug/kg	TALBFLO
4ace-spr3t-1         SW8260C         4ace-spr3t-2         380109-SS-403012         Tetrachoroethene         15         J F1         15         J MS-H         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-spr3t-2         380109-SS-402000         1,2-Dibrom-3-chloropropane         50         U         50         U         MS-H         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-spr3t-3         380109-SS-402000         1,2-Dibrom-3-chloropropane         45         U*         45         UJ         LCS-L         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-spr3t-34         360109-SS-401006         1,2-Dibrom-3-chloropropane         45         U*         47         UJ         LCS-L         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-spr3t-36         360109-SS-401011         Tetrachoroethere         8         B         8         U         BL1, BL2         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-spr3t-36         360109-SS-400005         1,2-Dibromo-3-chloropropane         49         U*         49         UJ         LCS-L         ug/kg         TALBFLO           4ace-spr3t-1         SW8260C         4ace-sp	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	Dichlorodifluoromethane	50	U	50	UJ	MS-L	ug/kg	TALBFLO
480-89781-1         SW220C         480-89781-29         360109-SS-403012         Trichlorofluorojmentane         50         U         50         U         MS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-402000         1,2-Dibromo-3-chloropropane         73         U*         73         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         45         U*         45         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         47         U*         47         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-400001         1,2-Dibromo-3-chloropropane         49         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-38         360109-SS-400012         1,2-Dibromo-3-chloropropane         49         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-3         360109-SS-5400012	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	Tetrachloroethene	15	J F1	15	J	MS-H	ug/kg	TALBFLO
480-89781-1         SW220C         480-89781-30         360109-SS-402000         1,2-Dibromo-3-chloropropane         45         U*         45         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-401000         1,2-Dibromo-3-chloropropane         45         U*         45         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-33         360109-SS-401006         1,2-Dibromo-3-chloropropane         47         U*         47         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-36         360109-SS-401000         1,2-Dibromo-3-chloropropane         47         U*         47         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-36         360109-SS-400000         1,2-Dibromo-3-chloropropane         49         U*         49         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220CC         480-89781-38         360109-SS-400000         1,2-Dibromo-3-chloropropane         42         U*         42         U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW2	480-89781-1	SW8260C	480-89781-29	360109-SS-403012	Trichlorofluoromethane	50	U	50	UJ	MS-L	ug/kg	TALBFLO
480-89781-1         SW220C         480-89781-31         360109-SS-402006         1.2-Dibrom-3-chloropropane         45 U*         45 U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-33         360109-SS-401000         1.2-Dibrom-3-chloropropane         56 U*         56 U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         360109-SS-401001         1.2-Dibrom-3-chloropropane         47 U*         47 U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-37         360109-SS-400005         1.2-Dibrom-3-chloropropane         49 U*         49 U         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-37         360109-SS-400012         1.2-Dibrom-3-chloropropane         49 U*         49 UJ         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-3         360109-SS-400012         1.2-Dibrom-3-chloropropane         45 U*         45 UJ         LCS-L         ug/kg         TALBFLO           480-89781-1         SW220C         480-89781-4         360109-GS-506011         1,1,1-Trichoroethane         30 U         30 U         S5-L         ug/kg         TALB	480-89781-1	SW8260C	480-89781-30	360109-SS-402000	1,2-Dibromo-3-chloropropane	73	U *	73	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-33       360109-SS-401000       1,2-Dibromo-3-chloropropane       47       U*       47       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-35       360109-SS-401000       1,2-Dibromo-3-chloropropane       47       U*       47       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-35       360109-SS-400000       1,2-Dibromo-3-chloropropane       51       U*       49       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-400005       1,2-Dibromo-3-chloropropane       49       U*       49       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-506011       1,1-Dibromo-3-chloropropane       42       U*       45       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-SS-506011       1,1,1-Trichloroethane       30       U       30       U       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U	480-89781-1	SW8260C	480-89781-31	360109-SS-402006	1,2-Dibromo-3-chloropropane	45	U *	45	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW2260C       480-89781-34       360109-SS-401006       1.2-Dibromo-3-chloropropane       47       U*       47       U       LCS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-36       360109-SS-400000       1.2-Dibromo-3-chloropropane       8       B       8       U       LCS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-37       360109-SS-400005       1.2-Dibromo-3-chloropropane       49       U*       49       U       LCS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-37       360109-SS-400012       1.2-Dibromo-3-chloropropane       42       U*       42       U       LCS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-43       360109-SS-400012       1.2-Dibromo-3-chloropropane       42       U*       42       U       LCS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1.1,1-Z.7-Tetrahoroethane       30       U       30       U       SS-L       Ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1.1,2-Z-Tetrahoroethane       30       U	480-89781-1	SW8260C	480-89781-33	360109-SS-401000	1,2-Dibromo-3-chloropropane	56	U *	56	NI	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-35       360109-SS-401011       Tetrachloroethene       8 B       8 U       BL1, BL2       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-37       360109-SS-400005       1,2-Dibromo-3-chloropropane       51 U*       51 UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-37       360109-SS-400012       1,2-Dibromo-3-chloropropane       49 U*       49 UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-400012       1,2-Dibromo-3-chloropropane       42 U*       42 UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,1-Trichloroethane       33       33 J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30 U       30 UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30 U       30 UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4	480-89781-1	SW8260C	480-89781-34	360109-SS-401006	1,2-Dibromo-3-chloropropane	47	U *	47	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-36       360109-SS-400000       1,2-Dibromo-3-chloropropane       51       U*       49       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-4000012       1,2-Dibromo-3-chloropropane       49       U*       49       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-400012       1,2-Dibromo-3-chloropropane       42       U*       42       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-39       360109-SS-301006       1,2-Dibromo-3-chloropropane       45       U*       45       U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichlorochtane       30       U       30       U       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichlorochtane       30       U       30       U       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-2-Trichlorochane       30       U       30 </td <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-35</td> <td>360109-SS-401011</td> <td>Tetrachloroethene</td> <td>8</td> <td>В</td> <td>8</td> <td>U</td> <td>BL1, BL2</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-35	360109-SS-401011	Tetrachloroethene	8	В	8	U	BL1, BL2	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-37       360109-SS-400005       1,2-Dibromo-3-chloropropane       49 U*       49 U       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-38       360109-SS-400012       1,2-Dibromo-3-chloropropane       42 U*       42 U*       42 UU       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-SS-506011       1,1-Dichloroethane       33       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-36</td> <td>360109-SS-400000</td> <td>1,2-Dibromo-3-chloropropane</td> <td>51</td> <td>U *</td> <td>51</td> <td>UJ</td> <td>LCS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-36	360109-SS-400000	1,2-Dibromo-3-chloropropane	51	U *	51	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-38       360109-SS-400012       1,2-Dibromo-3-chloropropane       42       U*       42       UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-39       360109-SS-301006       1,2-Dibromo-3-chloropropane       45       U*       45       UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,1-Trichloroethane       33       33       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Z-Tetrachloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloroethane       30       U       30       UJ       SS-L       ug/kg	480-89781-1	SW8260C	480-89781-37	360109-SS-400005	1,2-Dibromo-3-chloropropane	49	U *	49	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-39       360109-SS-301006       1,2-Dibromo-3-chloropropane       45       U*       45       UJ       LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,1-Trichloroethane       33       33       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibrioroethane       30       U       30 <td< td=""><td>480-89781-1</td><td>SW8260C</td><td>480-89781-38</td><td>360109-SS-400012</td><td>1,2-Dibromo-3-chloropropane</td><td>42</td><td>U *</td><td>42</td><td>UJ</td><td>LCS-L</td><td>ug/kg</td><td>TALBFLO</td></td<>	480-89781-1	SW8260C	480-89781-38	360109-SS-400012	1,2-Dibromo-3-chloropropane	42	U *	42	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,1-Trichloroethane       33       33       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg	480-89781-1	SW8260C	480-89781-39	360109-SS-301006	1,2-Dibromo-3-chloropropane	45	U *	45	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2,2-Tetrachloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1,1,1-Trichloroethane	33		33	J	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloro-1,2,2-Trifluoroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibriorobenzene       30       U       30       UJ       SS-L </td <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-4</td> <td>360109-GS-506011</td> <td>1,1,2,2-Tetrachloroethane</td> <td>30</td> <td>U</td> <td>30</td> <td>UJ</td> <td>SS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1,1,2,2-Tetrachloroethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1       SW3260C       480-89781-4       360109-GS-506011       1,1,2-Trichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,1-Dichloroethene       150       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1,1,2-Trichloro-1,2,2-Trifluoroethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethane       32       32       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethene       150       150       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1,1,2-Trichloroethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,1-Dichloroethene       150       150       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-4</td> <td>360109-GS-506011</td> <td>1.1-Dichloroethane</td> <td>32</td> <td></td> <td>32</td> <td>J</td> <td>SS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.1-Dichloroethane	32		32	J	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2,4-Trichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-thane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-thane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       u	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.1-Dichloroethene	150		150	J	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromo-3-chloropropane       30       U       30       UJ       SS-L, LCS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       <	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.2.4-Trichlorobenzene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dibromoethane       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.2-Dibromo-3-chloropropane	30	U	30	UJ	SS-L, LCS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       240       240       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloroptopane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloroptopane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO </td <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-4</td> <td>360109-GS-506011</td> <td>1.2-Dibromoethane</td> <td>30</td> <td>U</td> <td>30</td> <td>UJ</td> <td>SS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.2-Dibromoethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloroethane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,2-Dichloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW8260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO <td>480-89781-1</td> <td>SW8260C</td> <td>480-89781-4</td> <td>360109-GS-506011</td> <td>1.2-Dichlorobenzene</td> <td>240</td> <td></td> <td>240</td> <td>J</td> <td>SS-L</td> <td>ug/kg</td> <td>TALBFLO</td>	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.2-Dichlorobenzene	240		240	J	SS-L	ug/kg	TALBFLO
480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1,2-Dichloropropane       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1,3-Dichlorobenzene       30       U       30       UJ       SS-L       ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       1,4-Dichlorobenzene       320       320       J       SS-L       ug/kg       TALBFLO         480-89781-1       SW2260C       480-89781-4       360109-GS-506011       2-Butanone       150       UJ       SS-L       ug/kg       TALBFLO	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	1.2-Dichloroethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1         SW8260C         480-89781-4         360109-GS-506011         1,3-Dichlorobenzene         30         U         30         UJ         SS-L         ug/kg         TALBFLO           480-89781-1         SW8260C         480-89781-4         360109-GS-506011         1,4-Dichlorobenzene         320         320         J         SS-L         ug/kg         TALBFLO           480-89781-1         SW8260C         480-89781-4         360109-GS-506011         1,4-Dichlorobenzene         320         320         J         SS-L         ug/kg         TALBFLO           480-89781         J         SW8260C         480-89781-4         360109-GS-506011         1,4-Dichlorobenzene         320         320         J         SS-L         ug/kg         TALBFLO           480-89781         J         SS-1         ug/kg         TALBFLO         J	480_80781_1	SW8260C	480-89781-4	360109-GS-506011	1.2-Dichloropropane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1 SW8260C 480-89781-4 360109-GS-506011 1,4-Dichlorobenzene 320 320 J SS-L ug/kg TALBFLO	480-80781-1	SW8260C	480-89781-4	360109-GS-506011	1.3-Dichlorobenzene	30	U	30	Πl	SS-L	ug/kg	TALBELO
490 90721 1 SW2260C 1490 90721 4 360100 CS-506011 2 Butanone 1501UI 1501UI SS-1 UIG/kg TALBELO	480-80781-1	SW8260C	480-89781-4	360109-GS-506011	1 4-Dichlorobenzene	320		320	J	SS-L	ug/kg	TALBFLO
	480-89781-1	SW8260C	480-89781-4	360109-GS-506011	2-Butanone	150	U	150	UJ	SS-L	ug/kg	TALBFLO

#### TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

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	Analysis					Lab	Validated	Validation			
SDG	Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Qualifier	Result	Qualifier	Val Reason Code	Units	Lab Id
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	2-Hexanone	150	U	150	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	4-Methyl-2-pentanone	150	U	150	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C.	480-89781-4	360109-GS-506011	Acetic acid, methyl ester	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Acetone	150	U *	150	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Benzene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Bromodichloromethane	30	U	30	ŲJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Bromoform	30	U *	30	UΊ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Bromomethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Carbon disulfide	30	U *	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Carbon tetrachloride	30	U *	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Chlorobenzene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Chloroethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Chloroform	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Chloromethane	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Cis-1,3-Dichloropropene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Cyclohexane	480		480	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Dibromochloromethane	30	U *	30	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Dichlorodifluoromethane	30	U	30	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Isopropylbenzene	1100		1,100	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Methyl cyclohexane	2700		2,700	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Methyl Tertbutyl Ether	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Methylene chloride	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Styrene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Toluene	240		240	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	trans-1,2-Dichloroethene	240		240	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	trans-1,3-Dichloropropene	30	U	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Trichlorofluoromethane	30	U *	30	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Vinyl chloride	1800		1,800	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-4	360109-GS-506011	Xylenes, Total	270		270	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-40	360109-SS-301006D	1,2-Dibromo-3-chloropropane	52	U * .	52	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-41	360109-SS-301010	1,2-Dibromo-3-chloropropane	45	U *	45	UJ	LCS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-44	360109-GW-40815	Acetone	11	* ^	11	J	CCV%D	ug/l	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1,1-Trichloroethane	32	J	32	J	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1,2,2-Tetrachloroethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1,2-Trichloro-1,2,2-Trifluoroethane	. 37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1,2-Trichloroethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1-Dichloroethane	31	J	31	J	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,1-Dichloroethene	130		130	J	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2,4-Trichlorobenzene	37	U	37	0J	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2-Dibromo-3-chloropropane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2-Dibromoethane	37	U	37	UJ .	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2-Dichlorobenzene	180		180	J	55-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2-Dichloroethane	37	U	37	UJ	55-L	ug/kg	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,2-Dichloropropane	37	U	37	UJ	55-L	ug/kg	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,3-Dichlorobenzene	37	U	37	UJ	55-L	ug/kg	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	1,4-Dichlorobenzene	250		250	J	55-L	ug/кg	IALBELO

#### TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

	Analysis				1 - 6 - 7 16	Lab	Validated	Validation	Val Daaran Cada	Unite	
SDG	Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Qualifier	Result	Quaimer	Val Reason Code	Units	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	2-Butanone	190	0	190	UJ	55-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	2-Hexanone	190	0	190	01	55-L	ug/kg	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	4-Methyl-2-pentanone	190	0	190	UJ	55-L	ug/kg	
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Acetic acid, methyl ester	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Acetone	190	0 ^	190	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Benzene	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Bromodichloromethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Bromoform	37	0 ^	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Bromomethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Carbon disulfide	37	U *	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Carbon tetrachloride	37	0*	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Chlorobenzene	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Chloroethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Chloroform	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Chloromethane	37	U	37	UJ	SS-L	ug/kg	TALBELO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Cis-1,3-Dichloropropene	37	U	37	ΩJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Cyclohexane	540		540	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Dibromochloromethane	37	U *	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Dichlorodifluoromethane	37	U	37	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Isopropylbenzene	830		830	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Methyl cyclohexane	3300		3,300	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Methyl Tertbutyl Ether	37	U	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Methylene chloride	37	U	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Styrene	37	U	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Toluene	180		180	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	trans-1,2-Dichloroethene	240		240	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	trans-1,3-Dichloropropene	37	U	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Trichlorofluoromethane	37	บ *	37	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Vinyl chloride	910		910	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-5	360109-GS-506011D	Xylenes, Total	97		97	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1,1-Trichloroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1,2,2-Tetrachioroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1,2-Trichloro-1,2,2-Trifluoroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1,2-Trichloroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1-Dichloroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,1-Dichloroethene	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2,4-Trichlorobenzene	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2-Dibromo-3-chloropropane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2-Dibromoethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2-Dichlorobenzene	150		150	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2-Dichloroethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,2-Dichloropropane	· 52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,3-Dichlorobenzene	. 52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	1,4-Dichlorobenzene	250		250	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	2-Butanone	260	U .	260	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	2-Hexanone	260	U	260	UJ	SS-L	ug/kg	TALBFLO

# TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

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	Analysis					Lab	Validated	Validation			
SDG	Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Qualifier	Result	Qualifier	Val Reason Code	Units	Lab Id
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	4-Methyl-2-pentanone	260	U	260	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Acetic acid, methyl ester	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Acetone	260	U *	260	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Benzene	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Bromodichloromethane	52	U ·	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Bromoform	52	U *	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Bromomethane	52	U	52	ΩJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Carbon disulfide	52	U *	52	ΩJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Carbon tetrachloride	52	U *	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Chlorobenzene	52	U	52	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Chloroethane	52	U	52	ΩJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Chloroform	52	U	52	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Chloromethane	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Cis-1,3-Dichloropropene	52	U	52	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Cyclohexane	520		520	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Dibromochloromethane	52	U *	52	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Dichlorodifluoromethane	52	U	52	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Ethylbenzene	3800		3,800	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Isopropylbenzene	790		790	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Methyl cyclohexane	4800		4,800	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Methyl Tertbutyl Ether	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Methylene chloride	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Styrene	52	υ	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Toluene	270		270	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	trans-1,2-Dichloroethene	63		63	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	trans-1,3-Dichloropropene	52	U	52	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Trichlorofluoromethane	52	U *	52	nl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Vinyl chloride	24	J	24	J.	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-6	360109-GS-506016	Xylenes, Total	890		890	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1,1-Trichloroethane	_ 41	U	41	UJ .	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1,2,2-Tetrachloroethane	41	U	41	NI	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1,2-Trichloro-1,2,2-Trifluoroethane	41	U	41	Πl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1,2-Trichloroethane	41	U	41	ΛJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1-Dichloroethane	14	J	14	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,1-Dichloroethene	. 80		80	J,	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2,4-Trichlorobenzene	41	U	41	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2-Dibromo-3-chloropropane	41	U	41	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2-Dibromoethane	41	U	41	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2-Dichlorobenzene	260		260	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2-Dichloroethane	41	U	41	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,2-Dichloropropane	41	บ	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,3-Dichlorobenzene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	1,4-Dichlorobenzene	240		240	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	2-Butanone	200	U	200	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	2-Hexanone	200	บ	200	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	4-Methyl-2-pentanone	200	U	200	UJ	SS-L	ug/kg	TALBFLO
# TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS CATEGORY A REVIEW OCTOBER 2015 SOIL AND GROUNDWATER SAMPLING INDUSTRIAL OVERALL UNIFORM CORPORATION NEW ROCHELLE, NEW YORK

	Analysis					Lab	Validated	Validation			
SDG	Method	Lab Sample Id	Field Sample ID	Parameter Name	Lab Result	Qualifier	Result	Qualifier	Val Reason Code	Units	Lab Id
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Acetic acid, methyl ester	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Acetone	200	U *	200	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Benzene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Bromodichloromethane	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Bromoform	41	U *	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Bromomethane	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Carbon disulfide	41	U *	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Carbon tetrachloride	41	U *	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Chlorobenzene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Chloroethane	41	υ	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Chloroform	41	U	41	ΟJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Chloromethane	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Cis-1,3-Dichloropropene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Cyclohexane	41	υ	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Dibromochloromethane	41	U *	41	UJ .	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Dichlorodifluoromethane	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Isopropylbenzene	790		790	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Methyl Tertbutyl Ether	41	U	41	UJ -	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Methylene chloride	41	U	41	Λl	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Styrene	41	U .	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Tetrachloroethene	41	บ	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Toluene	2200		2,200	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	trans-1,2-Dichloroethene	120		120	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	trans-1,3-Dichloropropene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Trichloroethene	41	U	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Trichlorofluoromethane	41	U *	41	UJ	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Vinyl chloride	1800		1,800	J	SS-L	ug/kg	TALBFLO
480-89781-1	SW8260C	480-89781-9	360109-GS-507012	Xylenes, Total	1400		1,400	J	SS-L	ug/kg	TALBFLO
480-90144-1	SW8260C	480-90144-7	360109-MW-50102	Cyclohexane	1	U	1	UJ	MS-L	ug/l	TALBFLO

Val Reason Code:

BL1 = laboratory blank qualifier

BL2 = trip/field blank qualifier

LCS-L = laboratory control sample recovery below limit

MS-L = matrix spike recovery below limit

MS-H = matrix spike recovery above limit

MS-RPD = MS/MSD relative percent difference above limit

FD = Field duplicate limit exceeded

SS-L = surrogate recovery below limit

### ATTACHMENT A

\_\_\_\_\_

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Page 4 of 4

# VOCs

PROJECT CATEGORY A REVIEW RECORD Project: Industrial Overall Method: <u>SW-846 8260B</u> ちょしっと Laboratory and SDG(s): TAL SDG# 460-89582-1 Date: 11/6/15 Reviewer: Julia Ricardi Review Level X CATEGORY A
1. Case Narrative Review and COC/Data Package Completeness <u>COMMENTS</u> Were problems noted? See attached
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
Are Field Sample IDs and Locations assigned correctly (YES)NO (circle one)
2. Holding time and Sample Collection All samples were analyzed within the 14 day holding time. YES NO (circle one)
3. QC Blanks Are method blanks free of contamination? YES NO (circle one)
Are Trip blanks free of contamination? YES NO (circle one) See at the bed' (1) on guals
Are Rinse blanks free of contamination? YES NO (NA) (circle one)
<ul> <li>4.  Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35) Were MS/MSDs submitted/analyzed? (YES) NO Scc etteched Were all results were within the Region II limits? YES NO NA (circle one) 360109 - 12t - 2216 MS [MSD] 5.   Field Duplicates - Region II Limits (water RPD 50, soil RPD 100) Were Field Duplicates submitted/analyzed? (YES) NO 360109 - 12t - 3409/34090 Were all results were within Region II Limits? YES (NO) NA (circle one) Sec attached; not interpreted to be significant data limitation 6.   Reporting Limits: Were samples analyzed at a dilution? (YES) NO (circle one) Actival RL, reported in Table 2; Samples enelyted at Dis data 7.   Electronic DataReview and Edits f [11-TCA) [1-PLC; PCE; TCE; Circl, 1-PLC]</li></ul>
Does the EDD match the Form I's? (YES)NO (circle one)
<ul> <li>Table Review Table 1 (sample Listing), Table 2 (results summary), Table 3 (Reason Codes), Table 4 (TICs). Did lab report TICs? YES NO (circle one)</li> </ul>
9. A subset of results were qualifie estimated (Jluo) based on nerrative information, but were not interpreted to be significant data limitations (CCV).

### Client: AMEC Foster Wheeler E & I, Inc

Job Number: 480-89582-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
400.00500.4			Sampled	Received
480-89582-1	360109-GS-500003	Solid	10/17/2015 1445	10/21/2015 1000
480-89582-2	360109-GS-500007	Solid	10/17/2015 1450	10/21/2015 1000
480-89582-3	360109-GS-500008	Solid	10/17/2015 1500	10/21/2015 1000
480-89582-4	360109-DC001	Solid	10/18/2015 0830	10/21/2015 1000
480-89582-5	360109-GS-501001	Solid	10/17/2015 1645	10/21/2015 1000
480-89582-5MS	360109-GS-501001MS	Solid	10/17/2015 1645	10/21/2015 1000
480-89582-5MSD	360109-GS-501001MD	Solid	10/17/2015 1645	10/21/2015 1000
480-89582-6	360109-DC002	Solid	10/18/2015 0840	10/21/2015 1000
480-89582-7	360109-GS-502003	Solid	10/17/2015 1730	10/21/2015 1000
480-89582-8	360109-DC003	Solid	10/18/2015 1100	10/21/2015 1000
480-89582-9	360109-DC004	Solid	10/18/2015 1115	10/21/2015 1000
480-89582-10	360109-GS-504001	Solid	10/18/2015 0845	10/21/2015 1000
480-89582-11	360109-GS-504005	Solid	10/18/2015 0850	10/21/2015 1000
480-89582-12	360109-GS-504008	Solid	10/18/2015 0900	10/21/2015 1000
480-89582-13	360109-GS-505003	Solid	10/18/2015 1255	10/21/2015 1000
480-89582-14	360109-GS-505009	Solid	10/18/2015 1305	10/21/2015 1000
480-89582-15	360109-GS-505012	Solid	10/18/2015 1325	10/21/2015 1000
480-89582-16	360109-PZ-3315	Water	10/18/2015 1140	10/21/2015 1000
480-89582-17	360109-PZ-3409	Water	10/17/2015 1730	10/21/2015 1000
480-89582-18	360109-PZ-3409D	Water	10/17/2015 1730	10/21/2015 1000
480-89582-19	360109-PZ-3527	Water	10/17/2015 1720	10/21/2015 1000
480-89582-20	360109-PZ-2216	Water	10/18/2015 1405	10/21/2015 1000
480-89582-21	QC-TB10172015-XX	Solid	10/17/2015 1200	10/21/2015 1000
480-89582-22	QC-TB10172015-XX	Water	10/17/2015 1550	10/21/2015 1000

\_\_\_\_\_

### Job ID: 480-89582-1

#### Laboratory: TestAmerica Buffalo

#### Narrative

**Job Narrative** 480-89582-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 10/21/2015 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

#### **Receipt Exceptions**

The following sample was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): QC-TB10172015-XX V (480 - 89582 - 22)

#### GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271226 recovered above the upper control limit for Carbon Disulfide. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: 360109-GS-500003 (480-89582-1), 360109-GS-500007 (480-89582-2), OK 360109-GS-500008 (480-89582-3), 360109-GS-501001 (480-89582-5), 360109-GS-502003 (480-89582-7), 360109-GS-504001 (480-89582-10), 360109-GS-504005 (480-89582-11), 360109-GS-504008 (480-89582-12), 360109-GS-505003 (480-89582-13), 360109-GS-505009 (480-89582-14), 360109-GS-505012 (480-89582-15) and QC-TB10172015-XX (480-89582-21)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271226 recovered outside acceptance criteria. low biased, for Vinyl Chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted: 360109-GS-500003 (480-89582-1), 360109-GS-500007 (480-89582-2), 360109-GS-500008 (480-89582-3), 360109-GS-501001 (480-89582-5), OK 360109-GS-502003 (480-89582-7), 360109-GS-504001 (480-89582-10), 360109-GS-504005 (480-89582-11), 360109-GS-504008 (480-89582-12), 360109-GS-505003 (480-89582-13), 360109-GS-505009 (480-89582-14), 360109-GS-505012 (480-89582-15) and QC-TB10172015-XX (480-89582-21)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271541 recovered above the upper control limit for 1,1.2-Trichloro-1,2,2-trifluoroethene and Methylcyclohexane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 360109-PZ-3315 (480-89582-16). OK 360109-PZ-3409 (480-89582-17), 360109-PZ-3409D (480-89582-18), 360109-PZ-3527 (480-89582-19), 360109-PZ-2216 (480-89582-20) and QC-TB10172015-XX (480-89582-22)

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-271541 recovered outside control limits for the following analyte: Bromomethane, Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following sample is impacted: 360109-PZ-3315 (480-89582-16), 360109-PZ-3409 (480-89582-17), 360109-PZ-3409D (480-89582-18), 360109-PZ-3527 (480-89582-19), 360109-PZ-2216 (480-89582-20) and QC-TB10172015-XX alti-(480-89582-22) not prinary site contaminant; OK Dilalis

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 360109-PZ-3315 (480-89582-16), 360109-PZ-3409 (480-89582-17), 360109-PZ-3409D (480-89582-18), 360109-PZ-3527 (480-89582-19) and 360109-PZ-2216 (480-89582-20). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-271708 was outside the method criteria for the following analyte: Tetrachloroethene. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated. The following sample is impacted; 360109-PZ-2216 (480-89582-20). J UJ

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-271708 recovered outside control limits for the following Significant analyte: Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, data linitation re-analysis was not performed. The following samples are impacted: 360109-PZ-2216 (480-89582-20)

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### Job ID: 480-89582-1 (Continued)

#### Laboratory: TestAmerica Buffalo (Continued)

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 360109-PZ-2216 (480-89582-20), (480-89582-B-20 MS) and (480-89582-B-20 MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with analytical batch 271708 recovered above the upper control limit for the analyte Method(s). The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The following sample is impacted: 360109-PZ-2216 (480-89582-20).

Method(s) 8260C: The continuing calibration verification (CCV) associated with analytical batch 271708 recovered outside acceptance criteria, low biased, for the analyte Bromomethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica Buffalo 10/30/2015

**Analytical Data** 

### Client: AMEC Foster Wheeler E & I, Inc

Job Number: 480-89582-1

Client Sample ID:	QC-TB10172015-XX	wata	~ TR		
Lab Sample ID: Client Matrix:	480-89582-22 Water	000 -01		Date Sa Date Re	mpled: 10/17/2015 1550 ceived: 10/21/2015 1000
	826	0C Volatile Organic	Compounds by	GC/MS	
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8260C 5030C 1.0 10/28/2015 1436 10/28/2015 1436	Analysis Batch: Prep Batch:	480-271541 N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:	HP5973S S3983.D 5 mL 5 mL
Analyte		Result (ug	/L) Quali	fier MDL	RL
1,1,1-Trichloroetha		ND	***************************************	0.82	1.0
1,1,2,2-Tetrachloro	bethane	ND		0.21	10
1.1.2-Trichloro-1.2	.2-trifluoroethane	ND		0.31	10
1.1.2-Trichloroetha	ine	ND		0.23	1.0
1.1-Dichloroethane	9	ND		0.20	1.0
1.1-Dichloroethene	2	ND		0.29	1.0
124-Trichloroben	, Zene	ND		0.2.9	1.0
1 2-Dibromo-3-Chl	oropropane			0.41	1.0
1.2-Dibromoethane		ND		0.08	1.0
1.2 Dichlorobenze				0.73	1.0
1 2-Dichloroethane				0.79	1.0
1.2-Dichloroproper				0.21	1.0
1.3-Dichlorobenzei				0.72	1.0
1.4-Dichlorobenzei	ne	ND		0.70	1.0
2 Butanone (MEK)				0.64	1.0
2-Buildhone (MLR)				1.3	10
4-Methyl_2-pentan	one (MIRK)			1.4	5.0
Acetone				2.1	5.0
Repropo				3.0	10
Bromodiabloromoti	hono			0.41	1.0
Bromoform	lialle			0.39	1.0
Bromomothono			· · · · ·	0.26	1.0
Dromometriane		ND		0.69	1.0
Carbon disulide	4	ND		0.19	1.0
Carbon tetrachioric	le	ND		0.27	1.0
Chloropenzene		ND		0.75	1.0
Chloroethane		ND		0.32	1.0
Chloroform		ND		0.34	1.0
Chloromethane		ND		0.35	1.0
cis-1,2-Dichloroeth	iene	ND		0.81	1.0
cis-1,3-Dicnioropro	ppene	ND		0.36	1.0
Cyclonexane		ND		0.18	1.0
Dipromocnioromet	nane	ND		0.32	1.0
Dichlorodifluorome	thane	ND		0.68	1.0
Ethylbenzene		ND		0.74	1.0
Isopropyibenzene		ND .		0.79	1.0
Methyl acetate		ND		1.3	2.5
Methyl tert-butyl et	her	ND		0.16	1.0
Methylcyclohexane	Allen	ND ND		0.16	1.0
Methylene Chloride	e mil samples N	$J_j \subset 0.61$	J	0.44	1.0
Styrene	AD alat	ND		0.73	1.0
Tetrachloroethene	in quad	ND		0.36	1.0
Toluene	•	ND		0.51	1.0
trans-1,2-Dichloroe	ethene cv	NĎ		0.90	1.0
trans-1,3-Dichlorop	propene 7	ND		0.37	1.0
Trichloroethene	ulal	I S ND		0.46	1.0
Trichlorofluoromet	hane	· > ND		0.88	1.0

Client: AMEC Foster Wheeler E & I, Inc

### Matrix Spike/

a.

Matrix Spike Duplicate Recovery Report - Batch: 480-271708

Job Number: 480-89582-1

Method: 8260C Preparation: 5030C

MS Lab Sample ID Client Matrix: Dilution: Analysis Date: Prep Date: Leach Date:	: 480-89582-20 Water 100 10/29/2015 0447 10/29/2015 0447 N/A	Ana Preț Lea	lysis Batch: 5 Batch: ch Batch:	480-271708 N/A N/A	Instrume Lab File Initial We Final We	ent ID: ID: eight/Volume: eight/Volume:	HP5973S S4018.D 5 mL 5 mL 5 mL	
MSD Lab Sample I	iD: 480-89582-20	Ana	lysis Batch:	480-271708	Instrume	ent ID:	HP5973S	
Dilution:		Prep	D Batch:	N/A	Lab File	ID:	S4019.D	
Dilution. Analysia Data:	100	Lea	ch Batch:	N/A		eight/Volume:	5 mL	
Pren Date:	10/29/2015 0510				Final we	eignt/volume:	5 mL	
Frep Date.	N/A	in	< IMS A		0 1	•	5 ML	
Leadin Date.		1.4	JINJ	10-1	130	10		
		%	Rec.			No. Contraction		
Analyte		MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1 1 1-Trichloroetha	***************************************	109	110	73 - 126	1	15	nan ana amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o a	To 1628-875 (17) - 24 - 646/0717-1715-0 446
1 1 2 2-Tetrachloro	hethane	102	105	70 - 126	3	15		
1,1,2,2 rotracinere 1,1,2-Trichloro-1,2	2-trifluoroethane	111	123	52 - 148	10	20		
1.1.2-Trichloroetha	ine	109	116	76 - 122	6	15		
1.1-Dichloroethane	)	109	112	71 - 129	3	20		
1.1-Dichloroethene	)	110	116	58 - 121	5	16		
1.2.4-Trichloroben	zene	105	111	70 - 122	6	20		
1.2-Dibromo-3-Chl	oropropane	84	85	56 - 134	2	15		
1.2-Dibromoethane	3	104	110	77 - 120	5	15		
1.2-Dichlorobenzer	ne	107	107	80 - 124	Õ	20		
1,2-Dichloroethane	)	102	104	75 - 127	1	20		
1,2-Dichloropropar	le	110	109	76 - 120	1	20		
1,3-Dichlorobenzei	ne	110	107	77 - 120	2	20		
1,4-Dichlorobenzer	ne	107	109	75 - 120	2	20		
2-Butanone (MEK)		103	109	57 - 140	5	20		
2-Hexanone		101	106	65 - 127	5	15		
4-Methyl-2-pentane	one (MIBK)	97	105	71 - 125	8	35		
Acetone		101	112	56 - 142	11	15		
Benzene		111	111	71 - 124	0	13		
Bromodichloromet	hane	100	101	80 - 122	1	15		
Bromoform		72	76	52 - 132	6	15		
Bromomethane	J(UJ) - 20	(42)	(57)	55 - 144	(29)	15	F1	F2
Carbon disulfide		93	98	59 - 134	5	15		
Carbon tetrachloric	le MS-L	113	114	72 - 134	0	15		
Chlorobenzene		113	115	72 - 120	2	25		
Chloroethane	Marin	83	85	69 - 136	2	15		
Chloroform		111	110	73 - 127	1	20		
Chloromethane		91	93	68 - 124	2	15		
cis-1,2-Dichloroeth	ene	107	106	74 - 124	0	15		
cis-1,3-Dichloropro	pene	100	101	74 - 124	1	15		
Cyclohexane		117	116	59 - 135	1	20		
Dibromochloromet	hane	85	90	75 - 125	6	15		
Dichlorodifluorome	thane	83	82	59 - 135	2	20		
	2-1							
T	0 11/41	15	<b>D</b>	0 - f 000				1010010-
i estamerica Buff	alo		Page 9	9 01 000				10/30/201

### **Quality Control Results**

Job Number: 480-89582-1

Client: AMEC Foster Wheeler E & I, Inc

### Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 480-271708

# Method: 8260C

### Preparation: 5030C

MS Lab Sample ID	: 480-89582-20	Analysis Batch:	480-271708	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S4018.D
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2015 0447			Final Weight/Volume:	5 mL
Prep Date:	10/29/2015 0447			0	5 mL
Leach Date:	N/A				
MSD Lab Sample I	D: 480-89582-20	Analysis Batch:	480-271708	Instrument ID:	HP5973S
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	S4019.D
Dilution:	100	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	10/29/2015 0510			Final Weight/Volume:	5 mL
Prep Date:	10/29/2015 0510	<i>"</i> <b>〕</b> —	12 12	0	5 mL
Leach Date:	N/A	$\mathcal{D}$	130 20		
		<u>% Rec.</u>			

Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ethylbenzene	110	111	77 - 123	1	15	anananya manjari kwa 2005 mwa 72.700	an ar tha ann 1 ann 16 ann ann an 16 ann
Isopropylbenzene	109	106	77 - 122	3	20		
Methyl acetate	108	115	74 - 133	6	20		
Methyl tert-butyl ether	99	103	64 - 127	5	37		
Methylcyclohexane	120	116	61 - 138	3	20		
Methylene Chloride	101	105	57 - 132	4	15		
Styrene	108	112	70 - 130	3	20		
Tetrachloroethene $(5+) - 20$	(131)	(136)	74 - 122	1	20	F1	F1
Toluene	109	111	80 - 122	2	15		
trans-1,2-Dichloroethene MS ~ H	112	110	73 - 127	2	20	•	
trans-1,3-Dichloropropene	90	99	72 - 123	10	15		
Trichloroethene	112	110	74 - 123	1	16		
Trichlorofluoromethane	99	94	62 - 152	5	20		
Vinyl chloride	89	96	65 - 133	7	15		
Xylenes, Total	112	114	76 - 122	2	16		
Surrogate		MS % Rec	MSD	% Rec	Acc	eptance Lim	its
1,2-Dichloroethane-d4 (Surr)	a ann a' Anna ann an Aonaichtean ann an Aonaichtean	99	106	1997 - 1997 - 1997 - 1997 - 1998 - 1998 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	6	6 - 137	and a second
Toluene-d8 (Surr)		105	109		7	'1 - 126	
4-Bromofluorobenzene (Surr)	<u>}~</u>	103	107		7	′3 - 120	
C	119/15						

**Quality Control Results** 

Client: AMEC Foster Wheeler E & I, Inc

Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 480-271176

Job Number: 480-89582-1

Method: 8260C Preparation: 5035

MS Lab Sample IE Client Matrix: Dilution: Analysis Date: Prep Date: Leach Date:	): 480-89582-5 Solid 1.0 10/27/2015 0548 10/21/2015 1800 N/A	Ana Pre  Lea	lysis Batch: 5 Batch: ch Batch:	480-271226 480-271176 N/A	Instrume Lab File Initial We Final We	nt ID: ID: iight/Volume: ight/Volume:	HP5973G G44197.D 5.664 g 5 mL 5 mL	
MSD Lab Sample Client Matrix: Dilution: Analysis Date: Prep Date:	ID: 480-89582-5 Solid 1.0 10/27/2015 0610 10/21/2015 1800	Ana Prej Lea	lysis Batch: b Batch: ch Batch: IM S I M	480-271226 480-271176 N/A	Instrume Lab File Initial We Final We	nt ID: ID: sight/Volume: d ight/Volume: 255	HP5973G G44198.D 4.86 g 5 mL 5 mL	
Leach Date:	N/A					A James and a local data		
		%	Rec.					
Analyte	ć	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroetha	ane $J+(N)-5$	123	(132)	64 - 116	22	20	F1	F1 F2
1,1,2,2-Tetrachloro	bethane	118	120	75 - 120	17	20		
1,1,2-Trichloroetha	ane	126	129	70 - 130	18	20		
1,1,2-Trichloro-1,2	,2-trifluoroethane	101	108	40 - 120	22	20		F2
1,1-Dichloroethane	e	122	126	82 - 138	19	20		
1,1-Dichloroethene		115	121	50 - 147	20	20		
1,2,4-Irichloroben	zene $J + (N) - 5$	130	(139)	40 - 160	22	20		F2
1,2-Dibromo-3-Chi	oropropane	80	86	. 60 - 110	22	20		F2
1,2-Dibromoethan		127	130	81 - 119	18	20	F1	F1
1,2-Dichlorobenze	ne J + (NO) - 5	12/	(132)	80 - 132	19	20		
1,2-Dichloroethane		119	120	78 - 129		20		<b>—</b> .
1,2-Dichloropropar		128	(133)	76 - 125	19	20	F1	F1
1,3-Dichlorobenze	nejt v -5	129	(134)	63 - 134	19	20		
1,4-Dichloropenze	ne	125	130	60 - 134	19	20		
2-nexarione		110	117	70 - 127	16	20		
4 Mothyl 2 ponton	ono (MIDIZ)	140	120	54 - 149	14	20		
4-methyl-z-pentan		119	119	74 - 120	15	20		
Renzono	-	106	(1)	47 - 141	10	20	<b>F</b> 4	<b>F</b> 4
Bromodichloromot		120	120	77 - 120	20	20	F1	F1
Bromoform		07	120	71-121 49 405	23	20		F2
Bromomethane		80 81		40 - 120	23 17	20		F2
Carbon digulfide "	TA (ND) - E	(120)	(149)	39 - 149	17	20	<b>F</b> 4	54 50
Carbon tetrachlorid		117	120	40 - 100	22	20	F1	F1F2
Chlorobenzene	TH ID	121	129	76 100	20	20	<b>E1</b>	F2
Dibromochloromet	hape ND -5	106	116	70 - 120 64 119	19	20	FI	
Chloroethane TT	UT -=	(46)	(45)	23 - 164	2 <del>4</del> 13	20		FZ
Chloroform		119	124	20 - 104 78 - 118	10	20	E1	<b>E1</b>
Chloromethane	My-V	114	112	61 - 124	14	20		• •
cis-1.2-Dichloroeth	iene	125	129	79 - 124	18	20	F1	F1
cis-1.3-Dichloropro	ppene	124	128	75 - 121	19	20	F1	F1
Cyclohexane	-   / <del>-</del>	117	124	49 - 129	20	20		
Dichlorodifluorome	ethane J(J) -5	(45)	(42)	10 - 150	9	20		
	MS·L		~		-			
TootA moring Duff	- \* Falo	0	Dogo 0	7 of 666				40/00/004 **
i estantenta Duit		Onla	ーaye o. リブ					10/30/2015

Client: AMEC Foster Wheeler E & I, Inc

### Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 480-271176

Job Number: 480-89582-1

Method: 8260C Preparation: 5035

MS Lab Sample ID Client Matrix: Dilution: Analysis Date: Prep Date: Leach Date:	0: 480-89582 Solid 1.0 10/27/2015 0 10/21/2015 1 N/A	-5 548 800	Ana Prep Lead	lysis Batch: 5 Batch: ch Batch:	480-271226 480-271176 N/A	Instrume Lab File Initial We Final We	ent ID: ID: eight/Volume: eight/Volume:	HP5973G G44197.D 5.664 g 5 mL 5 mL	
MSD Lab Sample I Client Matrix: Dilution: Analysis Date: Prep Date:	ID: 480-89582 Solid 1.0 10/27/2015 0 10/21/2015 1 N/A	-5 610 800	Ana Prep Lead	lysis Batch: DBatch: ch Batch:	480-271226 480-271176 N/A	Instrume Lab File Initial We Final We	nt ID: ID: eight/Volume: eight/Volume:	HP5973G G44198.D 4.86 g 5 mL 5 mL	
			%	Rec	·				
Analyte			MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ethylbenzene J	+(ND)	-5	128	(133)	78 - 124	19	20	F1	F1
Isopropylbenzene			124	130	76 - 119	20	20	F1	F1
Methyl acetate			117	115	71 - 123	14	20		
Methyl tert-butyl et	her		121	122	67 - 137	16	20		~
Methylcyclohexane			126	136	50 - 130	24	20		F1 F2
Methylene Chloride	ent (ND)	-5	(133)	(135)	75 - 118	17	20	F1	F1
Styrene T+	(ND)	- 5	133	(138)	84 - 119	20	20	F1	F1

	Methylcyclohexane		126	136	50 - 130	24	20		F1 F2	
	Methylene Chloride J+ (ND) -	5 (	133)	(135)	75 - 118	17	20	F1	F1	
N/ S 11	Styrene J+	5 (	133	(138)	84 - 119	20	20	F1	F1	
W1517	-Tetrachloroethene(J+) uJ	5 6	-24	(177)	73 - 133	65	20	<b>F</b> 1	F1 F2	
ייז כוין	Toluene MSTH, MS-RYD		121	128	75 - 124	21	20		F1 F2	
·	trans-1,2-Dichloroethene $\mathcal{T} + (Nb)$	-う	125	(132)	74 - 129	21	20		F1 F2	
	trans-1,3-Dichloropropene		121	126	73 - 118	19	20	F1	F1	
	Trichloroethene $\mathcal{J} \vdash (N)$ -	- 5	129	(136)	75 - 131	21	20		F1 F2	
	Trichlorofluoromethane (145)	- 5	74	(56)	29 - 158	12	20			
	Vinyl chloride		97	99	59 - 124	17	20			
	Xylenes, Total J+ (ND) -	-5 (	132	(138)	78 - 125	20	20	<b>F</b> 1	F1	
	Surrogate	MS % Rec MSD % Rec		6 Rec	Acceptance Limits					
	1,2-Dichloroethane-d4 (Surr)			93	94	94 34		53 - 146		
	Toluene-d8 (Surr)			97	101			50 - 149		
	4-Bromofluorobenzene (Surr)			105	110			49 - 148		
		0								

211/9/15

TestAmerica Job ID: 480-89582-1

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Client: AME	C Foster V	Vheeler	Ε&	I, In	С
Project/Site:	Industrial	Overall	Serv	vice	site

Client Sample ID: 360109-P2 Date Collected: 10/17/15 17:30 Date Received: 10/21/15 10:00	2-3409 PP-340	G i)			Lab Sample	ID: 480-895 Matrix	82-17 Water
	10 210	<u>'</u>					
Method: 8260C - Volatile Organi	c Compounds by GC/	MS		11	<b>n n n n n n n n n n</b>		
1 1 1 Trichloroothano				Unit	D Prepared	Analyzed	Dil Fac
1,1,1-11cmoloethane	ND	200	160	ug/L		10/28/15 15:22	200
1,1,2,2-1 Bilachioroethane		200	42	ug/L		10/28/15 15:22	200
1,1,2-Trichloroothano	ND 210 49	200	62	ug/L		10/28/15 15:22	200
1.1 Disblaraothana		, 200	40	ug/L		10/28/15 15:22	200
1,1-Dichloroethane	ND	200	76	ug/L.		10/28/15 15:22	200
	ND	200	58	ug/L		10/28/15 15:22	200
1,2,4-Theniorobenzene	ND	200	82	ug/L		10/28/15 15:22	200
1,2-Dibromo-3-Chioropropane	ND	200	78	ug/L		10/28/15 15:22	200
	ND	200	150	ug/L		10/28/15 15:22	200
	ND	200	160	ug/L		10/28/15 15:22	200
1,2-Dichloroethane	ND	200	42	ug/L		10/28/15 15:22	200
1,2-Dichloropropane	ND	200	140	ug/L		10/28/15 15:22	200
1,3-Dichlorobenzene	ND	200	160	ug/L		10/28/15 15:22	200
1,4-Dichlorobenzene	ND	200	170	ug/L		10/28/15 15:22	200
2-Butanone (MEK)	ND	2000	260	ug/L		10/28/15 15:22	200
2-Hexanone	ND	1000	250	ug/L		10/28/15 15:22	200
4-Methyl-2-pentanone (MIBK)	ND	1000	420	ug/L		10/28/15 15:22	200
Acetone	ND	2000	600	ug/L		10/28/15 15:22	200
Benzene	ND	200	82	ug/L		10/28/15 15:22	200
Bromodichloromethane	ND	200	78	ug/L		10/28/15 15:22	200
Bromoform	ND	200	52	ug/L		10/28/15 15:22	200
Bromomethane	ND *	200	140	ug/L		10/28/15 15:22	200
Carbon disulfide	ND	200	38	ug/L		10/28/15 15:22	200
Carbon tetrachloride	ND	200	54	ug/L		10/28/15 15:22	200
Chlorobenzene	ND	200	150	ug/L		10/28/15 15:22	200
Chloroethane	ND	200	64	ug/L		10/28/15 15:22	200
Chloroform	ND	200	68	ug/L		10/28/15 15:22	200
Chloromethane	ND	200	70	ug/L		10/28/15 15:22	200
cis-1,2-Dichloroethene Sec	)	200	160	ug/L		10/28/15 15:22	200
cis-1,3-Dichloropropene	ND	200	72	ug/L		10/28/15 15:22	200
Cyclohexane	ND	200	36	ug/L		10/28/15 15:22	200
Dibromochloromethane	ND	200	64	ug/L		10/28/15 15:22	200
Dichlorodifluoromethane	ND	200	140	ug/L		10/28/15 15:22	200
Ethylbenzene	ND	200	150	ug/L		10/28/15 15:22	200
Isopropylbenzene	ND	200	160	ug/L		10/28/15 15:22	200
Methyl acetate	ND	500 <sup>°</sup>	260	ug/L		10/28/15 15:22	200
Methyl tert-butyl ether	ND	200	32	ug/L		10/28/15 15:22	200
Methylcyclohexane	ND	200	32	ug/L		10/28/15 15:22	200
Methylene Chloride	ND	200	88	ug/L		10/28/15 15:22	200
Styrene	ND	200	150	ug/L		10/28/15 15:22	200
Tetrachloroethene See Du	25000-E 16 000	⊃ 200	72	ug/L		10/28/15 15:22	200
Toluene	ND	200	100	ug/L		10/28/15 15:22	200
trans-1,2-Dichloroethene	ND	200	180	ug/L		10/28/15 15:22	200
trans-1,3-Dichloropropene	ND	200	74	ug/L		10/28/15 15:22	200
Trichloroethene	13000 12000	200	92	ug/L		10/28/15 15:22	200
Trichlorofluoromethane	ND	200	180	ug/L		10/28/15 15:22	200
Vinyl chloride D 12	1600 15 <i>0</i> 0	200	180	ug/L		10/28/15 15:22	200

i Xylenes, Total

2~11 lalis

ND

TestAmerica Buffalo

10/28/15 15:22

400

130 ug/L

200

### **Client Sample Results**

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Industrial Overall Service site

TestAmerica Job ID: 480-89582-1

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Client Sample ID: 360109- Date Collected: 10/17/15 17:30 Date Received: 10/21/15 10:00	PZ-3409	12-34	09 V			La	b Sample	ID: 480-895 Matrix	82-17 Water
Surrogate	%Recoverv	Qualifier	l imits				Propered	Anglurod	Dil Eng
1.2-Dichloroethane-d4 (Surr)	104		66 . 137					10/28/15 15:22	200
4-Bromofluorobenzene (Surr)	101		73 - 120					10/28/15 15:22	200
Toluene-d8 (Surr)	104		71 - 126					10/28/15 15:22	200
 Method: 8260C - Volatile Orga	nic Compo	unds by GC/	MS - DL	MDI	llnið	P	Dropord	Analysis 1	
1 1 1-Trichlorgethane	ND		400	330		U	Fiehaled	Analyzeo	UII Fac
1.1.2.2-Tetrachloroethane	ND		400	84	ug/L			10/20/10 10:04	400
1.1.2-Trichloro-1.2.2-trifluoroethane	ND		400	120	ug/L			10/20/15 10.54	400
1.1.2-Trichloroethane	ND		400	92	ug/L			10/20/10 10:04	400
1.1-Dichloroethane	ND		400	150	ug/L			10/28/15 16:54	400
1.1-Dichloroethene	ND		400	120	ug/L			10/20/15 10:54	400
1.2.4-Trichlorobenzene	ND		400	160	ug/i			10/28/15 16:54	400
1.2-Dibromo-3-Chloropropane	ND		400	160	ug/L			10/28/15 16:54	400
1.2-Dibromoethane	ND		400	290	ug/L			10/28/15 16:54	400
1.2-Dichlorobenzene	ND		400	320	ug/L			10/28/15 16:54	400
1.2-Dichloroethane	ND		400	84	ug/l			10/28/15 16:54	400
1.2-Dichloropropane	ND		400	290	ua/l			10/28/15 16:54	400
1.3-Dichlorobenzene	ND		400	310	ua/l			10/28/15 16:54	400
1,4-Dichlorobenzene	ND		400	340	ug/L			10/28/15 16:54	400
2-Butanone (MEK)	ND		4000	530	ua/i			10/28/15 16:54	400
2-Hexanone	ND		2000	500	ua/L			10/28/15 16:54	400
4-Methyl-2-pentanone (MIBK)	ND		2000	840	ua/L			10/28/15 16:54	400
Acetone	ND		4000	1200	ua/L			10/28/15 16:54	400
Benzene	. ND		400	160	ua/L			10/28/15 16:54	400
Bromodichloromethane	ND		400	160	ua/L			10/28/15 16:54	400
Bromoform	ND		400	100	ua/L			10/28/15 16:54	400
Bromomethane	ND	*	400	280	ua/L			10/28/15 16:54	400
Carbon disulfide	ND		400	76	ua/L			10/28/15 16:54	400
Carbon tetrachloride	ND		400	110	ua/L	•		10/28/15 16:54	400
Chlorobenzene	ND		400	300	ua/L			10/28/15 16:54	400
Chloroethane	ND		400	130	ug/L			10/28/15 16:54	400
Chloroform	ND		400	140	ug/L			10/28/15 16:54	400
Chloromethane	ND		400	140	ug/L			10/28/15 16:54	400
cis-1,2-Dichloroethene OK	27000	) 25000	<b>4</b> 00	320	ug/L			10/28/15 16:54	400
cis-1,3-Dichloropropene	ND	,	400	140	ug/L			10/28/15 16:54	400
Cyclohexane	ND		400	72	ug/L			10/28/15 16:54	400
Dibromochloromethane	ND		400	130	ug/L			10/28/15 16:54	400
Dichlorodifluoromethane	ND		400	270	ug/L			10/28/15 16:54	400
Ethylbenzene	ND		400	300	ug/L			10/28/15 16:54	400
Isopropylbenzene	ND		400	320	ug/L			10/28/15 16:54	400
Methyl acetate	ND		1000	520	ug/L			10/28/15 16:54	400
Methyl tert-butyl ether	ND		400	64	ug/L			10/28/15 16:54	400
Methylcyclohexane	ND		400	64	ug/L			10/28/15 16:54	400
Methylene Chloride	ND		400	180	ug/L			10/28/15 16:54	400
Styrene	ND		400	290	ug/L			10/28/15 16:54	400
Tetrachloroethene OK	(17000	16000	400	140	ug/L			10/28/15 16:54	400
Toluene	ND		400	200	ug/L			10/28/15 16:54	400
trans-1,2-Dichloroethene	ND		400	360	ug/L			10/28/15 16:54	400
trans-1,3-Dichloropropene	ND		400	150	ug/L			10/28/15 16:54	400

### TestAmerica Buffalo

### **Client Sample Results**

Client: AMEC Foster Wheeler E & I, Inc Project/Site: Industrial Overall Service site

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### Client Sample ID: 360109-PZ-3409 Date Collected: 10/17/15 17:30 Date Received: 10/21/15 10:00

### Lab Sample ID: 480-89582-17 Matrix: Water

Method: 8260C - Vola	atile Organic Comp	ounds by G	C/MS - DL. (C	ontinue	d)				
Analyte	Resu	it Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	See 01 8, 4400	θ→	400	180	ug/L			10/28/15 16:54	400
Trichlorofiuoromethane	N	D C	400	350	ug/L			10/28/15 16:54	400
Vinyl chloride	Sec 018. 1970	0 <sup>,</sup>	400	360	ug/L			10/28/15 16:54	400
Xylenes, Total	O N	C	800	260	ug/L			10/28/15 16:54	400
Surrogate	%Recover	y Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Sun	r) 10	6	66 - 137			-		10/28/15 16:54	400
4-Bromofluorobenzene (Su	r) . 10	2	73 - 120					10/28/15 16:54	400
Toluene-d8 (Surr)	10	3	71 - 126					10/28/15 16:54	400

11/9/15



# ANALYTICAL REPORT

Job Number: 480-89582-1 Job Description: Industrial Overall Service site

> For: AMEC Foster Wheeler E & I, Inc 511 Congress St. Suite 200 Portland, ME 04101

Attention: Ms. Julie Ricardi

Approved for release. Brian J Fischer Manager of Project Management 10/30/2015 4:20 PM

Brian J Fischer, Manager of Project Management 10 Hazelwood Drive, Amherst, NY, 14228-2298 (716)504-9835 brian.fischer@testamericainc.com 10/30/2015

cc: Mr. Tige Cunningham

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NHDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

TestAmerica Laboratories, Inc. TestAmerica Buffalo 10 Hazelwood Drive, Amherst, NY 14228-2298 Tel (716) 691-2600 Fax (716) 691-7991 www.testamericainc.com



### VOCs

PROJECT CATEGORY A REVIEW RECORD Project: Industrial Overall Method: SW-846 8260B 8260C SDG# 460-89781-1 Laboratory and SDG(s): TAL Date: 11/6/15 Reviewer: Julie Ricereli Review Level X CATEGORY A 1. Case Narrative Review and COC/Data Package Completeness **COMMENTS** Were problems noted? Sec ettached Were all the samples on the COC analyzed for the requested analyses? (YES) NO (circle one) Are Field Sample IDs and Locations assigned correctly? YES (NO) (circle one) See attached IDs changed in TEDS during Cat A revised 2. If Holding time and Sample Collection All samples were analyzed within the 14 day holding time. (YES) NO (circle one) 3. 🗹 **QC** Blanks Are method blanks free of contamination? YES NO (circle one) See attached for guals Are Trip blanks free of contamination? YES (NO (circle one) See attached for mal Are Rinse blanks free of contamination? YES NO (NA)(circle one) Note: MB was qualified H for holding time by 125; H was removed base on 4. Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35) profi judgment. Were MS/MSDs submitted/analyzed YES NO 360109-55-403012 NS/MJD Were all results were within the Region II limits? YES (NO) NA (circle one) See attached for grass 5. Field Duplicates - Region II Limits (water RPD 50, soil RPD 100) Were Field Duplicates submitted/analyzed? YES) NO See attached sample list oll ok Were all results were within Region II Limits? (YES NO NA (circle one) **Reporting Limits:** Were samples analyzed at a dilution? YES NO (circle one) 6. Electronic Data Review and Edits 7. Does the EDD match the Form I's? (YES) NO (circle one) 8. D Table Review Table 1 (sample Listing), Table 2 (results summary), Table 3 (Reason Codes), Table 4 (TICs). Did lab report TICs? YES (NO)(circle one) 9. Surrogets recoveries - Percent recoveries for 2 or more surrogets in a subset of samples were below keg 2 control limits à based on professional judgment sample results were qualified Jlut, See attached summary. 10. Subset of compound results were gralified estimated (J/us)

based on narrative information det were not interprete to be significant data limitations. (((V, L(S))

### Client: AMEC Foster Wheeler E & I, Inc

Job Number: 480-89781-1

			Date/Time	
Lab Sample ID	Client Sample ID	<b>Client Matrix</b>	Sampled	Received
480-89781-1	QC-TB10202015-XX	Solid	10/20/2015 1600	10/24/2015 0220
480-89781-2	360109-MH001010	Solid	10/20/2015 1615	10/24/2015 0220
480-89781-3	360109-GS506003	Solid	10/21/2015 0800	10/24/2015 0220
480-89781-4	360109-GS506011 🗂 🗸 🗤	Solid	10/21/2015 0830	10/24/2015 0220
480-89781-5	360109-GS506011D JOK	Solid	10/21/2015 0830	10/24/2015 0220
480-89781-6	360109-GS506016	Solid	10/21/2015 0845	10/24/2015 0220
480-89781-7	360109-GS507003	Solid	10/21/2015 0955	10/24/2015 0220
480-89781-8	360109-GS507009	Solid	10/21/2015 1000	10/24/2015 0220
480-89781-9	360109-GS507012	Solid	10/21/2015 1015	10/24/2015 0220
480-89781-10	360109-GS508013	Solid	10/21/2015 1055	10/24/2015 0220
480-89781-11	360109-SS-408000	Solid	10/22/2015 0850	10/24/2015 0220
480-89781-12	360109-SS-408007	Solid	10/22/2015 0855	10/24/2015 0220
480-89781-13	360109-SS-408011	Solid	10/22/2015 0915	10/24/2015 0220
480-89781-14	360109-SS-407000	Solid	10/22/2015 0925	10/24/2015 0220
480-89781-15	360109-SS-407006 🦳 🗸	Solid	10/22/2015 0935	10/24/2015 0220
480-89781-16	360109-SS-407006D - OF	Solid	10/22/2015 0935	10/24/2015 0220
480-89781-17	360109-SS-407012	Solid	10/22/2015 0945	10/24/2015 0220
480-89781-18	360109-SS-406000	Solid	10/22/2015 0955	10/24/2015 0220
480-89781-19	360109-SS-406006	Solid	10/22/2015 1000	10/24/2015 0220
480-89781-20	360109-SS-406011	Solid	10/22/2015 1010	10/24/2015 0220
480-89781-21	360109-SS-405000	Solid	10/22/2015 1025	10/24/2015 0220
480-89781-22	360109-SS-405008	Solid	10/22/2015 1030	10/24/2015 0220
480-89781-23	360109-SS-405012	Solid	10/22/2015 1035	10/24/2015 0220
480-89781-24	360109-SS-404000	Solid	10/22/2015 1045	10/24/2015 0220
480-89781-25	360109-SS-404006	Solid	10/22/2015 1050	10/24/2015 0220
480-89781-26	360109-SS-404011	Solid	10/22/2015 1055	10/24/2015 0220
480-89781-27	360109-SS-403000	Solid	10/22/2015 1110	10/24/2015 0220
480-89781-28	360109-SS-403006	Solid	10/22/2015 1115	10/24/2015 0220
480-89781-29	360109-SS-403012	Solid	10/22/2015 1120	10/24/2015 0220
480-89781-29MS	360109-SS-403012MS	Solid	10/22/2015 1120	10/24/2015 0220
480-89781-29MSD	360109-SS-403012MD	Solid	10/22/2015 1120	10/24/2015 0220
480-89781-30	360109-SS-402000	Solid	10/22/2015 1135	10/24/2015 0220
480-89781-31	360109-SS-402006	Solid	10/22/2015 1140	10/24/2015 0220
480-89781-32	360109-SS-402011	Solid	10/22/2015 1145	10/24/2015 0220
480-89781-33	360109-SS-401000	Solid	10/22/2015 1200	10/24/2015 0220
480-89781-34	360109-SS-401006	Solid	10/22/2015 1205	10/24/2015 0220
480-89781-35	-360109-SS-401011	Solid	10/22/2015 1210	10/24/2015 0220
480-89781-36	360109-SS-400000	Solid	10/22/2015 1218	10/24/2015 0220
480-89781-37	360109-SS-400005	Solid	10/22/2015 1221	10/24/2015 0220
480-89781-38	360109-SS-400012	Solid	10/22/2015 1225	10/24/2015 0220
480-89781-39	360109-SS-301006 - C	Solid	10/22/2015 1240	10/24/2015 0220
480-89781-40	360109-SS-301006D J OK	Solid	10/22/2015 1240	10/24/2015 0220
480-89781-41	360109-SS-301010	Solid	10/22/2015 1242	10/24/2015 0220
480-89781-42	360109-SS-301012	Solid	10/22/2015 1245	10/24/2015 0220
480-89781-43	360109-GW-30114	Water	10/22/2015 1430	10/24/2015 0220
480-89781-44	360109-GW-40815	Water	10/22/2015 1515	10/24/2015 0220
480-89781-45	QC-TB102215-XX N)	Water	10/22/2015 1600	10/24/2015 0220

Dulalis

# Sample Summary

### Client: AMEC Foster Wheeler E & I, Inc Project/Site: Industrial Overall Service site

### TestAmerica Job ID: 480-89781-1

9

Lab Sample ID	Client Sample ID	Matrix	Anilanta-1	Deech
480-89781-1		Solid	Collected	Received
480-89781-2	360109-MH001010	Solid	10/20/15 10:00	10/24/15 02:20
480-89781-3	360109-115506003	Solid	10/20/15 16:15	10/24/15 02:20
480-89781-4		Solid	10/21/15 08:00	10/24/15 02:20
480-89781-5	360100-0000011	Solid	10/21/15 08:30	10/24/15 02:20
480-80781-6	360109-US5061016 9n U	Solid	10/21/15 08:30	10/24/15 02:20
480-80781-0	360100 115507002 011 45 50001010	Solid	10/21/15 08:45	10/24/15 02:20
400-03701-7		Solid	10/21/15 09:55	10/24/15 02:20
480 80784 0	360100 11507012 40 62 120	Solid	10/21/15 10:00	10/24/15 02:20
400-09701-9	360109-05507012 DE CTS PER	Solid	10/21/15 10:15	10/24/15 02:20
400-09701-10		Solid	10/21/15 10:55	10/24/15 02:20
400-08701-11	360109-55-408000 GDZ: (heared in	Solid	10/22/15 08:50	10/24/15 02:20
480-89781-12	360109-SS-408007 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Solid	10/22/15 08:55	10/24/15 02:20
480-89781-13	360109-SS-408011	Solid	10/22/15 09:15	10/24/15 02:20
480-89781-14	360109-55-407000 datbar auring	Solid	10/22/15 09:25	10/24/15 02:20
480-89781-15	360109-SS-407006	Solid	10/22/15 09:35	10/24/15 02:20
480-89781-16	360109-SS-407006D data 1980	Solid	10/22/15 09:35	10/24/15 02:20
480-89781-17	360109-SS-407012 CC CC C	Solid	10/22/15 09:45	10/24/15 02:20
480-89781-18	360109-SS-406000	Solid	10/22/15 09:55	10/24/15 02:20
480-89781-19	360109-SS-406006	Solid	10/22/15 10:00	10/24/15 02:20
480-89781-20	360109-SS-406011 11/6/15	Solid	10/22/15 10:10	10/24/15 02:20
480-89781-21	360109-SS-405000	Solid	10/22/15 10:25	10/24/15 02:20
480-89781-22	360109-SS-405008	Solid	10/22/15 10:30	10/24/15 02:20
480-89781-23	360109-55-405012 (126 nonticul	Solid	10/22/15 10:35	10/24/15 02:20
480-89781-24	360109-SS-404000	Solid	10/22/15 10:45	10/24/15 02:20
480-89781-25	360109-SS-404006 N2 Email for	Solid	10/22/15 10:50	10/24/15 02:20
480-89781-26	360109-SS-404011	Solid	10/22/15 10:55	10/24/15 02:20
480-89781-27	360109-SS-403000 VP-11000 5f	Solid	10/22/15 11:10	10/24/15 02:20
480-89781-28	360109-SS-403006	Solid	10/22/15 11:15	10/24/15 02:20
480-89781-29	360109-55-403012	Solid	10/22/15 11:20	10/24/15 02:20
480-89781-30	360109-SS-402000	Solid	10/22/15 11:35	10/24/15 02:20
480-89781-31	360109-SS-402006 Ø	Solid	10/22/15 11:40	10/24/15 02:20
480-89781-32	360109-SS-402011	Solid	10/22/15 11:46	10/24/15 02:20
480-89781-33	360109-55-401000	Solid	10/22/15 12:00	10/24/15 02:20
480-89781-34	360109-SS-401006	Solid	10/22/10 12:00	10/24/15 02.20
480-89781-35	360109-SS-401011	Solid	10/22/15 12:05	10/24/15 02.20
480-89781-36	360109-55-400000	Solid	10/22/10 12.10	10/24/15 02:20
480-89781-37	360109-55-400005	Solid	10/22/10 12:10	10/24/15 02:20
480-89781-38	360100-00-400000	Solid	10/22/10 12:21	10/24/15 02:20
400-00701-00	360109-55-301006	Solid	10/22/10 12:20	10/24/15 02:20
480-80781-40	360100-00-001000	Solid	10/22/15 12:40	10/24/15 02:20
480-80781-44	360103-36-3010000	30110 Calid	10/22/15 12:40	10/24/15 02:20
100-00101-41	200100-20201010	50110 0-11-1	10/22/15 12:42	10/24/15 02:20
100-09/01-42	300109-35-301012	Solid	10/22/15 12:45	10/24/15 02:20
400-08/01-43	200109-GW-20114	vvater	10/22/15 14:30	10/24/15 02:20
100-09/01-44	300109-GVV-40815	Water	10/22/15 15:15	10/24/15 02:20
480-89781-45	QC-TB102215-XX	Water	10/22/15 16:00	10/24/15 02:20

#### **Job Narrative** 480-89781-1

#### **Revision II**

Report was revised to correct a sample ID missed on the 1st revision as per client request.

#### Revision I

Report was revised to correct sample ID's as per client request.

#### Receipt

The samples were received on 10/24/2015 2:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.5° C and 0.8° C.

#### GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271536 recovered above the upper control limit for Carbon disulfide and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes: therefore, the data have been reported. The following samples are impacted: 360109-US500011 (400-09701-7), 000100 (480-89781-18), 0101-0100 (480-89781-5), 360109-US5061016 (480-89781-6), 360109-US507012 (480-89781-9), 360109-SS-406000 (480-89781-18), 0101-0100 (480-89781-19), 360109-SS-406011 (480-89781-20) and 360109-SS-405000 (480-89781-21).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271536 recovered outside acceptance criteria, low biased, for Carbon tetrachloride and Dibromochloromethane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detects for these analytes, the data have been reported. The following samples are impacted 360109-US506011 (480-89781-4), 360109-US506011D (480-89781-5), 360109-US5061016 (480-89781-6), 

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OK

11/06/2015

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 480-271462 and analytical batch 480-271536 recovered outside control limits for the following analytes: Carbon disulfide. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 360109-US506011 (480-89781-4), 360109-US506011D (480-89781-5), 360109-US5061016 (480-89781-6), 360109-US507012 (480-89781-9), (480-89781-4), 360109-05506011D (460-69781-5), 360109-053061010 (460-69781-9), 360109-SS-406011 (480-89781-20) and 360109-SS-405000 (CMOUR) OK; (480-89781-21). 126 quals

Method(s) 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-271462 and analytical batch 480-271536 recovered outside control limits for several analytes. The following samples are batch 480-271462 and analytical batch 400-271500 recovered outside control limits for several analytics. The following samples are impacted: 360109-US506011 (480-89781-4), 360109-US506011D (480-89781-5), 360109-US5061016 (480-89781-6), 360109-US507012 (480-89781-9), 360109-SS-406000 (480-89781-18), 360109-SS-406006 (480-89781-19), 360109-SS-406011 (480-89781-20) and CHC + CHI 360109-SS-405000 (480-89781-21). Car ban to trachionice 4370 = 4370 = 435IND no at

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 360109-US506011D (480-89781-5), 360109-US5061016 (480-89781-6) and 360109-US507012 (480-89781-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271713 recovered above the upper control limit for Acetone. The samples associated with this CCV were not detected above the reporting limit for the affected analyte; therefore, the data has been reported. The following samples are impacted: 360109-GW-30114 (480-89781-43) and QC-TB102215-XX OK. (480-89781-45).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271713 recovered above the upper control limit for 2-Butanone. The samples associated with this CCV were not detected above the reporting limit for the affected analyte; therefore, the data have been reported. The following samples are impacted: 360109-GW-30114 (480-89781-43), 360109-GW-40815 (480-89781-44) and QC-TB102215-XX (480-89781-45). CXC

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-271713 recovered outside control limits for the following analyte: Acetone. Acetone has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. the following samples are impacted: 360109-GW-30114 (480-89781-43), 360109-GW-40815 (480-89781-44) and OIC QC-TB102215-XX (480-89781-45).

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-271713 . The following samples are impacted: 360109-GW-30114 OK (480-89781-43) and QC-TB102215-XX (480-89781-45).

Method(s) 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-271462 recovered outside control limits for the following analytes: Acetone, Bromoform, Carbon Tetrachloride, OK.

Chlorodibromomethane, and Trichlorofluoromethane. The following analytes. Acetorie, Bromotorini, Carbon Tetracinonde, NJ IN SAMPLES, ACETORIE AND CARBON AS THE CHLOROM SALE ACETORIES ACE

all else Page 4 of 1223 < 35 ; carbon tet ND; no quels

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were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 360109-MH001010 (480-89781-2), 360109-US506003 (480-89781-3), 360109-US506011 (480-89781-4), 360109-US506011D (480-89781-5), 360109-US5061016 (480-89781-6), 360109-US507003 (480-89781-7), 360109-US507009 (480-89781-8), 360109-US507012 (480-89781-9), 360109-SS-408000 (480-89781-11), 360109-SS-408007 (480-89781-12), 360109-SS-408011 (480-89781-13), 360109-SS-407000 (480-89781-14), 360109-SS-407006 (480-89781-15), 360109-SS-407006D (480-89781-16) and OV 360109-SS-407012 (480-89781-17).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271485 recovered above the upper control limit for 2-Butanone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: QC-TB10202015-XX (480-89781-1), 360109-SS-402011 (480-89781-32) and 360109-SS-401011 OK (480-89781-35).

Method(s) 8260C: The method blank for 480-271492 contained Toluene and Tetrachloroethane above the method detection limit. These target-analyte concentrations were less than the reporting limit (RL); therefore, re-analysis of samples was not performed. The following samples are impacted: QC-TB10202015-XX (480-89781-1), 360109-SS-402011 (480-89781-32) and 360109-SS-401011 (480-89781-35).

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-271713 was outside the method criteria for the following analyte: Acetone. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected

following analyte: Acetone. As indicated in the reference method, sample analysis may proceed, network, any detected analyte is considered estimated. The following sample is impacted: 360109-GW-40815 (480-89781-44). low biased, for Chloromethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted 360109-GW-30114 125 (480-89781-43). 0K gravel

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 360109-GW-30114 (480-89781-43). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271776 recovered above the upper control limit for Carbon disulfide. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: 360109-SS-402000 (480-89781-30), 360109-SS-301006D (480-89781-40) and OK 360109-SS-301010 (480-89781-41),

Method(s) 8260C: The laboratory control sample for preparation batch 480-271503 and analytical batch 480-271776 recovered outside control limits for the following analyte: 1,2-Dibromo-3-Chloropropane. 1,2-Dibromo-3-Chloropropane has been identified as a poor 

360109-SS-402000 (480-89781-30). Elevated reporting limits (RLs) are provided.

nt annont Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271718 recovered outside acceptance criteria. low biased, for Carbon Tetrachloride and Chlorodibromomethane. A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analyte, the data have been reported. The following samples are impacted: 360109-US506011 (480-89781-4), 360109-US508013 (480-89781-10), 360109-SS-405008 (480-89781-22), 360109-SS-405012 (480-89781-23), 360109-SS-404000 (480-89781-24), 360109-SS-404006 (480-89781-25), 360109-SS-404011 (480-89781-26), 360109-SS-403000 (480-89781-27), 360109-SS-403006 (480-89781-28), 360109-SS-403012 (480-89781-29), CK. 360109-SS-402000 (480-89781-30), 360109-SS-402006 (480-89781-31), 360109-SS-401000 (480-89781-33), 360109-SS-401006 (480-89781-34), 360109-SS-400000 (480-89781-36), 360109-SS-400005 (480-89781-37), 360109-SS-400012 (480-89781-38) and ハン ジンル 360109-SS-301006 (480-89781-39)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-271718 recovered above the upper control limit for Carbon Disulfide. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: 360109-US506011 (480-89781-4), 360109-US508013 (480-89781-10), 360109-SS-405008 (480-89781-22), 360109-SS-405012 (480-89781-23), 360109-SS-404000 (480-89781-24), 360109-SS-404006 (480-89781-25), 360109-SS-404011 (480-89781-26), 360109-SS-403000 (480-89781-27), 360109-SS-403006 (480-89781-28), 360109-SS-403012 (480-89781-29), 360109-SS-402000 (480-89781-30), 360109-SS-402006 (480-89781-31), 360109-SS-401000 DIC (480-89781-33), 360109-SS-401006 (480-89781-34), 360109-SS-400000 (480-89781-36), 360109-SS-400005 (480-89781-37), 360109-SS-400012 (480-89781-38) and 360109-SS-301006 (480-89781-39)

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-271503 and analytical batch 480-271718 recovered outside control limits for the following analyte: 1,2-Dibromo-3-Chloropropane. 1,2-Dibromo-3-Chloropropane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction and re-analysis was not performed. The following samples are impacted: 360109-SS-405008 (480-89781-22), 360109-SS-405012 (480-89781-23), 360109-SS-404000 (480-89781-24), 360109-SS-404006 (480-89781-25), 360109-SS-404011 (480-89781-26), 360109-SS-403000 (480-89781-27), 360109-SS-403006 OK (480-89781-28), 360109-SS-403012 (480-89781-29), 360109-SS-402000 (480-89781-30), 360109-SS-402006 (480-89781-31), 360109-SS-401000 (480-89781-33), 360109-SS-401006 (480-89781-34), 360109-SS-400000 (480-89781-36), 360109-SS-400005 (480-89781-37), 360109-SS-400012 (480-89781-38) and 360109-SS-301006 (480-89781-39).

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39). 552 (UJ)all j not interorete to be significant data Milalis limitation 11/06/2015

(not significant

principy

site

data limit)

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: 360109-US506011 (480-89781-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-272015 recovered above the upper control limit for Carbon Disulfide. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following samples are impacted: 360109-SS-301012 (480-89781-42). OK

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-272015 recovered outside acceptance criteria, low biased, for 1,1,2-Trichloro-1,2,2-trifluoroethene, Cyclohexane, and Methylcyclohexane . A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for this analytes, the data have been reported. The following samples are impacted: 360109-SS-301012 (480-89781-42). OK

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-272003 and analytical batch 480-272015 recovered outside control limits for the following analyte: Carbon Disulfide. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 360109-SS-301012 (480-89781-42).

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for preparation batch 480-271462 and analytical batch 480-271718 recovered outside control limits for the following analyte: Carbon disulfide. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: 360109-US506011 (480-89781-4) and 360109-US508013 (480-89781-10). OK

Method(s) 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-271462 and analytical batch 480-271718 recovered outside control limits for the following analytes: Acetone, Bromoform, Carbon tetrachloride, Chlorodibromomethane, and Trichlorofluoromethane. The following samples are impacted: 360109-US506011 (480-89781-4) and 360109-US508013 (480-89781-10). NI) in samples in a single sample in the sample OC

Method(s) 8260C: The following sample was received with the preparation holding time expired. As such, the laboratory had to perform the analysis outside of holding time: QC-TB10202015-XX (480-89781-1), the analysis outside of holding time: QC-TB10202015-XX (480-89781-1). No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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OK

### **Quality Control Results**

### Client: AMEC Foster Wheeler E & I, Inc

### Job Number: 480-89781-1

### Method Blank - Batch: 480-271492

N/A

Leach Date:

# Method Blank

### Method: 8260C Preparation: 5035A

Lab Sample ID:	MB 480-271492/2-A	Analysis Batch:	480-271485	Instrument ID:	HP5973F
Client Matrix:	Solid	Prep Batch:	480-271492	Lab File ID:	F1900.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5.17 g
Analysis Date:	10/28/2015 0048	Units:	ug/Kg	Final Weight/Volume:	5 mL
Prep Date:	10/27/2015 2239				

1,1,1-TrichloroethaneND0.354.81,1,2-TrichloroethaneND0.634.81,1,2-TrichloroethaneND0.634.81,1,2-TrichloroethaneND1.14.81,1-DichloroethaneND0.594.81,1-DichloroethaneND0.594.81,1-DichloroethaneND0.594.81,2-TrichlorobenzeneND0.294.81,2-DichloroethaneND0.294.81,2-DichloroethaneND0.244.81,2-DichloroethaneND0.244.81,2-DichloroethaneND-3.22.41,2-DichloroethaneND-3.50.681,2-DichlorobenzeneND-3.50.681,4-DichlorobenzeneND-3.50.681,4-DichlorobenzeneND1.8242-HexanoneND1.6244-Methyl-2-pentanone (MIBK)ND1.624AcetoneND0.244.8BromodichloromethaneND0.244.8BromodichloromethaneND0.444.8Carbon disulfideND0.474.8ChloroethaneND0.474.8ChloroethaneND0.304.8ChloroethaneND0.304.8ChloroethaneND0.304.8ChloroethaneND0.444.8ChloroethaneND0.444.8ChloroethaneND0.64 <td< th=""></td<>
1,1,2,2-TetrachloroethaneND $0.78$ $4.8$ 1,1,2-TrichloroethaneND $0.63$ $4.8$ 1,1,2-TrichloroethaneND $0.63$ $4.8$ 1,1-DichloroethaneND $0.59$ $4.8$ 1,1-DichloroethaneND $0.59$ $4.8$ 1,2-TrichloroethaneND $0.59$ $4.8$ 1,2-DichlorobenzeneND $0.29$ $4.8$ 1,2-DichlorobenzeneND $0.29$ $4.8$ 1,2-DichloroethaneND $0.29$ $4.8$ 1,2-DichlorobenzeneND $0.24$ $4.8$ 1,2-DichlorobenzeneND $0.24$ $4.8$ 1,3-DichlorobenzeneND $-3.2$ $2.4$ $4.8$ 1,3-DichlorobenzeneND $-3.5$ $0.68$ $4.8$ 1,3-DichlorobenzeneND $-3.5$ $0.68$ $4.8$ 1,4-DichlorobenzeneND $-3.5$ $0.68$ $4.8$ 2-Butanone (MEK)ND $1.6$ $24$ $4.4$ 4-Methyl-2-pentanone (MIBK)ND $0.65$ $4.8$ BromodichloromethaneND $0.24$ $4.8$ BromoformND $0.44$ $4.8$ Carbon disulfideND $0.47$ $4.8$ Carbon disulfideND $0.47$ $4.8$ ChlorobenzeneND $0.64$ $4.8$ </td
1,12-Trichloroethane       ND       0.63       4.8         1,12-Trichloroethane       ND       1.1       4.8         1,1-Dichloroethane       ND       0.59       4.8         1,1-Dichloroethane       ND       0.59       4.8         1,2-Dichloroethane       ND       0.29       4.8         1,2-Dichlorobenzene       ND       0.29       4.8         1,2-Dichlorobenzene       ND       0.38       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       1.8       24         2-Hexanone       ND       1.6       24         2-Hexanone       ND       0.24       4.8         Bromodichloromethane       ND       0.41       24         Bromodichloromethane       ND
1,12-Trichloro-1,2,2-trifluoroethane       ND       1.1       4.8         1,1-Dichloroethane       ND       0.59       4.8         1,1-Dichloroethane       ND       0.29       4.8         1,2-Dichloroethane       ND       0.29       4.8         1,2-Dichloroethane       ND       0.24       4.8         1,2-Dichloroethane       ND       0.24       4.8         1,2-Dichloroethane       ND       0.25       4.8         1,2-Dichloroethane       ND       - 3.7       2.4       4.8         1,2-Dichloroethane       ND       0.25       4.8         1,2-Dichlorobenzene       ND       - 3.5       0.68       4.8         1,4-Dichlorobenzene       ND       - 3.5       0.68       4.8         1,4-Dichlorobenzene       ND       - 3.5       0.68       4.8         2-Butanone (MEK)       ND       1.6       24         2-Hexanone       ND       0.24       4.8         Bromodichloromethane       ND       0.41       24         Benzene       ND       0.42       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44
1,1-Dichloroethane       ND       0.59       4.8         1,1-Dichloroethane       ND       0.59       4.8         1,2-Libromo-3-Chloropropane       ND       0.29       4.8         1,2-Dichlorobenzene       ND       2.4       4.8         1,2-Dichlorobenzene       ND       0.38       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.24       4.8         Bromodichloromethane       ND       0.24       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide
1,1-DichloroetheneND0.594.81,2-4-TrichlorobenzeneND0.294.81,2-DichloropopaneNDApplies to0.384.81,2-DichlorobenzeneND0.244.81,2-DichlorobenzeneND $-32$ 2.44.81,2-DichlorobenzeneND $-335$ 0.684.81,2-DichlorobenzeneND $-355$ 0.684.81,4-DichlorobenzeneND $-355$ 0.684.82-Butanone (MEK)ND1.8242-HexanoneND1.6244-Methyl-2-pentanone (MIBK)ND1.624AcetoneND0.244.8BromodichloromethaneND0.244.8BromodichloromethaneND0.444.8Carbon tetrachlorideND0.444.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChlorobenzeneND0.644.8ChlorobenzeneND0.644.8ChlorobenzeneND0.304.8ChlorobenzeneND0.304.8ChlorobenzeneND0.244.8ChlorobenzeneND0.244.8ChlorobenzeneND0.644.8ChlorobenzeneND0.644.8ChlorobenzeneND0.304.8ChlorobenzeneND0.244.8ChlorobenzeneND0.624.8<
1,2,4-Trichlorobenzene       ND       0.29       4.8         1,2-Dichlorobenzene       ND       Applies       2.4       4.8         1,2-Dichlorobenzene       ND       0.38       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.24       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Chlorobenzene       ND       0.44       4.8         Chloroberthane       ND       0.44       4.8         Chloroberthane <td< td=""></td<>
1,2-Dibromo-3-Chloropropane       ND       Applies to       2.4       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,2-Dichloroptopane       ND       - 3 2       2.4       4.8         1,2-Dichlorobenzene       ND       0.25       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       - 3 5       0.68       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       1.8       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.24       4.8         Bromodichloromethane       ND       0.24       4.8         Bromoform       ND       0.65       4.8         Bromoform       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Ch
1,2-Dichlorobenzene       ND       MD       0.38       4.8         1,2-Dichlorobenzene       ND       0.24       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       0.24       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.24       4.8         Bromodichloromethane       ND       0.24       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Chlorobenzene       ND       0.664       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND
1,2-Dichloroethane       ND       -3 2       2.4       4.8         1,2-Dichloroppane       ND       -3 2       2.4       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       -3 5       0.68       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Carbon disulfide       ND       0.44       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.44       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenz
1,2-Dichloropropane       ND       -3.2       2.4       4.8         1,3-Dichlorobenzene       ND       0.25       4.8         1,4-Dichlorobenzene       ND       -3.5       0.68       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       1.6       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.65       4.8         Benzene       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Chlorobenzene       ND       0.44       4.8         Chlorobenzene       ND       0.44       4.8         Chlorobenzene       ND       0.44       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64<
1,3-Dichlorobenzene       ND       -35       0.25       4.8         1,4-Dichlorobenzene       ND       -35       0.68       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       0.24       4.8         Benzene       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromomethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Chlorobenzene       ND       0.30       4.8         Chlorobenzene       ND       0.30       4.8         Chloroform       ND       0.30       4.8         Chloroform       ND       0.29       4.8         Chloroform       ND       0.29       4.8         Chloroformethane       ND       0.62       4.8
1,4-Dichlorobenzene       ND       -35       0.68       4.8         2-Butanone (MEK)       ND       1.8       24         2-Hexanone       ND       2.4       24         4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       4.1       24         Benzene       ND       0.65       4.8         Bromodichloromethane       ND       0.65       4.8         Bromodichloromethane       ND       0.44       4.8         Bromodichloromethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon tetrachloride       ND       0.47       4.8         Chlorobenzene       ND       0.44       4.8         Chlorobenzene       ND       0.47       4.8         Chlorobenzene       ND       0.30       4.8         Chloroform       ND       0.30       4.8         Chloroform       ND       0.30       4.8         Chloroform       ND       0.29       4.8         Chloroperpene       ND       0.62       4.8         Chloroperpene       ND       0.62       4.8
2-Butanone (MEK)         ND         1.8         24           2-Hexanone         ND         2.4         24           4-Methyl-2-pentanone (MIBK)         ND         1.6         24           Acetone         ND         4.1         24           Benzene         ND         0.24         4.8           Bromodichloromethane         ND         0.65         4.8           Bromodichloromethane         ND         2.4         4.8           Bromodichloromethane         ND         0.65         4.8           Bromodichloromethane         ND         2.4         4.8           Bromodichloromethane         ND         0.64         4.8           Carbon disulfide         ND         0.44         4.8           Carbon tetrachloride         ND         0.47         4.8           Chlorobenzene         ND         0.64         4.8           Chloroform         ND         0.30         4.8           Chloroform         ND         0.30         4.8           Chloroform         ND         0.29         4.8           Chloroform         ND         0.62         4.8           Chloroformethane         ND         0.62         4
2-Hexanone         ND         2.4         24           4-Methyl-2-pentanone (MIBK)         ND         1.6         24           Acetone         ND         4.1         24           Benzene         ND         0.24         4.8           Bromodichloromethane         ND         0.65         4.8           Bromoform         ND         2.4         4.8           Bromoform         ND         2.4         4.8           Bromoform         ND         2.4         4.8           Bromomethane         ND         2.4         4.8           Carbon disulfide         ND         0.44         4.8           Carbon tetrachloride         ND         0.47         4.8           Chlorobenzene         ND         0.64         4.8           Chlorobenzene         ND         0.64         4.8           Chloroform         ND         0.30         4.8           Chloroform         ND         0.30         4.8           Chloroform         ND         0.29         4.8           Cis-1,2-Dichloroethene         ND         0.62         4.8           cis-1,3-Dichloropropene         ND         0.70         4.8 <tr< td=""></tr<>
4-Methyl-2-pentanone (MIBK)       ND       1.6       24         Acetone       ND       4.1       24         Benzene       ND       0.24       4.8         Bromodichloromethane       ND       0.65       4.8         Bromoform       ND       2.4       4.8         Bromodichloromethane       ND       0.44       4.8         Bromomethane       ND       0.44       4.8         Carbon disulfide       ND       0.44       4.8         Carbon disulfide       ND       0.47       4.8         Carbon tetrachloride       ND       0.64       4.8         Chlorobenzene       ND       0.64       4.8         Chloroform       ND       0.30       4.8         Chloroform       ND       0.30       4.8         Chloromethane       ND       0.29       4.8         Chloromethane       ND       0.62       4.8         Cis-1,2-Dichloropthene       ND       0.62       4.8         cis-1,3-Dichloropropene       ND       0.70       4.8         Cyclohexane       ND       0.68       4.8
AcetoneND4.124BenzeneND0.244.8BromodichloromethaneND0.654.8BromoformND2.44.8BromomethaneND0.444.8Carbon disulfideND2.44.8Carbon disulfideND0.474.8Carbon tetrachlorideND0.644.8ChlorobenzeneND0.644.8ChloroethaneND0.644.8ChloroethaneND0.304.8ChloromethaneND0.304.8ChloromethaneND0.624.8ChloroptopeneND0.624.8ChloroptopeneND0.624.8ChloroptopeneND0.624.8ChloroptopeneND0.624.8ChloroptopeneND0.684.8
BenzeneND0.244.8BromodichloromethaneND0.654.8BromoformND2.44.8BromomethaneND0.444.8Carbon disulfideND2.44.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.304.8ChloromethaneND0.294.8ChloromethaneND0.624.8ChloropenpeneND0.624.8Cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
BromodichloromethaneND0.654.8BromoformND2.44.8BromomethaneND0.444.8Carbon disulfideND2.44.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.304.8ChloromethaneND0.294.8ChloromethaneND0.624.8ChloropetheneND0.624.8Cis-1,2-DichloropetheneND0.704.8CyclohexaneND0.684.8
BromotormND2.44.8BromomethaneND0.444.8Carbon disulfideND2.44.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8ChloromethaneND0.624.8ChloromethaneND0.624.8Cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
BromomethaneND0.444.8Carbon disulfideND2.44.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8ChloromethaneND0.624.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
Carbon disulfideND2.44.8Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
Carbon tetrachlorideND0.474.8ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
ChlorobenzeneND0.644.8ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
ChloroethaneND1.14.8ChloroformND0.304.8ChloromethaneND0.294.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
ChloroformND0.304.8ChloromethaneND0.294.8cis-1,2-DichloroetheneND0.624.8cis-1,3-DichloropropeneND0.704.8CyclohexaneND0.684.8
Chioromethane         ND         0.29         4.8           cis-1,2-Dichloroethene         ND         0.62         4.8           cis-1,3-Dichloropropene         ND         0.70         4.8           Cyclohexane         ND         0.68         4.8
Cis-1,2-Dichloropethene         ND         0.62         4.8           cis-1,3-Dichloropropene         ND         0.70         4.8           Cyclohexane         ND         0.68         4.8
Cis-1,3-Dichloropropene         ND         0.70         4.8           Cyclohexane         ND         0.68         4.8
Cyclonexane ND 0.68 4.8
Dibusus alalansus allansus a
Dipromocnioromethane ND 0.62 4.8
1,2-Dipromoetnane ND 0.62 4.8
Dichlorodinuoromethane ND 0.40 4.8
Eurypenzene ND 0.33 4,8
ND 0.73 4.8
Methyl actual 2.9 4.8
Methylavelebovene ND 0.47 4.8
Methylopo Chlorida
Totrachlaraothana $(U)$ 55 - $U$ DI DI 1 $(100)$ 5 $U$ 1 = $8$ 2 0.05 4.8
Toluona $(1.00)$ $(1$
trans_1 2-Dichleroethene $CISe \rightarrow (0.943)$ J 0.37 4.8
trans-1,2-Distribution U.50 4.8
Trichloroethene CLTUD ICVEL ND 2.1 4.8

### Client: AMEC Foster Wheeler E & I, Inc

QC-TB10202015-XX

**Client Sample ID:** 

Trichlorofluoromethane

Trichloroethene

Lab Sample ID: Client Matrix:	480-89781-1 Solid	Soil TB	)	Date San Date Rec	npled: 10/20/2015 16 ceived: 10/24/2015 02	300 220
······	82600	Volatile Organic Compo	unds by GC/M	S		
Analysis Method: Prep Method: Dilution: Analysis Date: Prep Date:	8260C 5035A 1.0 10/28/2015 0204 10/24/2015 0405	Analysis Batch: 480-271 Prep Batch: 480-271	485 Inst 492 Lab Initia Fina	rument ID: File ID: al Weight/Volume: al Weight/Volume:	HP5973F F1901.D 5.137 g 5 mL	
Analyte	DryWt Corrected: I	Result (ug/Kg)	Qualifier	MDL	RL	
1.1.1-Trichloroetha	3De	ND		0.35	10	***** <b>**</b> ***
1122-Tetrachlor	hethane	ND	н	0.00	4.0	
1 1 2-Trichloroeth	ane	ND	н Ц	0.73	4.9	
1 1 2-Trichloro-1 2	2-trifluoroethane	ND	и Ц	0.05	4.9	
1 1-Dichloroethan		ND		0.50	4.9	
1 1-Dichloroethen		ND	11 LJ	0.59	4.9	
1 2 4-Trichloroben	zene	ND (A a a)	1.4	0.00	4,9	
1.2-Dibromo-3-Ch	loropropane	ND HOPILES	TO	0.30	4.9	
1.2-Dichlorobenze	ne			2.4	4.9	
1.2-Dichloroethan				0.30	4.9	
1.2-Dichloropropa	e ne			0.24	4.9	
1.3-Dichlorobenze	ne	ND 201	11 14	2. <del>4</del> 0.25	4.9	
1 4-Dichlorobenze	ne	ND	н	0.20	4.9	
2-Butanone (MEK)	)	ND SOMOL	U н	1.8	-4.8 24	
2-Hexanone	,	ND	- II H	24	24	
4-Methyl-2-pentan	one (MIBK)	ND	н	1.6	24	
Acetone		9.9	 .1 H	4.1	24	
Benzene		ND	Н	0.24	49	
Bromodichloromet	hane	ND	H	0.65	4,0	
Bromoform		ND	H	2.4	4.9	
Bromomethane		ND	Н	0.44	4.9	
Carbon disulfide		ND	H	2.4	49	
Carbon tetrachlori	de	ND	Н	0.47	4.9	
Chlorobenzene		ND	Н	0.64	49	
Dibromochloromet	thane	ND	Н	0.62	4.9	
Chloroethane		ND	н	1.1	4.9	
Chloroform		ND	н	0.30	4.9	
Chloromethane		ND	н	0.29	4.9	
cis-1,2-Dichloroeth	nene	ND	Н	0.62	4.9	
cis-1,3-Dichloropro	opene	ND	н	0.70	4.9	
Cyclohexane	•	ND	н	0.68	4.9	
Dichlorodifluorome	ethane	ND	н	0.40	4.9	
Ethylbenzene		ND	н	0.34	4.9	
1,2-Dibromoethan	e	ND	Н	0.62	4,9	
Isopropylbenzene		ND	Н	0.73	4.9	
Methyl acetate		ND	Н	2.9	4.9	
Methyl tert-butyl e	ther	ND	Н	0.48	4.9	
Methylcyclohexan	e	ND	Н	0.74	4.9	
Methylene Chlorid	e 55-407006	ND	Н	2.2	4.9	
Styrene	C SS-Varan	ND	Н	0.24	4.9	
Tetrachloroethene	(4) Solart	(2.4)	JHB	0.65	4.9	
Toluene		ND - In	<u>Ч</u> рн	0.37	4.9	
trans-1,2-Dichloro	ethene elsc > A.	L. ND >x = 12	'г., <sup>н</sup>	0.50	4.9	
trans-1,3-Dichloro	propene	ND	"ንዘ	2.1	4.9	

Job Number: 480-89781-1

ND

ND

1.1

0.46

Н

Н

4.9

4.9

HP5973G

G44302.D

6.998 g

5 mL

5 mL

Job Number: 480-89781-1

Client: AMEC Foster Wheeler E & I, Inc

### Matrix Spike/

Matrix Spike Duplicate Recovery Report - Batch: 480-271503

 MS Lab Sample ID:
 480-89781-29

 Client Matrix:
 Solid

 Dilution:
 1.0

 Analysis Date:
 10/29/2015
 0507

 Prep Date:
 10/24/2015
 0405

 Leach Date:
 N/A

 MSD Lab Sample ID:
 480-89781-29

 Client Matrix:
 Solid

 Dilution:
 1.0

 Analysis Date:
 10/29/2015
 0445

 Prep Date:
 10/24/2015
 0405

 Leach Date:
 N/A

Prep Batch: 480-271503 Leach Batch: N/A

480-271718

70-130

Analysis Batch:

Analysis Batch:480-271718Prep Batch:480-271503Leach Batch:N/A

135 480-271718 480-271503

Instrument ID: HP5973G Lab File ID: G44301.D Initial Weight/Volume: 6.714 g Final Weight/Volume: 5 mL

Method: 8260C

Instrument ID:

Lab File ID:

**Preparation: 5035** 

Initial Weight/Volume:

Final Weight/Volume:

1

5 mL

	<u>%</u>	Rec.		$\sim$			
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	119	117	64 - 116	2	20	F1	F1
1,1,2,2-Tetrachloroethane	104	112	75 - 120	11	20		
1,1,2-Trichloroethane	119	126	70 - 130	9	20		
1,1,2-Trichloro-1,2,2-trifluoroethane	80	89	40 - 120	15	20		
1,1-Dichloroethane	107	123	82 - 138	18	20		
1,1-Dichloroethene	102	118	50 - 147	19	20		
1,2,4-Trichlorobenzene J+ (Nb)	(131)	(138)	40 - 160	10	20		
1,2-Dibromo-3-Chloropropane	71	71	60 - 110	4	20		
1,2-Dibromoethane	122	126	81 - 119	7	20	F1	F1
1,2-Dichlorobenzene	120	130	80 - 132	12	20		
1,2-Dichloroethane	109	115	78 - 129	9	20		
1,2-Dichloropropane	(164)	(134)	76 - 125	16	20	F1	F1
1,3-Dichlorobenzene	124	133	63 - 134	12	20		
1,4-Dichlorobenzene	119	128	60 - 134	11	20		
2-Hexanone	109	113	70 - 127	8	20		
2-Butanone (MEK)	102	122	54 - 149	21	20		F2
4-Methyl-2-pentanone (MIBK)	110	115	74 - 120	8	20		
Acetone	97	113	47 - 141	19	20		
Benzene J+ (ND)	120	$\overline{(132)}$	77 - 125	13	20		F1
Bromodichloromethane	130	97	71 - 121 ·	24	20	F1	F2
Bromoform J/(1)	73	69	48 - 125	2	20		
Bromomethane	99	87	39 - 149	9	20		
Carbon disulfide	116	125	40 - 136	11	20		
Carbon tetrachloride	98	93	54 - 135	1	20		
Chlorobenzene J+ (ND)	(131)	(135)	76 - 126	7	20	F1	F1
Dibromochloromethane	85	80	64 - 118	2	20		
Chloroethane J(UJ)	(49)	(43)	23 - 164	10	20		
Chloroform	114	123	78 - 118	12	20		F1
Chloromethane	126	106	61 - 124	13	20	F1	• •
cis-1,2-Dichloroethene J+(N)	118	(131)	79 - 124	15	20	• •	F1
cis-1,3-Dichloropropene T+	(156)	126	75 - 121	18	20	F1	F1
Cyclohexane	100	118	49 - 129	21	20	••	F2
Dichlorodifluoromethane	38	33	10 - 150	10	20		

**TestAmerica Buffalo** 

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### **Quality Control Results**

HP5973G

G44302.D

5 mL

Job Number: 480-89781-1

Client: AMEC Foster Wheeler E & I, Inc

### Matrix Spike/

Prep Date:

Leach Date:

MS Lab Sample ID:

Matrix Spike Duplicate Recovery Report - Batch: 480-271503

480-89781-29

10/24/2015 0405

Client Matrix:	Solid
Dilution:	1.0
Analysis Date:	10/29/2015 0507
Prep Date:	10/24/2015 0405
Leach Date:	N/A
MSD Lab Sample I	D: 480-89781-29
Client Matrix:	Solid
Dilution:	1.0
Analysis Date:	10/29/2015 0445

N/A

Prep Batch:	480-271503
Leach Batch:	N/A
	,
	1

Analysis Batch:

70-130 35

480-271718

Analysis Batch:480-271718Prep Batch:480-271503Leach Batch:N/A

Instrument ID:HP5973GLab File ID:G44301.DInitial Weight/Volume:6.714 gFinal Weight/Volume:5 mL5 mL

Initial Weight/Volume: 6.998 g

Final Weight/Volume: 5 mL

Method: 8260C

Instrument ID:

Lab File ID:

Preparation: 5035

	<u>%</u>	Rec.		$\checkmark$			
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Ethylbenzene J+ (ND)	129	(133)	78 - 124	7	20	F1	F1
Isopropylbenzene	120	130	76 - 119	12	20	F1	F1
Methyl acetate	102	128	71 - 123	27	20		F1 F2
Methyl tert-butyl ether	112	124	67 - 137	14	20		
Methylcyclohexane J+(Nb)	(157)	118	50 ~ 130	25	20	F1	F2
Methylene Chloride	115	130	75 - 118	17	20		F1
Styrene J+ NV	(134)	(138)	84 - 119	7	20	F1	F1 .
Tetrachloroethene $(\mathcal{J}^{+})$	(146)	(149)	73 - 133	6	20	F1	F1
Toluene	120	125	75 - 124	8	20		F1
trans-1,2-Dichloroethene	116	126	74 - 129	13	20		
trans-1,3-Dichloropropene	113	118	73 - 118	8	20		
Trichloroethene J+ (NV	(169)	(136)	75 - 131	18	20	F1	F1
Trichlorofluoromethane J(J)	72	(60)	29 - 158	14	20		
Vinyl chloride	107	88	59 - 124	15	20		
Xylenes, Total J+(N)	(133)	(137)	78 - 125	7	20	F1	F1
Surrogate		MS % Rec	MSD %	Rec	Acce	eptance Limi	ts
1,2-Dichloroethane-d4 (Surr)		91	89	NUTY INCOME NOT STOLEN.	5	3 - 146	981-101805-0082 - 108-0-109-04-0-120-22 1
Toluene-d8 (Surr)		96	94		5	0 - 149	
4-Bromofluorobenzene (Surr)		107	105		4	9 - 148	

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### **EXECUTIVE SUMMARY - Detections**

Client: AMEC Foster Wheeler E & I, Inc

.

Job Number: 480-89781-1

		•					
Lab Sample ID Analyte	Client Sample ID	Result	Qualifie	Repo r Limit	orting t	Units	Method
480-89781-1	QC-TB10202015-XX						
Acetone		9.9	JΗ	24		ua/Ka	8260C
Tetrachloroethene		2.4	JHB	4.9		ug/Kg	8260C
480-89781-2	360109-MH001010						
1,1,1-Trichloroethan	e	92	J	150		ug/Kg	8260C
1,1-Dichloroethane		180		150		ug/Kg	8260C
Acetone		810	*	730		ug/Kg	8260C
cis-1,2-Dichloroethe	ne	100	J	150		ug/Kg	8260C
Methyl acetate		700		150		ug/Kg	8260C
Methylcyclohexane		98	J	150		ug/Kg	8260C
trans-1,2-Dichloroeti	nene	38	J	150		ug/Kg	8260C
Vinyl chloride		140	J	150		ug/Kg	8260C
Percent Moisture		56		0.10		%	Moisture
Percent Solids		44		0.10		%	Moisture
480-89781-3	360109-GS506003						
Percent Moisture		17		0.10		%	Moisture
Percent Solids		83		0.10		%	Moisture
			5060110		RPD		
480-89781-4	360109-GS506011		And a sector with the to sector provide the structure of the		C A DESCRIPTION OF THE OWNER, CONTRACT, CONTRACT, CONTRACT, CONTRACT, CONTRACT, CONTRACT, CONTRACT, CONTRACT, C		
1,1,1-Trichloroethan	e	33	OK	30		ug/Kg	8260C
1,1-Dichloroethane		32	1	30		ug/Kg	8260C
1,1-Dichloroethene		150	1	30		ug/Kg	8260C
1,2-Dichlorobenzene	9	240		30		ug/Kg	8260C
1,4-Dichlorobenzene	9	320		30		ug/Kg	8260C
cis-1,2-Dichloroethe	ne	87000		6100		ug/Kg	8260C
Cyclohexane		480		30		ug/Kg	8260C
Ethylbenzene		8700		6100		ug/Kg	8260C
Isopropylbenzene		1100		30		ug/Kg	8260C
Methylcyclohexane		2700		30		ug/Kg	8260C
Tetrachloroethene		250000		6100		ug/Kg	8260C
Toluene		240		30		ug/Kg	8260C
trans-1,2-Dichloroeth	nene	240		30		ug/Kg	8260C
Irichloroethene		300000	V O A G	6100		ug/Kg	8260C
Vinyl chloride		1800	410	30	66	ug/Kg < I	30 8260C DIC
Xyienes, Iotal		270	97	61	94	ug/Kg ∠ις	\$ 8260C OIC
Percent Wolsture		10	OIL	0.10		%	Moisture
Percent Solids		90	$\checkmark$	0.10		%	Moisture

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### **Quality Control Results**

Job Number: 480-89781-1

### Client: AMEC Foster Wheeler E & I, Inc

### Surrogate Recovery Report

### 8260C Volatile Organic Compounds by GC/MS

70-130

### **Client Matrix: Solid**

		DCA	TOL	BFB	
Lab Sample ID	Client Sample ID	%Rec	%Rec	%Rec	
480-89781-2	360109-MH001010	100	101	109	
480-89781-3	360109-GS506003	99	99	106	$\bigcirc$
480-89781-4	360109-GS506011	(56)	(60)	(61)	(Jus) results from original NM
480-89781-4 DL	360109-GS506011 DL	91	95	104	
480-89781-5	360109-GS506011D	85	(59)	(66)	(JUJ) result from original NM
480-89781-5 DL	360109-GS506011D DL	92	93	102	
480-89781 <b>-</b> 6	360109-GS506016	111	(56)	62	(Flut) result from original MA
480-89781-6 DL	360109-GS506016 DL	94	94	103	
480-89781-7	360109-GS507003	92	96	106	
480-89781-8	360109-GS507009	91	90	99	$\frown$
480-89781-9	360109-GS507012	94	(67)	(73)	Thus result from onginition
480-89781-9 DL	360109-GS507012 DL	91	86	92	
480-89781-10	360109-GS508013	94	97	108	
480-89781-11	360109-SS-408000	92	95	104	0.
480-89781-12	360109-SS-408007	93	95	106	and the line
480-89781-13	360109-SS-408011	91	94	105	11/4/15
480-89781-14	360109-SS-407000	91	90	100	
480-89781-15	360109-SS-407006	90	97	107	
480-89781-16	360109-SS-407006D	92	95	104	
480-89781-17	360109-SS-407012	94	96	106	
480-89781-18	360109-SS-406000	96	96	104	
480-89781-19	360109-SS-406006	92	96	105	
480-89781-20	360109-SS-406011	91	96	106	
480-89781-21	360109-SS-405000	90	95	105	
480-89781-22	360109-SS-405008	93	96	106	
480-89781-23	360109-SS-405012	95	96	104	
480-89781-24	360109-SS-404000	94	95	106	

Acceptance Limits
53-146
50-149
49-148



# ANALYTICAL REPORT

Job Number: 480-89781-1 Job Description: Industrial Overall Service site

> For: AMEC Foster Wheeler E & I, Inc 511 Congress St. Suite 200 Portland, ME 04101

Attention: Jean Firth

Approved for release. Joe V Glacomazza Project Management Assistant II 11/6/2015 3:23 PM

Designee for Brian J Fischer, Manager of Project Management 10 Hazelwood Drive, Amherst, NY, 14228-2298 (716)504-9835 brian.fischer@testamericainc.com 11/06/2015 Revision: 2

#### cc: Mr. Tige Cunningham

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# VOCs

PROJECT CATEGORY A REVIEW RECORD Project: Industrial Overall Method: <u>SW-846 8260B</u> & 260c Laboratory and SDG(s): TAL SDG# 480 - 90144-1 Date: 11/11/15 Reviewer: Julie Ricardi Review Level X CATEGORY A
1. Case Narrative Review and COC/Data Package Completeness <u>COMMENTS</u> Were problems noted? Sec attached; no action Acceled.
Were all the samples on the COC analyzed for the requested analyses? YES NO (circle one)
Are Field Sample IDs and Locations assigned correctly YES NO (circle one)
<ul> <li>Holding time and Sample Collection</li> <li>All samples were analyzed within the 14 day holding time. YES NO (circle one)</li> </ul>
3. QC Blanks Are method blanks free of contamination? YES NO (circle one)
Are Trip blanks free of contamination? (YES) NO (circle one)
Are Rinse blanks free of contamination? YES NO NA (circle one)
<ul> <li>4. Matrix Spike - Region II limits (water and soil 70-130%, water RPD 20, soil RPD 35)</li> <li>Were MS/MSDs submitted/analyzed? (YES) NO</li> <li>360190 - MW- 50102 Ms 1450 i See etteched for (eval)</li> <li>Were all results were within the Region II limits? YES (NO) NA (circle one)</li> </ul>
5. Field Duplicates - Region II Limits (water RPD 50, soil RPD 100) Were Field Duplicates submitted/analyzed? YES(NO)
Were all results were within Region II Limits? YES NO NA (circle one)
<ol> <li>Reporting Limits: Were samples analyzed at a dilution? YES NO (circle one)</li> <li>Sample 360109 - MW-SOSLL (100x), MW-SOYIO (100x) andlyted</li> <li>If dilutions for terret compounds 1,1,1-TLA; 1,1-DLE; TCE; 1,1-DLA</li> <li>Does the EDD match the Form I's? (YES) NO (circle one) (elveted RLs for all ND empds)</li> </ol>
8. <b>Table Review</b> Table 1 (sample Listing), Table 2 (results summary), Table 3 (Reason Codes), Table 4 (TICs). Did lab report TICs? YES NO (circle one)
Note: Elevated Ru (100x) reported for MW-50522
and MW-SOULD due to high concentrations of; 111 - TEA 111 - DEE TEE 1,1 - DEA
Surrogetes all OK

### SAMPLE SUMMARY

### Client: AMEC Foster Wheeler E & I, Inc

Job Number: 480-90144-1

Lab Sample ID	ample ID Client Sample ID Client Matrix		Date/Time Sampled	Date/Time Received		
480-90144-1	QC-TB102615-XX	Solid	10/26/2015 1700	10/30/2015 0230		
480-90144-2	360109-GS-503003	Solid	10/26/2015 1703	10/30/2015 0230		
480-90144-3	360109-GS-503006	Solid	10/26/2015 1720	10/30/2015 0230		
480-90144-4	QC-TB102715-XX	Water	10/27/2015 1400	10/30/2015 0230		
480-90144-5	360109-MW-50522	Water	10/27/2015 1515	10/30/2015 0230		
480-90144-6	360109-MW-50410	Water	10/27/2015 1620	10/30/2015 0230		
480-90144-7	360109-MW-50102	Water	10/27/2015 1840	10/30/2015 0230		
480-90144-7MS	360109-MW-50102MS	Water	10/27/2015 1840	10/30/2015 0230		
480-90144-7MSD	360109-MW-50102MD	Water	10/27/2015 1840	10/30/2015 0230		

#### Job Narrative 480-90144-1

#### Receipt

The samples were received on 10/30/2015 2:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2° C.

#### Receipt Exceptions

Terra Core sampled 10/26/2015. Recevived 10/30/2015 placed in freezer at 0535

#### GC/MS VOA

Method(s) 8260C: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 480-272915 and analytical batch 480-273174 recovered outside control limits for the following analytes: Acetone and 2-Butanone (MEK). The following samples are impacted: QC-TB102615-XX (480-90144-1), 360109-GS-503003 (480-90144-2) and 360109-GS-503006 (480-90144-3).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-273903 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detect for the affected analyte; therefore, the data have been reported. The following samples are impacted: QC-TB102715-XX (480-90144-4), 360109-MW-50522 (480-90144-5) and 360109-MW-50410 (480-90144-6).

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: 360109-MW-50522 (480-90144-5) and 360109-MW-50410 (480-90144-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

11/12/13

# Client: AMEC Foster Wheeler E & I, Inc

# Matrix Spike/ Matrix Spike Duplicate Recovery Report - Batch: 480-274025

MS Lab Sample IE Client Matrix: Dilution: Analysis Date: Prep Date: Leach Date:	0: 480-90144-7 Water 1.0 11/10/2015 0755 11/10/2015 0755 N/A	Ana Prej Lea	lysis Batch: ɔ Batch: ch Batch:	480-274025 N/A N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume:		HP5973G G44580.D 5 mL 5 mL 5 mL	
MSD Lab Sample ID: 480-90144-7Client Matrix:WaterDilution:1.0Analysis Date:11/10/2015 0817Prep Date:11/10/2015 0817Leach Date:N/A		Ana Pre Lea	liysis Batch: o Batch: ch Batch: つつ	480-274025 N/A N/A	Instrument ID: Lab File ID: Initial Weight/Volume: Final Weight/Volume: 2 O		HP5973G G44581.D 5 mL 5 mL 5 mL	
% Rec								
Analyte		MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qua
1,1,1-Trichloroetha 1,1,2,2-Tetrachloro 1,1,2-Trichloro-1,2 1,1,2-Trichloroetha 1,1-Dichloroethan 1,1-Dichloroethan 1,2,4-Trichloroben	ane oethane 2,2-trifluoroethane ane e e zene	89 93 99 86 88 94 93	94 92 96 86 92 96 99	73 - 126 70 - 126 52 - 148 76 - 122 71 - 129 58 - 121 70 - 122	6 1 3 0 4 2 6	15 15 20 15 20 16 20		
1,2-Dibromo-3-Chloropropane 1,2-Dibromoethane 1,2-Dichlorobenzene 1,2-Dichloroethane		91 92 90 91	93 93 89 91	56 - 134 77 - 120 80 - 124 75 - 127	2 1 1 0	15 15 20 20		
1,2-Dichloropropane 1,3-Dichlorobenzene 1,4-Dichlorobenzene 2-Butanone (MEK)		87 91 88 111	89 90 89 109	76 - 120 77 - 120 75 - 120 57 - 140	2 1 2 1	20 20 20 20		
2-Hexanone 4-Methyl-2-pentanone (MIBK) Acetone Benzene Bromodichloromethane Bromoform		97 104 90 90 86	95 104 93 93 92	65 - 127 71 - 125 56 - 142 71 - 124 80 - 122 52 - 132	3 2 1 2 3 7	15 35 15 13 15 15		
Bromomethane Carbon disulfide Carbon tetrachloride Chlorobenzene		97 81 90 89 98	84 85 94 89 82	55 - 144 59 - 134 72 - 134 72 - 120 69 - 136	15 4 5 0 17	15 15 15 25		F2
Chloroform Chloromethane cis-1,2-Dichloroetl cis-1,3-Dichloropr Cyclohexane	opene JUJ	89 87 89 88 68	93 87 92 89 (69)	73 - 127 68 - 124 74 - 124 74 - 124 59 - 135	4 0 3 2 2	20 15 15 15 20	0.	12
Dibromochloromethane Dichlorodifluoromethane		89 91	90 85	75 - 125 59 - 135	1 7	15 20	011/12	lis

All else ok

Page 41 of 351

Method: 8260C Preparation: 5030C

Job Number: 480-90144-1



### ANALYTICAL REPORT

Job Number: 480-90144-1 Job Description: Industrial Overall Service site

> For: AMEC Foster Wheeler E & I, Inc 511 Congress St. Suite 200 Portland, ME 04101

Attention: Jean Firth

Approved for release. Joe V Glacomazza Project Management Assistant II 11/12/2015 4:28 PM

Designee for Brian J Fischer, Manager of Project Management 10 Hazelwood Drive, Amherst, NY, 14228-2298 (716)504-9835 brian.fischer@testamericainc.com 11/12/2015

cc: Mr. Tige Cunningham

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# REVIEW OF HAPSITE GC/MS FIELD SCREENING DATA AIR SAMPLING ANALYSIS DATES 10/26/15-10/28/15 INDUSTRIAL OVERALL UNIFORM CORPORATION SITE

Air samples were collected and analyzed 10/26/15 – 10/28/15 at the Industrial Overall Uniform Corporation Site as on-site screening data for the following volatile organic compounds:

- Vinyl chloride
- Trichloroethene
- Tetrachloroethene

The instrument logbook and electronic summary of sample results were reviewed for adherence to the Amec Foster Wheeler Standard Operating Procedure, "SOP for Hapsite GC/MS Field Instrument Operation and On-Site Sample Analysis of VOC Grab Samples," quality control results, and transcriptions/calculations.

The following items were reviewed:

- Calibration All initial calibrations and continuing calibrations associated with sample analyses were within control limits specified in the SOP.
- Data Transcriptions All sample results were accurately transcribed from the logbook to the electronic table of sample results.
- Final Result Calculation Calculations were performed on ten percent of the results and reporting limits to verify accurate conversion of concentrations from ppbv to ug/m3. Final review of the data indicates results were reported correctly.

The following minor difference between the SOP and analytical practice was noted:

• The SOP suggests analyzing sample duplicates at a frequency of 1 per 20 samples as well as recording the barometric pressure during each day of sample analysis. Since the analyses performed were for screening purposes only, no sample duplicates were analyzed and no barometric pressure readings were recorded in the instrument logbook. The goal of recording barometric pressure is to monitor over time any effect ambient pressure has on the trends for increased or decreased concentrations of contaminants, and since the analyses were performed as a screening tool, the lack of barometric pressure readings is interpreted to have no adverse impact on sample results.

Based on the review, the data meet the data quality objectives for screening data.

Reviewed by: Julie Ricardi

Julie Ricardi

November 17, 2015