Monroe Electronics 100 Housel Avenue Lyndonville, New York

Site Code No. 837013 **WA # D006130-18** 

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I, Nancy Garry, certify that I am currently a Licensed Professional Engineer as defined at 6 Part NYCRR Part 375 and that this Remedial Investigation Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER -10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.

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#### 1.0 INTRODUCTION

This report presents the results of the Remedial Investigation (RI) completed by HRP Associates, Inc. (HRP), under contract with the New York State Department of Environmental Conservation (NYSDEC) in connection with the Monroe Electronics site (the Site) in the Village of Lyndonville, Orleans County, New York (Figure 1). Monroe Electronics is listed as a Class 2 hazardous waste site on the NYSDEC Registry of Inactive Hazardous Waste Disposal Sites (Site No. 837013). This RI Report was prepared in accordance with the NYSDEC requirements in Work Assignment (WA) No. D006130-18 dated September 9, 2010 (NYSDEC, 2010) as amended.

Interpretations presented within this report are based primarily on the investigations described herein. Previous investigations completed by others at the site have been reviewed by HRP. Applicable data from these reports have been included in sections of this report.

### 1.1 PURPOSE OF REPORT AND TECHNICAL OBJECTIVES

The purpose of this RI Report is to present the findings of the RI completed by HRP during the period of May 2011 to June 2013 to characterize media potentially impacted by historic activities at the Monroe Electronics site. The Feasibility Study (FS) report for this work assignment will be submitted separately.

The primary objectives of the RI were to:

- Verify previous data generated during past investigations by others and identify geologic and hydrogeologic data gaps;
- Determine if onsite operations have resulted in surface or subsurface contamination;
- Delineate the vertical and horizontal extent of contaminated soil and groundwater;
- Evaluate historical and potentially continuing source area(s);
- Evaluate present and future human health exposure pathways; and

 Collect sufficient data to develop a set of remedial alternatives and recommend remedial options.

## 1.2 <u>SITE BACKGROUND</u>

#### 1.2.1 <u>Site Description</u>

The Monroe Electronics site is located at 100 Housel Avenue, in the Village of Lyndonville, Orleans County, New York (see Figure 2).

The site is improved with two primary structures, a 15,900 ft<sup>2</sup> rectangular manufacturing building occupied by Monroe Electronics and a 500 ft<sup>2</sup> residence located south of the manufacturing building. The manufacturing building is constructed on a concrete block and slab foundation with no basement. The manufacturing building is primarily a wood framed building, although a portion of the manufacturing building is a metal sided addition to west of the original building. The areas surrounding the building are improved with gravel parking areas to the south and east of the building and a gravel access road to the south towards Housel Avenue.

The area south of the buildings is vacant, cleared land, and wooded areas and the Bowman Apple/former DuPont site is located to the north. A small drainage swale traverses the northern property boundary from east to west. The site is connected to the municipal water supply.

At present, the areas surrounding the property include:

North: Nanko Foods, Inc. and H.H. Dobbins, Inc., then agricultural land.

West: Agricultural land.

South: Housel Avenue and LA Webber Middle-High School athletic field.

East: Lynhaven Cemetery, then residential neighborhoods.

# 1.2.2 <u>Disposal History</u>

Before Monroe Electronics operated at the site, the property was utilized by the former Barre Lime and Sulfur Company which operated at the Site starting in the 1920's. DuPont/Barre manufactured various agricultural sprays and dust mixtures at the property from 1943 to 1954. Waste lime and sulfur sludge were disposed in a nearby landfill which is part of the property currently owned by H.H. Dobbins, Inc. Monroe Electronics has occupied the site since 1972, manufacturing electronic instrumentation and subassemblies associated with the television industry including CATV switching products and emergency alerts. In September 1986, the company submitted a Hazardous Waste Disposal Questionnaire as a requirement of the Community Right to Know (CRTK) survey. In the CRTK survey, Monroe Electronics indicated that they dumped 1 to 4 tons of 1,1,1-Trichloroethane (TCA) at the site. The dumping area and resulting contamination source were not indicated on the survey form, however, recent conversations with

the owner/plant manager during the RI indicate that dumping may have occurred outside a former door on the west end of the original prior to the construction of a building addition in the early 1970s. The owner also indicated that TCA and waste oil was spread along the driveway on the east side of the building.

Potential pesticide and heavy metal residues associated with the former pesticide production activities were suspected to be present in shallow site soils. While investigations to date (in conjunction with the Lyndonville West Avenue Site, which included the Monroe Electronics property before the boundaries were modified) did not identify consequential amounts of pesticide and/or arsenic on the Monroe Electronics property, they did confirm the presence of groundwater contaminated with volatile organic compounds (VOCs). In 1999, the NYSDEC segregated the Monroe Electronics property from the Lyndonville West Avenue site description. Due to the groundwater contamination identified at the site, the NYSDEC listed the property as a Class 2 State Superfund Site in 2002 (Site No. 837013).

### 1.2.3 Previous Investigations

The following is a summary of portions of the 1997 Supplemental Environmental Assessment (SEA) and 2001 Supplemental Site Investigation (SRI) conducted by DuPont pertaining to the Monroe Electronics (Dupont, 1998; Dupont, 2001) property as well as the Site Investigation conducted in May 2000 by the NYSDEC (NYSDEC, 2001).

DuPont conducted the SEA in 1997 to identify the source of sulfur odors along West Avenue and characterize the Lyndonville West Avenue site. Findings of the SEA revealed that the Monroe Electronics property was not contributing to the nuisance sulfur odors. The 1997 investigation failed to identify a consequential amount of arsenic and pesticide at the former plant site (DuPont, 1998).

In May 2000, the NYSDEC mobilized to the site with Zebra Environmental to perform soil boring and temporary groundwater well installation and sampling activities. Based on the information provided to HRP, seven (7) direct push soil borings were advanced up to 12 feet deep (B-1 to B-7), and four (4) surface soil samples (0 to 3 inches deep) were collected. Soil samples were collected from each boring for VOCs, semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals. While elevated levels of pesticides such as 4',4' DDT (17 mg/kg or parts per million) and arsenic (419 mg/kg) were detected at one isolated location (SS-03) immediately north of the Monroe Electronics building, no widespread soil contamination was identified. Groundwater sampling did reveal several chlorinated solvents, including TCA and Trichloroethene

(TCE), 1,2-Dichloroethane (1,2-DCA), and 1,2-Dichloroethene (1,2-DCE), above New York State Class GA groundwater standards at the site.

In 2001, a SRI was completed by DuPont, which included characterizing areas not fully addressed during previous investigations (DuPont, 2001). Arsenic was detected above background levels in the drainage swale that runs along the north side of the Monroe Electronics property. Soils in this area were excavated as part of the Lyndonville West Avenue site cleanup in 2005.

Based on the results of the previous investigations at the Monroe Electronics facility, the primary contaminants of concern at the site are TCE, TCA, and their degradation products, which include 1,2-DCE, 1,2-DCA, 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethane.

#### 1.3 REPORT ORGANIZATION

The text of this report is divided into seven sections. Immediately following the text are the references, tables, figures and appendices. A brief summary of each report section is provided below.

**Section 1.0 Introduction:** The purpose of the RI report; the report organization; the Site background including Site description, Site history, summary of previous relevant studies, agency involvement; and scope of work are discussed.

**Section 2.0 Study Area Investigation:** Summarizes field activities associated with the RI, including surficial and subsurface soil investigations, groundwater investigations, soil gas investigations, contaminant source investigations, geological investigations, and well receptor survey. Technical correspondence documenting field activities are also summarized in this section.

**Section 3.0 Physical Characteristics of the Study Area:** Includes results of field activities to determine physical characteristics, including surface features, geology, soils, hydrogeology, demography and land use.

**Section 4.0 Nature and Extent of Contamination:** Presents the results of remidial investigation, both natural and chemical components and contaminants in the following media: soils, groundwater, and soil gas.

**Section 5.0 Contaminant Fate and Transport:** An evaluation of potential migration pathways and contaminant persistence and/or migration is presented.

**Section 6.0 Exposure Assessment:** Presents the results of a general human health and environmental impact assessment completed at the Site. The assessment includes an estimation of exposure point concentrations and a comparison of this data with established and published standards and guidance values (SGV).

**Section 7.0 Conclusions, Data Limitations, Recommendations:** Summarizes the results and findings of the RI.

**Section 8.0 References** 

#### 2.0 STUDY AREA INVESTIGATIONS

Study area investigations were completed to evaluate the surface and subsurface environmental conditions and to provide data pertaining to the nature and extent of contamination. A description of the study area investigations conducted during this RI is presented in this Section.

The scope of work for the Site was prepared by the NYSDEC, Division of Environmental Remediation. Deviations, based on field conditions are noted in Section 2.2. The investigation tasks described in the work plan utilized the NYSDEC's Technical Guidance for Site Investigation and Remediation (DER-10, dated May 3, 2010) for guidance. On April 9, 2011 the Site Investigation Work Plan was approved by the NYSDEC. As required by the NYSDEC, the scope of work incorporated the following site specific components:

- Field Activity Plan (FAP);
- Quality Assurance Project Plan (QAPP);
- Health and Safety Plan (HASP); and
- Community Air Monitoring Plan (CAMP).

Field work for this RI was conducted in several mobilizations to the Site and included the following:

- Initial site inspection (January 23, 2011);
- Installation and retrieval of passive soil gas samplers (May 23 through 27, 2011);
- Collection of surface soil samples and submittal for analysis (August 32011);
- Installation of soil borings and the collection and submittal for analysis of select soil samples (August 1 through 3, 2011);
- Installation of overburden and bedrock groundwater monitoring wells (August 4 through 12, 2011);
- Development of groundwater monitoring wells (August 15, 2011 and July 24, 2012);
- Sampling of groundwater monitoring wells and submittal for analysis (September 13 and 14, 2011);
- Global Positioning System (GPS) survey of groundwater monitoring wells and relative groundwater monitoring well elevation survey (September 9, 2011);
- Installation of sub-slab soil vapor sampling points and collection and submittal for analysis (May 26, 2011 and March 8, 2012);
- Installation of deep overburden monitoring wells and additional shallow overburden and bedrock monitoring wells (July 9 through 23, 2012);
- Quarterly sampling of groundwater monitoring wells and submittal for analysis (August 2012, December 2012, March 2013, and June 2013)
- Well receptor survey to verify public water use and identify possible well receptors within a half mile of the site (March 2013).

 A well pumping test was conducted for the bedrock aquifer wells to assess hydraulic properties between groundwater intervals and horizontally across the bedrock cross-section (June 2013).

#### 2.1 REMEDIAL INVESTIGATION FIELD ACTIVITIES

To determine the nature and extent of possible contaminants from the Monroe Electronics site, HRP installed passive soil gas points, soil borings, permanent groundwater monitoring wells, and temporary soil vapor points, as presented in the Work Assignment Issuance/Notice to Proceed. Table 1 outlines the RI sampling program including types of exploration, samples collected, and dates. Groundwater, soil, and soil vapor samples were collected from these points and submitted to a NYSDOH ELAP-certified laboratory for analysis. Sampling procedures are discussed throughout this Section. The analytical results for each medium are discussed in Section 4. Photographs of various site activities are included in Appendix A.

### 2.1.1 Geological Investigations

HRP observed the installation of soil borings, overburden and bedrock monitoring wells which are depicted in Figure 2. The horizontal coordinates (latitude/longitude) of these test locations are provided on Table 2. Soil borings were installed using a Geoprobe 6620 DT, direct push track-mounted drill rig. All boring installations were conducted by SJB, Inc. (SJB), a New York Licensed driller. Monitoring wells were installed by SJB and GeologicNY utilizing a track-mounted conventional drill rigs. Monitoring wells were installed using hollow stem auguring and NQ coring to drill through regolith and solid bedrock. HRP recorded regolith mineralogy and grain size, per the Udden-Wentworth Scale (1922), in boring logs.

# 2.1.2 Passive Soil Gas Sampling

Passive soil gas samplers were deployed in accordance with the FAP around the vicinity of the Site as a screening tool to determine areas of interest for future investigation tasks, such as soil samples, well installation, and soil vapor sampling. HRP selected Shumaker Consulting Engineering and Land Surveying, P.C (Shumaker) to install and retrieve the passive soil gas samplers. Vapor Trail Analytics, LLC (Vapor Trail) of Rochester, New York provided the single-tube axial passive sampler devices.

Shumaker installed twenty-five (25) Vapor Trail passive soil gas samplers (PSV-1 to PSV-25) in the area surrounding the former Monroe Electronics property. The passive soil gas sample locations were determined, with approval from the NYSDEC project manager, based on the results of previous subsurface investigations and were placed in accordance with the

procedures referenced in the FAP. Subsequently, the passive soil gas samplers were sent to Vapor Trail for analysis of VOCs via EPA method 8260B by thermal desorption-gas chromatography/mass spectrometry. Vapor Trail's passive soil gas survey report, including soil gas sampling logs, soil gas sample locations, and analytical results, is provided in Appendix B.

# 2.1.3 Sub Slab and Indoor Air Sampling

To evaluate the potential for exposures related to soil vapor intrusion (SVI), two rounds of sub-slab and ambient air sampling was conducted. The first event was conducted Shumaker on May 26, 2011. The initial sub-slab sampling locations were designated SSB (sub-slab). The second event was completed by HRP on March 8, 2012 and the sub-slab sampling locations were designated SVP (soil vapor point). Ambient air samples (indoor and outdoor) were also collected during each sampling event. In addition, during the August 2011 sampling event, crawl spaces were sampled at the residence and facility on-site.

Sub-slab and ambient air sampling locations are depicted on Figure 3. Appendix C contains the building questionnaire and various vapor intrusion sampling forms.

All sub slab soil vapor, indoor and outdoor air samples were collected in batch certified 1-liter SUMMA canisters. SUMMA canisters are stainless steel vacuum sampling devises. SUMMA canisters are initially charged with a vacuum pressure of approximately 30 inches of Hg and equipped with a regulator. When the regulator is opened, air is slowly allowed to enter the container until equilibrium is reached. During this investigation regulars were set to not exceed a flow rate of 0.2 liters per minute

Indoor and Outdoor Ambient Air samples were collected by placing SUMMA canisters in the breathing zone, approximately five feet above the ground. The attached regulators were then opened and the canisters were allowed to fill-up. Samples were collected over a period of 1 hour using a flow regulator set not to exceed 0.2 liters per minute.

In order to collect sub slab soil vapor samples, temporary soil vapor sampling points were installed. A one half inch diameter hole was advanced through the concrete slab and extended two inches below the slab. A new section of one quarter inch Teflon tubing was inserted into the hole and the annular space was filled with inert glass beads. The top of the hole was sealed with bentonite slurry to prevent sample dilution by indoor air.

Prior to sampling the integrity of the seal was tested with a helium tracer gas. After the temporary soil vapor sampling point was installed a syringe

was used to purge 60 ml of air from the tubing. This process assures that vapor being sampled was not introduced during the installation process. Following the purging a plastic enclosure was placed over the sample point while allowing the tubing to protrude from the enclosure. The enclosure was equipped with weather stripping to minimize the escape of tracer gas. Helium tracer gas was introduced to the enclosure to a concentration of at least 50%. Next the helium concentration was measured at the end of the tubing. If high concentrations of the tracer gas (>20%) were noted by the MGD-2002 helium detection meter, the seal of the probe would have been re-evaluated. When high concentrations of tracer gas did not exist within the implant, purging and sampling commenced. Samples were collected over a period of 24 hours using a flow regulator set not to exceed 0.2 liters per minute. After sampling was completed sampling equipment was removed from the borehole. Soil vapor boreholes were abandoned (backfilled) and patched with cement.

After sampling was completed the canisters were appropriately labeled and stored in a shipping container. The samples were sent under chain of custody to Columbia Analytical Services, an ELAP-approved laboratory. Samples were analyzed for VOCs via USEPA Method TO-15.

# 2.1.4 Surface Soil Sampling

HRP collected ten (10) surface soil samples around the site on August 3, 2011 to evaluate the ingestion exposure pathway and identify possible sources areas. Samples were collected using clean hand tools and submitted to the laboratory for analysis of Pesticides (via Method 8081A) and TAL Metals (via Method 6010) in accordance with the FAP. The surface soil sampling locations are depicted on Figure 2 and the results are discussed in Section 4.2.1.

### 2.1.5 Soil Boring Installation and Sampling

To evaluate the nature and extent of contamination in subsurface soils, HRP and SJB mobilized to the site August 1, 2011 and installed a total of thirty soil borings (SB-1 through SB-30). The borings were installed using a Geoprobe 54 Series and 6610DT direct push rig. Soil boring locations are depicted on Figure 2. Boring locations were determined by HRP and the NYSDEC, and were specified in the Monroe Electronics site-specific FAP. Soil boring logs are provided in Appendix D.

During the subsurface soil boring investigation, composite soil samples were collected by advancing a 5-foot long Macro Core sampler. Upon collection, each soil sample was examined in the field for physical evidence of contamination (e.g., odor, staining) and subjected to a headspace analysis for the presence of gross volatile organics using a photoionization detector

(PID) equipped with a 11.7 eV bulb. The PID was routinely calibrated as per the manufacturer's specifications for the contaminant(s) of concern or for an appropriate surrogate. The collected soil samples were placed in labeled jars, and stored on ice in a cooler for preservation. Decontamination procedures (i.e., wash with soap and tap water) were employed between samplings to minimize cross-contamination. Each soil boring was backfilled with the removed soil and/or bentonite chips upon completion of soil sampling. Soil boring logs describing the geologic conditions and PID screening results were maintained in the field, and are included in Appendix D.

Based on the results of the field screening and observations, HRP selected a minimum of one soil sample from the 2-foot interval exhibiting the highest PID reading in each soil boring for laboratory analysis. When no elevated PID readings were observed, the soil sample that corresponded with the water table interface was selected. HRP collected additional subsurface soil samples from borings that exhibited visual, olfactory, or evidence from field PID measurements. In total, HRP collected thirty-one subsurface soil samples and two duplicate samples. Each sample was sent to Test America, an NYSDOH ELAP approved laboratory, for analysis for VOCs via USEPA Method 8260B.

In addition, matrix spike/matrix spike duplicate (MS/MSD) samples were sent to the lab for analysis. The matrix spike is an aliquot of a field sample, which is fortified with the analyte(s) of interest and analyzed to monitor measurement bias associated with the sample matrix. A matrix spike and matrix spike duplicate are performed for every analytical batch.

# 2.1.6 Bedrock Coring

In order to evaluate the bedrock beneath the site, bedrock cores were obtained during the installation of bedrock wells. The bedrock coring locations are presented on Figure 2.

During bedrock boring activities, continuous rock core samples were collected at 5-foot intervals from the onset of competent rock to ten feet below. The rock core samples were collected using a track-mounted hollow-stem auger drill rig fitted with a diamond-studded, 5-foot length, HQ core (2.499 inch diameter) barrel. Upon retrieval from the core barrel, the rock cores were placed in wooden boxes and labeled appropriately. Each core was then reviewed for any physical evidence of contamination. In addition, the lithology and the presence of fractures were qualitatively described for each 5-foot core section. In total, HRP installed collected 10-foot core sections at nine borings (MW-1B, MW-2B, MW-3B, MW-5B, MW-6B, MW-7B, MW-9B, and MW-10B).

Bedrock coring logs are included in Appendix E. A detailed description of the bedrock cores and geology is included in Section 3.5 of this report.

### 2.1.7 <u>Groundwater Monitoring Well Installation</u>

To evaluate the condition of on-site groundwater, HRP and SBJ mobilized to the site August 4 through 15, 2011 and installed three overburden/bedrock well couplets (MW-3/3B, MW-5/5B and MW-6/6B), and three overburden wells (MW-1, MW-2 and MW-4). Six additional bedrock wells MW-1B, MW-2B, MW-7B. MW-8B, MW-9B and MW-10B), three additional shallow overburden wells (MW-7, MW-9 and MW-10) and three deep overburden wells (MW-2D, MW-7D and MW-10D) were installed from July 9 through 23, 2012. The additional wells were installed by GeologicNY.

Monitoring well locations were selected by HRP and approved by the NYSDEC. Figure 4 shows all of the monitoring wells installed during this phase of the investigation. The final installation of the wells were slightly modified based on field conditions from the proposed locations and type of well in the FAP. Monitoring well construction details are included as Appendix E.

# Methods of Installation - Shallow and Deep Overburden Wells

Overburden monitoring wells were installed at the site within unconsolidated material in order to allow for the monitoring of groundwater elevation and acquisition of groundwater samples for laboratory testing. Nine (9) two-inch diameter, PVC monitoring wells were installed in the shallow saturated zone beneath the site. Depths of the shallow monitoring wells ranged from 12 to 15 feet below grade. In addition, three two-inch diameter, PVC monitoring wells were installed in the deep saturated zone beneath the site. The three deep overburden wells (MW-2D, MW-7D, and MW-10D) were installed with 5 feet of 2-inch diameter Schedule 40 PVC well screen (0.010-inch slot) placed immediately above bedrock. Depths of the deep overburden wells ranged from 20 to 24 feet below grade. The overburden monitoring wells were installed using the procedures described in the FAP.

#### Methods of Installation - Bedrock Wells

Nine bedrock monitoring wells (MW-1B, MW-2B, MW-3B, MW-5B, MW-6B, MW-7B, MW-8B, MW-9B, and MW-10B) were installed at the site within competent bedrock in order to allow for the monitoring of groundwater elevation and acquisition of groundwater samples for laboratory testing. To minimize interaction with the vadose zone, 4-inch diameter steel casing was installed from the ground surface and was set a minimum of 5 feet into competent rock. Subsequently, bedrock borings were advanced and rock core samples were collected. The bedrock monitoring wells were installed using the procedures described in the FAP. Bedrock Coring logs are included as Appendix F.

### Monitoring Well Survey

The horizontal location and elevation of each monitoring well was surveyed. The survey elevations of the first round of monitor wells installed was completed by Schumaker, a NYS licensed surveyor. To determine the elevations of the second round of monitor wells, HRP utilized an auto level mounted to a tripod to conduct a relative groundwater elevation survey across the site. Each monitoring well's measuring point (black mark on steel casing or PVC riser) was surveyed relative to the established elevation of a nearby well that had been surveyed by Shumaker to establish the measuring point elevation.

# 2.1.8 Well Development

HRP mobilized to the site on August 15, 2011 and July 24, 2012, to develop the groundwater monitoring wells after installation. HRP pumped the wells utilizing a submersible whaler pump and polyethylene tubing. This method was chosen as the appropriate well development method based on water depth, well productivity, and sediment content of the water. Non-disposable equipment (i.e. water level indicator) was decontaminated prior to use in each well. Care was taken not to introduce contaminants to the equipment during installation. All development waters were emptied into a clean 5-gallon pail for approximate volume measurement and were then discharged onto the ground. Based on a discoloration observed during development, purge water from MW-6 was collected in a 55-gallon metal drum. The volume of water, depth to bottom of the well, and other visual observations were recorded in a field notebook.

Well development was discontinued when field parameters met the following conditions:

- Well water had achieved a turbidity value of less than 50 NTU; and
- Well development was supplemented by measurements of temperature, pH, and specific conductance. Development was complete when these parameters stabilized for a minimum of three consecutive readings at 10 percent variability or less.

# 2.1.9 Groundwater Sampling

To evaluate the groundwater quality beneath the site, groundwater samples were collected from each of the installed groundwater monitoring wells. Depth to water was measured from each well's surveyed measuring point prior to purging. Table 3 presents depth to water measurements and various groundwater elevations calculated for each round of sampling. The groundwater elevations were used to construct groundwater contour maps

and interpret the groundwater flow direction at the site. To collect representative groundwater samples, monitoring wells were adequately purged prior to sampling. A minimum of 48 hours following the development of each well elapsed prior to groundwater sampling. Low flow sampling equipment and procedures were used to purge and sample the monitoring wells as described in the FAP. Groundwater sampling data sheets are included in Appendix G.

Groundwater samples were collected from each existing well in September 2011, August 2012, December 2012, March 2013, and June 2013.

Groundwater samples from the first round of sampling, including a duplicate and MS/MSD, were sent to Test America Laboratory, Inc., an NYSDOH ELAP-approved laboratory, for analysis of Target Compound List (TCL) VOCs, Pesticides, 8 RCRA Metals, Mercury, Arsenic, Iron, and Monitored Natural Attenuation (MNA) parameters. During subsequent sampling events, the list of analytical parameters was narrowed and only TCL VOCs, Arsenic, Iron, and MNA parameters were analyzed.

### 2.1.10 Well Receptor Survey

A well receptor survey was completed on March 14, 2013 to verify public water use and identify possible well receptors within a half mile of the site. This included a review of visual wellhead evidence, municipal records research, interviews with water department personnel, and the review of publicly available water supply maps. The survey resulted in the identification of one private water supply well located approximately a quarter miles from the site. The NYSDOH collected a sample from the well in April 2013 and the results are presented in Section 4.4

# 2.1.11 Long-Term Water Level Monitoring Survey

On March 13, 2013 HRP installed In-Situ® Level TROLL® electronic water level loggers (TROLLs) in each of the three MW-2 series monitoring wells to evaluate groundwater levels at three hour intervals for approximately three months. The TROLLS were removed prior to the start of the pumping test in June 2013. The results of the long-term monitoring level survey are discussed in Section 3.6.

#### 2.1.12 Well Pumping Test

An aquifer pumping test was conducted on a bedrock aquifer monitoring well (MW-7B) to assess hydraulic properties between the groundwater zones. On June 9, 2013 HRP mobilized to the site to install nine TROLLs in selected wells.. TROLLs were installed in MW-1B, MW-2B, MW-3B, MW-5B,

MW-6B, MW-7, MW-7D, MW-7B and MW-8. The TROLLs were programmed to record depth to water measurements at one minute intervals and were left in place throughout the testing and recovery period.

On June 10, 2013 a Geotech SS Geosub Pump submersible pump was placed in HRP-MW-7B. The pump was paired with a Geotech SS Geosub Controller in order to allow adjustment of the flow rate. The flow rate was measured with a calibrated bucket and stopwatch. HRP-MW-7B was chosen for the pumping test due to its central location onsite. HRP-MW-7B was pumped for a total of 394 minutes. Discharge from the pumping test was contained in a 27,000 gallon frac tank for future offsite disposal. The results of the pumping test are discussed in Section 3.6.

### 2.1.13 Investigation Derived Waste

During the installation of the overburden and bedrock wells, investigation derived waste (IDW) was generated, which consisted of soil, drill cuttings, and groundwater. The IDW was placed into 55-gallon drums and stored in the rear parking lot of 100 Housel Avenue. During the length of the RI, six drums of IDW were generated.

The IDW drums were profiled and then transported off-site using non-hazardous waste manifests. HRP subcontracted with TIER Environmental, LLC, 5745 Lincoln Hwy, Gap, PA to arrange for the removal and transportation of the IDW to properly permitted treatment, storage, or disposal facility. Based on the representative samples of cuttings and spoils that were analyzed it was determined that the materials would be classified as non-regulated material.

The IDW was disposed of at Waste Recovery Solutions Inc. located at 342 King Street in Myerstown, PA (EPA ID#PA000043026), Green Environmental Solutions, Inc. located at 8335 Quarry Rd., Niagara Falls, NY (EPA ID#NYR000013088) and VEXOR Technology, Inc. located at 855 West Smith Rd., Medina, OH (EPA ID#OHD077772895).

### 2.1.14 Community Air Monitoring

Community air monitoring was performed in accordance with the CAMP during intrusive activities. Real-time monitoring was conducted for VOCs and particulates (i.e., dust) at the downwind perimeter of each designated work area during drilling activities. Its intent was to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a result of investigative and remedial work activities. Additionally, the CAMP

helps to confirm that work activities did not spread contamination off-site through the air.

### 2.2 <u>DEVIATIONS FROM THE WORK PLAN</u>

HRP deviated from the RI Work Plan only with approval from the NYSDEC. Deviations included changes to the location of monitoring wells and indoor air samples. This was changed due to lack of access to private property and conflicts with underground utilities or substructures.

As part of the original scope of work HRP was tasked with completing a Fish and Wildlife Impact Analysis (FWIA) through Step II. As the RI field work began, the NYSDEC directed HRP that the FWIA would not be required.

It is HRP's opinion that these deviations have not affected our ability to identify and determine the nature and extent of contamination at the site.

# 2.3 <u>TECHNICAL CORRESPONDENCE</u>

No formal technical correspondence documenting field activities was identified between HRP and the NYSDEC. However, HRP and the NYSDEC project manager kept in constant coordination throughout the RI field work and other activities via email and telephone conversations. Any changes to the work plan and items encountered in the field were relayed to the NYSDEC project manager immediately and if approval was needed for a change it was obtained prior to it being completed.

#### 3.0 PHYSICAL CHARACTERISTICS OF THE SITE

The following sections discuss the results of field activities to determine physical characteristics.

# 3.1 SURFACE FEATURES: NATURAL AND MANMADE FEATURES

The Monroe Electronics site is slightly over 10 acres in size, according to the Orleans County Assessor's office. The site is generally flat. There is a drainage ditch that runs from east to west located along the northern property line. The site is improved with two primary structures, a 15,900 ft² rectangular manufacturing building occupied by Monroe Electronics and a 500 ft² residence located south of the manufacturing building. The manufacturing building is constructed on a concrete block and slab foundation with no basement. The manufacturing building is primarily a wood framed building, although a portion of the manufacturing building is a metal sided addition to west of the original building. The area surrounding the building consists of a gravel driveway and a lawn.

### 3.2 METEOROLOGICAL OBSERVATIONS

Throughout HRP's on-site investigations, the weather on-site varied due to seasonal temperature changes and precipitation. HRP collected daily outdoor temperature, rain fall measurements (as applicable), and wind direction readings each day that drilling activities were ongoing. In addition, visual and thermal observations (i.e. ambient temperature readings) were also noted and recorded in field notebooks. In addition, precipitation data was collected for March 2013 to June 2013 to evaluate with the water levels collected from the level TROLLS.

#### 3.3 DEMOGRAPHY AND LAND USE

The Village of Lyndonville is located in Orleans County, New York, which is approximately 40 miles west northwest of Rochester, New York and 38 miles northeast of Buffalo, New York. According to the United States census of 2000, there were 862 people, 325 households, and 228 families residing in the village. The population density was 842 people per square mile. In addition, there were 344 housing units at an average density of 336 per square mile.

Land use at the site and in the surrounding area is mixed industrial, residential and agricultural. The site is located along the north side of Housel Avenue, west of the intersection with Route 63, in the Village of Lyndonville.

#### 3.4 SURFACE WATER HYDROLOGY

No open bodies of water (e.g. ponds, wetlands, streams, etc.) or stormwater detention or retention ponds were observed on the site. However a drainage ditch is present on the northern edge of the property. As such, surface water investigations at the subject site were not included in the scope of this RI.

### 3.5 GEOLOGY

### 3.5.1 Surficial Geology

Surficial geological materials were encountered throughout the site and surrounding area to varying depths below grade. Depth to the bedrock surface in soil borings and monitoring wells ranged from 20 to 32 feet below ground surface (bgs). Regolith (overburden) was variable across the site, however, generally consisted of sand near the surface grading into silty sand, then silt and clay at depth. Boring logs prepared during this investigation are presented in Appendix D.

Based on the information gathered during the RI, the subsurface geology consists of a clay and silt layer that is an approximate 20-foot layer that undulates slightly (2 to 5-foot difference in approximately depth) across the site in a west to east direction, beginning at 8 to 15 feet bgs. It should be noted that during the investigation, clay was observed more frequently near the surface on the eastern side of the site. Beneath the clay and silt layer is a weathered shale layer and then bedrock (red shale, green & red shale and sandstone).

According to the Surficial Geology Map of New York - Niagara Sheet (1989), the material underlying the site is classified as lacustrine silt and clay (lsc). The material is described as: Generally laminated silt and clay, deposited by proglacial lakes, generally calcareous, potential land instablilty, variable thickness (up to 100 meters). HRP's observations are generally consistent with the mapped descriptions.

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), soils are the site and surrounding area are classified as Arkport very fine sandy loam (ArB). HRP's observations are generally consistent with the mapped descriptions.

### 3.5.2 Bedrock Geology

Competent, indurated and lithified bedrock was encountered in the nine borings that were converted to bedrock monitoring wells. At each bedrock boring, a 10-foot section of HQ core, consisting of two 5-foot sections of rock, was collected for analysis. Bedrock at the site and surrounding area

lithologically consisted of a red sandstone or shale. In general, bedrock was largely competent with relatively few fractures with the exception of two highly weathered bedrock cores, MW-9B and MW-10B. Cross-section A-A' and B-B' of this report (Figures 5a and 5b, respectively), depict the geology on-site and off-site based on the subsurface investigation. Based on the information gathered during the RI, the bedrock at the north end of the investigation, off-site at MW-10B, has the highest elevation of bedrock. There is an approximate 6-foot elevation difference between the bedrock interface at MW-10B and MW-5B (northernmost bedrock monitoring well onsite). The bedrock interface onsite from MW-5B (northern most bedrock well installed on-site) to MW-1B (southern most bedrock well installed on-site, approx. in the central portion of the property) has an approximate difference of 2 feet in elevation.

According to the Bedrock Geology Map of New York State - Niagara Sheet (1970), bedrock underlying the site and surrounding area is classified as the Ordovician aged Queenston Shale, part of the Medina Group and Queenston Formation (Oq). The Queenston shale is described as "silty red shale" and HRP's observations are generally consistent with the mapped descriptions.

#### 3.6 HYDROGEOLOGY

### 3.6.1 Groundwater Elevations

During the installation of soil borings, groundwater was encountered at depths on average ranging from 4 to 7 feet bgs. Following installation of monitoring wells, groundwater was observed in the onsite overburden wells at depths ranging from 0.38 to 10.1 feet bgs, in deep overburden wells ranging from 2.4 to 10.92 feet bgs, and in bedrock wells depths ranging from 2.94 to 12.43 feet bgs.

The groundwater was observed with no odor, no sheen, and no free product with the exception of a minor sulfur odor observed during purging of MW-10 and a yellow discoloration observed during the development of MW-6.

HRP measured groundwater levels in onsite wells on several sampling events: September 2011, August 2012, December 2012, March 2013, and June 2013. Overall, the highest water levels were observed during the March 2013 sampling event and the lowest water levels were observed during the August 2012 sampling event. The groundwater levels recorded during these five events are presented in Table 3.

Based on the results of the water level measurements, groundwater flow in the overburden was interpreted to be generally to the north-northwest. Groundwater flow in the bedrock is very difficult to interpret because the measured potentiometric surfaces are somewhat flat and shifting. Groundwater elevation contours and flow diagrams developed from a few representative sampling events are presented for overburden and bedrock aquifers in Figures 6a through 6f.

To further assess fluctuations in groundwater elevations, a three-month water level monitoring survey was conducted. TROLLS were installed in the three MW-2 series monitoring wells on March 13, 2013 to evaluate groundwater levels at three hour intervals for approximately three months. The TROLLS were removed prior to the start of the pumping test in June 2013. The results of the long term groundwater elevation survey are presented in Figure 7. The results of the test indicate that water levels for overburden, deep overburden, and bedrock wells all have similar trends throughout the testing period. A spike in water levels occurred following multiple rainfall events in early April 2013 and early to mid-June 2013. It should be noted that during the investigation, the groundwater level in the MW-2 series wells fluctuated by 2 to 4 feet during a single rainfall event. This fluctuation in groundwater levels can be seen on Figure 7. Otherwise, water levels tended to gradually decrease throughout the testing period.

# 3.6.2 Pumping Test

An aquifer pumping test was conducted on a bedrock aquifer monitoring well (MW-7B) to assess hydraulic properties between groundwater zones. The pumping test began at 8:51 on June 10, 2013. The initial pumping rate was 1.15 gallons per minute (gpm), however due to significant initial drawdown in the pumping well the flow rate was lowered over the course of the test to a final stabilized rate of 0.09 gpm. A total of 25.0 feet of drawdown was observed in the pumping well for a specific capacity of 0.0036 gallons per minute per foot. Only 0.03-foot of drawdown was observed during the last 40 minutes of the test, after the final rate adjustment had been made. The pump in MW-7B was shut down at 15:28 on June 10, 2013. The water level was allowed to recover overnight. 90% recovery occurred at 19:26 and 100% recovery at 6:58 on June 11, 2013.

Drawdown in observation wells is detailed below:

Well ID	Approximate Distance from	Observed Drawdown
	MW-7B (feet)	(feet)
MW-1B	184	0
MW2B	156	0.14
MW-3B	60	0.24
MW-5B	120	0
MW-6B	135	0
MW-7	10	0
MW-7D	12	0
MW-8	464	0

Hydrographs showing water level measurements from the pumping well and three observation wells can be found in Figure 8.

#### 4.0 NATURE AND EXTENT OF CONTAMINATION

Test America Laboratories, Inc. of Buffalo, New York provided the analytical laboratory services for the soil and groundwater analysis. Vapor Trail Analytical, LLC of Rochester, New York provided the analytical laboratory services for the Passive Soil Vapor analysis. Columbia Analytical Services, Inc. of Rochester, New York provided the analytical laboratory services for the soil vapor intrusion analysis. Nancy Potak of Greensboro, Vermont, provided data validation services for this project. Data qualifiers and their definitions, as defined by the data validator are included in the Data Usability Summary Reports (DUSRs) found in Appendix H. Compounds detected in the various media tested during this RI were compared to the following New York State guidance documents and standards:

- Groundwater: NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1); Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations dated October 1993; Revised June 1998; ERRATA Sheet dated January 1999; and Addendum dated April 2000 (NYSDEC Class GA).
- NYSDEC Regulation, 6 NYCRR Subpart 375-6, "Remedial Program Soil Cleanup Objectives" which applies to the development and implementation of the remedial programs for soil and other media set forth in subparts 375-2 through 375-4 [Inactive Hazardous Waste Disposal Site Remedial Program, Brownfield Cleanup Program, and Environmental Restoration Program] and includes the soil cleanup objective tables developed pursuant to ECL 27-1415(6).
- NYSDOH Soil Vapor Guidance for Evaluating Soil Vapor Intrusion in the State of New York dated October 2006 prepared by New York State Department of Health, Center of Environmental Health, Bureau of Environmental Exposure Investigation.

As a result, soil analytical results for this investigation were compared against 6 NYCRR Part 375-6 standards for Unrestricted, Commercial, and Industrial Soil Cleanup Objectives (SCOs).

#### 4.1 SOIL VAPOR INVESTIGATION

#### 4.1.1 Passive Soil Gas Survey

Twenty-five (25) passive soil gas samplers were installed around the Site on May 23, 2011 and retrieved four days later. The samples were analyzed for TCL VOCs by Vapor Trails Analytics using modified USEPA Method TO-17. The mass of retained on the sorbent media is reported in nanograms (ng). Assessment using this approach is strictly qualitative.

The passive soil vapor sampling detected TCE (37,864 ng) immediately east of the building and lower concentrations of TCE (38 ng) to the north of the building. There were also detections of Tetrachloroethene (PCE) (4,086 ng) immediately east of the building and lower levels of PCE (60 and 66 ng) at two locations south of the building.

In addition, samples containing Total Petroleum Hydrocarbons (TPH) were observed on all sides of the building. The full passive gas sampling report, including analytical data and mass results maps (provided by Vapor Trail), is included in Appendix B.

### 4.1.2 Soil Vapor Intrusion Sampling

In an effort to assess the potential for exposures related to soil vapor intrusion (SVI), sub-slab and ambient air samples were collected within the Monroe Electronics facility over two events as described in Section 2. VOC compounds were detected in soil vapor indoor air, and outdoor air sampling locations. These include chlorinated compounds (commonly associated with solvent degreasing), and non-chlorinated compounds (commonly associated with petroleum products). See Figure 3 for SVI sample locations and Table 4 for sample results. Results are presented in micrograms per cubic meter (ug/m3).

The results of the May 2011 soil vapor intrusion sampling event showed TCE and TCA at maximum concentrations of 600 ug/m3 and 2,000 ug/m3, respectively. In March 2012, the maximum levels of TCE and TCA detected in sub-slab samples were 460 ug/m3 and 450 ug/m3, respectively, The highest TCE concentrations were detected at near the southeastern corner of the building while the highest concentrations of TCA measured in soil vapor were observed at the western end of the building. TCA degradation products (namely 1,1-DCA, 1,2-DCA, and 1,1-DCE) were also detected at both ends of the building.

Soil vapor results were reviewed as a whole in conjunction with results of other environmental sampling media including passive gas survey, subsurface soil results, and groundwater results. The findings indicate the soil vapor media has been impacted by an unknown source of chlorinated and non-chlorinated compounds.

### 4.2 SOILS

# 4.2.1 Surface Soils

Ten surface soil samples were collected at ten locations during the RI on August 3, 2011. The samples were analyzed for Pesticides (via

Method 8081A) and TAL Metals (via Method 6010). One sample, SS-9 had a duplicate sample submitted. Sample results are presented below and in Table 5.

#### Surface Soils for Pesticides

Nine pesticides were detected among the ten surface soil samples tested. The only sample that did not contain pesticides was collected from the western side of the property near the tree line. Six pesticides (4-4'-DDD, 4-4'-DDE, 4-4'-DDT, Dieldrin, Endrin, beta-BHC) were detected at levels above Part 375-6 Protection of Public Health, Unrestricted Soil Cleanup Objectives (SCOs). There were no exceedances of the Part 375-6 Protection of Public Health, Commercial or Industrial SCOs. Analytical results for pesticides in surface soil samples are shown on Figure 9 and listed in Table 5.

### Surface Soils for TAL Metals

A total of twenty metals were detected. Four metals (Arsenic, Chromium, Copper, and Lead) were detected at levels above Unrestricted SCOs. Arsenic was also detected at levels above the Commercial and Industrial SCOs. Five detections of Arsenic above Industrial SCOs were found in samples located on the eastern side of the property and one was located on the western side of the property. Analytical results for metals in the surface soil samples are shown on Figure 9 and listed in Table 5.

#### Summary – Surface Soils

In summary, nine pesticides and twenty metals were detected among the ten samples analyzed. Six pesticides and four metals were found at concentrations exceeding Unrestricted SCOs. Arsenic was also detected at levels exceeding the Industrial SCOs. The exceedance of Unrestricted SCOs was detected in surface soil samples throughout the site. Exceedances of the Industrial SCO for Arsenic were detected in surface soil samples on the eastern side of the site, with one sample located adjacent to the western side of the driveway, closer to Housel Avenue.

#### 4.2.2 <u>Subsurface Soils</u>

Thirty-one subsurface soil samples were collected at thirty boring locations during the RI between August 1 and August 3, 2011. All thirty-one samples were analyzed for TCL VOCs (via USEPA Method 8260B) and three samples were also analyzed for TAL Metals (via USEPA Method 6010) and Pesticides (via Method 8081A). Sample results are presented below.

### Subsurface Soils for VOCs

Sixteen VOCs were detected among the thirty-one subsurface soil samples collected. Two VOCs (1,2-DCA and Acetone) in the subsurface soil were detected at concentrations that exceed Part 375-6 Protection of Public Health, Unrestricted SCOs. The two soil samples with elevated VOCs were collected from beneath the driveway on the property, just south of the main entrance to the building.

There were no exceedances of VOCs in the subsurface soil above Part 375-6 Protection of Public Health, Commercial or Industrial SCOs.

VOCs detected include TCA, 1,1,2-Trichloroethane, 1,1-DCA, 1,1-DCE, 1,2-DCA, 2-Butanone (MEK), Acetone, Carbon Disulfide, Cyclohexane, Isopropylbenzene, Methylcyclohexane, Methylchec Chloride, PCE, Toluene, TCE, and Xylene. Analytical results for VOCs in subsurface soil samples are listed in Table 6 and on Figure 10.

### Subsurface Soils for TAL Metals

Three subsurface soil samples were analyzed for total TAL metals. A total of nineteen metals were detected. Three metals (Arsenic, Chromium and Copper) were detected at levels above the Unrestricted SCOs. No metals were detected at concentrations exceeding the Commercial or Industrial SCOs. Analytical results for metals in subsurface soil samples collected are listed in Table 5 and on Figure 9.

#### Subsurface Soils for Pesticides

Three subsurface soil samples were analyzed for pesticides. A total of four pesticides were detected. Two pesticides (4-4'-DDE and 4-4'-DDT) were detected, at one location, with concentrations exceeding Unrestricted SCOs. There were no exceedances of Commercial or Industrial SCOs. Analytical results for pesticides in subsurface soil samples are listed in Table 5 and on Figure 9.

#### Summary - Subsurface soils

In summary, sixteen VOCs, nineteen metals and four pesticides were detected among the thirty-one subsurface soil samples analyzed. Two VOCs (1,2-dichloroethane and acetone), three metals (Arsenic, Chromium and Copper) and two pesticides (4-4'-DDE and 4-4'-DDT) were detected in the subsurface soil at concentrations exceeding the Unrestricted SCOs.

The exceedances of metals and pesticides above Unrestricted SCOs were detected in soil borings adjacent to the western side of the on-

site building. The soil borings taken south of the building, in the driveway, exceeded the Unrestricted SCO for 1,2-DCA.

No VOCs, metals, or pesticides were detected in the subsurface soil samples at concentrations exceeding Commercial or Industrial SCOs.

### 4.3 **GROUNDWATER**

Groundwater samples were collected from all of the wells on-site. The groundwater samples were collected from the original overburden monitoring wells and bedrock wells, deep overburden monitoring wells, additional installed shallow overburden wells, and bedrock monitoring wells installed in July 2012. The sampling events occurred in September 2011; August 2012; December 2012; March 2013; and June 2013.

All the groundwater samples were analyzed for TCL VOCs (via USEPA Method 8260B). In addition, groundwater samples collected from the six original overburden wells were analyzed for Pesticides (via USEPA Method 8081), TAL Metals (via USEPA Method 6010), and Cyanide. In addition, for QA/QC purposes, a duplicate sample and a MS/MSD sample were also submitted with each batch of groundwater samples.

Test results for the analysis of the groundwater samples are discussed below. Contaminant concentrations are presented in micrograms per liter (ug/L) or parts per billion (ppb).

# 4.3.1 <u>September 2011 Groundwater Sampling – First Round</u>

Eleven groundwater samples were collected in September 2011 from the seven original overburden monitoring wells (MW-1 through MW-7) and from the four bedrock monitoring wells (MW-3B, MW-5B, MW-6B, and MW-7B).

#### VOC Results

There were thirteen VOCs detected among the four bedrock groundwater samples tested. Of the thirteen VOCs detected, seven (TCA, 1,1,2-Trichloroethane, 1,1-DCA, 1,1-DCE, 1,2-DCA, Chloroethane, and cis-1,2-DCE) exceeded the NYSDEC Class GA, standard for groundwater. All other VOCs detected did not exceed their respective Class GA criteria. Analytical results for VOCS in the September bedrock groundwater samples are listed in Table 7.

There were twelve VOCs detected among the seven overburden groundwater samples tested. Of the twelve VOCs detected, six exceeded the Class GA standard for groundwater, all of which are chlorinated VOCs. The six VOCs that exceeded their respective TOGS

standards included: TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE and TCE. All other VOCs detected did not exceed their respective Class GA standard. Analytical results for VOCs in the September overburden groundwater samples are listed in Table 7.

#### Pesticide Results

Six pesticides were detected among the seven overburden groundwater samples collected. Two of the six detected pesticides (alpha-BHC and Dieldrin) were found at concentrations exceeding the Class GA Standards. The pesticides results for the groundwater sample are listed in Table 8.

#### Metals Results

Five metals were detected among the seven overburden groundwater samples collected. None of the metals were detected at concentrations exceeding their respective Class GA standards with the exception of arsenic detected at 0.03 mg/L (GA criteria 0.025 mg/L) in MW-5 to the north of the building. Other detected metals include Barium, Cadmium, Chromium and Lead. Metals results for groundwater are listed in Table 9.

## <u>Summary Analytical Results- Groundwater (Sept.2011)</u>

In summary, twelve VOCs were detected among the seven overburden groundwater samples tested. Of the twelve VOCs detected, six exceeded the Class GA standard for groundwater, all of which are chlorinated VOCs (CVOCs). The results of the overburden well sampling in general detected the highest concentrations of CVOCs in MW-2, MW-3, MW-6 and MW-7 located in close proximity to the western, southern, and eastern perimeter of the site building.

In addition, six pesticides were detected among the seven overburden groundwater samples collected. Two of the six detected pesticides were found at concentrations exceeding the Class GA standards. The highest concentrations of pesticides were found in MW-3, MW-4, MW-6 and MW-7 located in close proximity to the western, southern, and eastern perimeter of the site building.

Five metals were detected among the seven overburden groundwater samples collected. None of the metals were detected at concentrations exceeding their respective Class GA standards with the exception of Arsenic detected in MW-5, located in close proximity to the northern perimeter of the site building.

Thirteen VOCs detected among the four bedrock groundwater samples tested. Of the thirteen VOCs detected, seven exceeded the Class GA standard for groundwater, all of which are CVOCs.

The results of the bedrock well sampling in general detected high concentrations of CVOCs in all four monitoring tested, with the highest concentrations of CVOCs in MW-3B and MW-5B located in close proximity and down gradient of the western and northern perimeter of the site building. Bedrock wells were not sampled for pesticides and metals.

# 4.3.2 August 2012 Groundwater Sampling – Second Round

Twenty-one (21) groundwater samples were collected on August 7 and 8, 2012 from the existing groundwater monitoring wells and the additional monitoring wells installed by HRP during July 2012. All the groundwater samples were analyzed for TCL VOCs via USEPA Method 8260B.

# **VOC** Results

A total of sixteen (16) VOCs were detected among the twenty-one (21) groundwater samples collected in August 2012. Of the VOCs detected, nine exceeded the Class GA standard for groundwater, and one or more CVOCs were detected within each well sampled with the exception of MW-1, MW-4 (located on the southern portion of property), MW-5 (immediately north of the site building), and MW-7 (immediately south of the site building). The exceeding CVOCs detected include, and are not limited to:

- TCA was not detected in the bedrock wells above SCGs, but was detected ranging from ND to 530 ug/L (MW-3) in the overburden wells, and ND to 22 ug/L (MW-7D) in the deep overburden wells;
- 1,1-DCA ranging from ND to 270 ug/L (MW-9) in the overburden wells, 4.5 ug/L (MW-1B) to 530 ug/L (MW-5) in the bedrock wells, and 4.5 ug/L (MW-10B) to 1,400 ug/L (MW-7D) in the deep overburden wells:
- 1,1-DCE was not detected in bedrock wells above SCGs, but was detected ranging from ND to 160 ug/L (MW-3) in the overburden wells, and ND to 33 ug/L (MW-2D) in the deep overburden wells;
- 1,2-DCA ranging from ND to 1.1 ug/L (MW-9) in the overburden wells, 1.8 ug/L (MW-1B) to 70 ug/L (MW-5B) in the bedrock wells, and 13 ug/L (MW-10D) to 56 ug/L (MW-7D) in the deep overburden wells:
- Chloroethane was not detected in the overburden wells above SCGs, but was detected ranging from 8.3 ug/L (MW-6B) to 54 ug/L (MW-3B) in the bedrock wells, and ND to 170 ug/L (MW-2D) in the deep overburden wells;
- cis-1,2-DCE was not detected in the deep overburden wells above SCGs, but was detected ranging from ND to 39 ug/L (MW-6) in the overburden wells, and ND to 6.1 ug/L (MW-6B) in the bedrock wells;

- trans-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 44 ug/L (MW-6) in the overburden wells; and
- TCE was not detected in the deep overburden wells or bedrock wells above SCGs, but was detected ranging from ND to 270 ug/L (MW-9) in the overburden wells.

The Class GA groundwater standard is 5 ug/L for TCA, 1,1-DCA, 1,1-DCE, Chloroethane, cis-1,2-DCE, trans-1,2-DCE, and TCE, and 0.6 ug/L for 1,2-DCA. Results for this round of groundwater sampling are listed in Table 7.

# Summary Analytical Results- Groundwater (August 2012)

In summary, a total of sixteen (16) VOCs were detected within the twenty-one (21) groundwater samples collected in August 2012. Of the VOCs detected, nine exceeded the Class GA standard for groundwater. The results of the overburden well sampling in general detected the highest concentrations of total CVOCs in MW-6 and MW-9 located in the eastern portion of the site.

The results of the deep overburden well sampling in general detected the highest concentrations of CVOCs in MW-2D and MW-7D located west of the site building and MW-7D located south of the site building.

The results of the bedrock well sampling in general detected the highest concentrations of CVOCs in MW-3B to the west of the building and MW-5B located along the northern property boundary and down gradient of the site building.

In summary the analytical results from the August groundwater sampling on-site indicate that the three water levels sampled (overburden 20-30', deep overburden 30-40', and bedrock 40-50') have been impacted with CVOCs.

# 4.3.3 <u>December 2012 Groundwater Sampling – Third Round</u>

Twenty-one (21) groundwater samples were collected between December 20 and 21, 2012 from the groundwater monitoring wells onsite. All the groundwater samples were analyzed for TCL VOCs via USEPA 8260B, iron, and monitored natural attenuation (MNA) parameters.

#### Metals Results

Iron was detected among the twenty-one (21) groundwater samples collected in December 2012. However, Iron concentrations did not

exceed NYSDEC Class GA Criteria. Metals results for groundwater are listed in Table 9.

## **VOC Results**

A total of thirteen (13) VOCs were detected within the twenty-one (21) groundwater samples collected in December 2012. Of the VOCs detected, nine exceeded the Class GA standard for groundwater, and one or more CVOCs were detected within each well sampled with the exception of MW-1, MW-4 (located on the southern portion of property), and MW-5 (immediately north of the site building). The exceeding CVOCs detected include, and are not limited to:

- TCA ranging from ND to 25 ug/L (MW-2) in the overburden wells, ND to 30 ug/L (MW-2D) in the deep overburden wells, and ND to 5.5 ug/L (MW-1B) in the bedrock wells;
- 1,1-DCA ranging from ND to 190 ug/L (MW-6) in the overburden wells, 6.8 ug/L (MW-10B) to 650 ug/L (MW-3B) in the bedrock wells, and 0.65 ug/L (MW-10D) to 1,300 ug/L (MW-2D) in the deep overburden wells;
- 1,1-DCE ranging from ND (MW-1) to 16 ug/L (MW-6 and MW-9) in the overburden wells, ND to 25 ug/L (MW-3B) in the bedrock wells, and ND to 77 ug/L (MW-2D) in the deep overburden wells;
- 1,2-DCA ranging from ND to 1.6 ug/L (MW-10) in the overburden wells, 3.6 ug/L (MW-6B) to 84 ug/L (MW-3B) in the bedrock wells, and 1.8 ug/L (MW-7D) to 46 ug/L (MW-2D) in the deep overburden wells:
- Chloroethane was not detected in the overburden wells above SCGs, but was detected at 13 ug/L (MW-10B) to 230 ug/L (MW-3B) in the bedrock wells, and ND to 490 ug/L (MW-2D) in the deep overburden wells;
- cis-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 57 ug/L (MW-6) in the overburden wells;
- trans-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 65 ug/L (MW-6) in the overburden wells; and
- TCE was not detected in the deep overburden wells or bedrock wells above SCGs, but was detected ranging from ND to 210 ug/L (MW-9) in the overburden wells.

The groundwater SCG is 5 ug/L for TCA, 1,1-DCA, 1,1-DCE, Chloroethane, cis-1,2-DCE, trans-1,2-DCE, and TCE, and 0.6 ug/L for 1,2-DCA. Results for this round of groundwater sampling are listed in Table 7.

#### MNA Parameter Results

MNA results for the December 2012 groundwater sampling event are listed in Table 10.

### <u>Summary Analytical Results- Groundwater (December 2012)</u>

In summary, a total of thirteen (13) VOCs were detected within the twenty-one (21) groundwater samples collected in December 2012. Of the VOCs detected, nine exceeded the Class GA standard for groundwater. The results of the overburden well sampling in general detected the highest concentrations of total CVOCs in MW-6 and MW-9 located in the eastern portion of the site.

The results of the deep overburden well sampling in general detected the highest concentrations of CVOCs in MW-2D and MW-7D located west of the site building and MW-7D located south of the site building.

The results of the bedrock well sampling in general detected the highest concentrations of CVOCs in MW-1B, MW-3B, MW-5B, and MW-9B, located to the south, west, north, and east of the site building, respectively.

In summary the analytical results from the August groundwater sampling on-site indicate that the three water levels sampled (overburden 20-30', deep overburden 30-40', and bedrock 40-50') have been impacted with CVOCs.

No metals exceeded their respective groundwater SCGs.

### 4.3.4 March 2013 Groundwater Sampling – Fourth Round

Twenty-one (21) groundwater samples were collected between March 13 and 14, 2013 from the groundwater monitoring wells on-site. All the groundwater samples were analyzed for TCL VOCs via USEPA 8260B, arsenic, iron, and MNA parameters.

#### Metals Results

Both metals (arsenic and iron) were detected among the twenty-one (21) groundwater samples collected in December 2012. Arsenic exceeded NYSDEC Class GA Criteria at 0.038 mg/L and 0.041 mg/L (GA criteria 0.025 mg/L) in MW-5 and MW-7D, adjacent to the north and south of the site building, respectively. Iron was detected in each sample, however, concentrations did not exceed NYSDEC Class GA Criteria. Metals results for groundwater are listed in Table 9.

#### **VOC Results**

A total of fourteen (14) VOCs were detected within the twenty-one (21) groundwater samples collected in March 2013. Of the VOCs detected, eight exceeded the Class GA standard for groundwater, and one or more CVOCs were detected within each well sampled with the exception of MW-1, MW-4 (located on the southern portion of property), and MW-2B (west of the site building). The exceeding CVOCs detected include, and are not limited to:

- 1,1,1-TCA was not detected in the deep overburden wells above SCGs, but was detected ranging from ND to 8.6 ug/L (MW-2) in the overburden wells, and ND to 29 ug/L (MW-10B) in the bedrock wells;
- 1,1-DCA ranging from ND to 360 ug/L (MW-9) in the overburden wells, ND to 1,200 ug/L (MW-10B) in the bedrock wells, and 0.51 ug/L (MW-10D) to 290 ug/L (MW-7D) in the deep overburden wells:
- 1,1-DCE ranging from ND to 46 ug/L (MW-9) in the overburden wells, ND to 62 ug/L (MW-10B) in the bedrock wells, and ND to 66 ug/L (MW-2D) in the deep overburden wells;
- 1,2-DCA ranging from ND to 3.5 ug/L (MW-10) in the overburden wells, ND to 87 ug/L (MW-10B) in the bedrock wells, and 1.8 ug/L (MW-10D) to 10 ug/L (MW-2D) in the deep overburden wells;
- Chloroethane was not detected in the overburden wells above SCGs, but was detected ranging from ND to 350 ug/L (MW-10B) in the bedrock wells, and ND to 480 ug/L (MW-2D) in the deep overburden wells:
- cis-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 48 ug/L (MW-6) in the overburden wells;
- trans-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 60 ug/L (MW-6) in the overburden wells; and
- TCE was not detected in the deep overburden wells or bedrock wells above SCGs, but was detected ranging from ND to 120 ug/L (MW-9) in the overburden wells.

The groundwater SCG is 5 ug/L for 1,1,1-TCA, 1,1-DCA, 1,1-DCE, Chloroethane, cis-1,2-DCE, trans-1,2-DCE, and TCE, and 0.6 ug/L for 1,2-DCA. Results for this round of groundwater sampling are listed in Table 7.

#### MNA Parameter Results

MNA results for the March 2013 groundwater sampling event are listed in Table 10.

#### Summary Analytical Results- Groundwater (March 2013)

In summary, a total of fourteen (14) VOCs were detected within the twenty-one (21) groundwater samples collected in March 2013. Of the VOCs detected, eight exceeded the Class GA standard for groundwater. The results of the overburden well sampling in general detected the highest concentrations of total CVOCs in MW-6 and MW-9 located in the eastern portion of the site.

The results of the deep overburden well sampling in general detected the highest concentrations of CVOCs in MW-2D and MW-7D located west of the site building and MW-7D located south of the site building.

The results of the bedrock well sampling in general detected the highest concentrations of CVOCs in MW-3B to the west of the site building and MW-5B located along the northern property boundary and down gradient of the site building, with an increase in concentration to the north toward off-site MW-10B.

In summary the analytical results from the August groundwater sampling on-site indicate that the three water levels sampled (overburden 20-30', deep overburden 30-40', and bedrock 40-50') have been impacted with CVOCs.

No metals exceeded their respective groundwater SCGs.

#### 4.3.5 June 2013 Groundwater Sampling – Fifth Round

Twenty-one (21) groundwater samples were collected between June 6 and 7, 2013 from the groundwater monitoring wells on-site. All the groundwater samples were analyzed for TCL VOCs via USEPA 8260B, arsenic, iron, and MNA parameters.

#### Metals Results

Both metals (arsenic and iron) were detected among the twenty-one (21) groundwater samples collected in December 2012. Arsenic exceeded NYSDEC Class GA Criteria at 0.087 mg/L and 0.026 mg/L (GA criteria 0.025 mg/L) in MW-5 and MW-7D, adjacent to the north and south of the site building, respectively. Iron was detected in each sample, however, concentrations did not exceed NYSDEC Class GA Criteria. Metals results for groundwater are listed in Table 9.

#### VOC Results

A total of ten (10) VOCs were detected within the twenty-one (21) groundwater samples collected in June 2013. Of the VOCs detected, eight exceeded the Class GA standard for groundwater, and one or more CVOCs were detected within each well sampled with the exception of

MW-1, MW-4 (located on the southern portion of property), and MW-7 (south of the site building). The exceeding CVOCs detected include, and are not limited to:

- 1,1,1-TCA was not detected in the deep overburden wells above SCGs, but was detected ranging from ND to 8.8 ug/L (MW-2) in the overburden wells, and ND to 16 ug/L (MW-10B) in the bedrock wells;
- 1,1-DCA ranging from ND to 230 ug/L (MW-9) in the overburden wells, 3.6 ug/L (MW-6B) to 1,300 ug/L (MW-5B) in the bedrock wells, and 28 ug/L (MW-2D) to 66 ug/L (MW-7D) in the deep overburden wells:
- 1,1-DCE ranging from ND to 26 ug/L (MW-9) in the overburden wells, ND to 33 ug/L (MW-5B) in the bedrock wells, and ND to 59 ug/L (MW-2D) in the deep overburden wells;
- 1,2-DCA ranging from ND to 2.1 ug/L (MW-10) in the overburden wells, ND to 130 ug/L (MW-5B) in the bedrock wells, and 2.1 ug/L (MW-10D) to 5.2 ug/L (MW-2D) in the deep overburden wells;
- Chloroethane was not detected in the overburden wells above SCGs, but was detected ranging from ND to 190 ug/L (MW-9B) in the bedrock wells, and ND to 230 ug/L (MW-2D) in the deep overburden wells:
- cis-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 52 ug/L (MW-6) in the overburden wells;
- trans-1,2-DCE was not detected in the deep overburden wells and bedrock wells above SCGs, but was detected ranging from ND to 66 ug/L (MW-6) in the overburden wells; and
- TCE was not detected in the deep overburden wells or bedrock wells above SCGs, but was detected ranging from ND to 130 ug/L (MW-9) in the overburden wells.

The groundwater SCG is 5 ug/L for 1,1,1-TCA, 1,1-DCA, 1,1-DCE, Chloroethane, cis-1,2-DCE, trans-1,2-DCE, and TCE, and 0.6 ug/L for 1,2-DCA. Results for this round of groundwater sampling are listed in Table 7.

Of the overburden wells sampled, the highest concentrations of total CVOCs were detected in MW-6 and MW-9 areas located in the eastern portion of the site. Of the deep overburden wells, in general the highest concentrations of total CVOCs were detected in the areas of MW-2D to the west of the building and MW-7D located south of the building. Of the bedrock wells, in general the highest concentrations of total CVOCs were detected in MW-3B to the west of the building and MW-5B located along the northern property boundary and down gradient of the site building, with an increase in concentration to the north toward off-site MW-10B.

#### MNA Parameter Results - Groundwater (June 2013)

MNA results for the June 2013 groundwater sampling event are listed in Table 10.

#### Summary Analytical Results- Groundwater (June 2013)

In summary, a total of ten (10) VOCs were detected within the twenty-one (21) groundwater samples collected in June 2013. Of the VOCs detected, eight exceeded the Class GA standard for groundwater. The results of the overburden well sampling in general detected the highest concentrations of total CVOCs in MW-6 and MW-9 located in the eastern portion of the site.

The results of the deep overburden well sampling in general detected the highest concentrations of CVOCs in MW-2D and MW-7D located west of the site building and MW-7D located south of the site building.

The results of the bedrock well sampling in general detected the highest concentrations of CVOCs in MW-3B to the west of the site building, MW-5B located along the northern property boundary and down gradient of the site building, MW-9B to the east of the site building, MW-10B off-site to the north.

In summary the analytical results from the August groundwater sampling on-site indicate that the three water levels sampled (overburden 20-30', deep overburden 30-40', and bedrock 40-50') have been impacted with CVOCs.

No metals exceeded their respective groundwater SCGs.

#### 4.4 PRIVATE SUPPLY WELL SAMPLING

The well survey resulted in the identification of one private water supply well located approximately a quarter miles from the site. The water was tested by the NYSDOH in April 2013 and analyzed for VOCs, SVOCs, and metals using USEPA analytical protocols applicable to drinking water. The analytical results were compared to New York State Department of Health (NYSDOH) Maximum Contaminant Levels (MCLs) under the New York State Sanitary Code (NYCRR Title 10, Part 5, Subpart 5-1). No contaminants of concern related to the Monroe Electronics site were detected in the drinking water sample.

#### 5.0 CONTAMINANT FATE AND TRANSPORT

This section discusses the mechanisms that may affect the environmental fate and trasnport of the primary contaminants of concern at the Site including their physiochemical behavior, the site environmental characteristics, and potential routes of migration. This information is compared with the Site specific data and observations to assist in assessing the extent of migration that has occurred.

#### 5.1 POTENTIAL SOURCES OF CONTAMINATION

Based on the results of the previous subsurface investigations as well as the results of this RI, the primary contaminants of concern at the site are TCE and TCA breakdown products detected in the soil, groundwater and soil vapor at levels exceeding applicable NYSDEC standards, criteria, and guidance (SCGs). In addition, low levels of metals were also detected in soil and groundwater samples at levels exceeding NYSDEC SCGs.

The results of this RI indicate the primary source areas of TCE and TCA contamination include a former interior loading and/or storage area (located on the southeastern portion of the building) and the location of the former western door to the facility. Recent conversations with the owner/plant manager during the RI indicate that solvent dumping may have occurred outside a former door on the west end of the original building prior to the construction of a building addition in the early 1970s. The owner also indicated that TCA and waste oil was spread along the driveway on the east side of the building for dust control. Elevated groundwater and soil vapor concentrations below the southeastern portion of the building and in the area of the former western door, as well as widespread low-level groundwater contamination, appear to reinforce the validity of this information.

#### 5.2 POTENTIAL ROUTES OF MIGRATION

#### 5.2.1 Groundwater

The primary route of contaminant migration associated with the site is via groundwater. The overburden groundwater flow direction in the vicinity of the Monroe Electronics site is generally flows to north/northwest. Concentrations of VOCs detected in the shallow overburden appear localized and are not generally detected site wide. Shallow, deep overburden, and bedrock groundwater were impacted consistently over the course of multiple groundwater sampling events. The greatest concentrations of contaminants were located to the north, east, and west of the manufacturing building on-site.

Water in the bedrock aquifer appears to flow at a flat gradient to the north/northwest, while deep overburden flowed intermittently to the west. Each of the samples collected from the installed bedrock wells and deep overburden wells showed high levels of TCA and/or its breakdown products (1,1-DCA, 1,1-DCE, chloroethane). The highest concentrations were detected in the northern (MW-10B) and westernmost well (MW-2D).

There is a high potential for groundwater contamination in the bedrock aquifer to migrate from the site to surrounding properties. These concentrations correspond to areas beneath the western and southeastern portions of the building which are suspected to be primary contaminant source areas.

The extent of off-site migration is not fully known but is expected to be limited. Results of the well receptor survey indicated that a private water well was in use at a home approximately a quarter of a mile north/northwest of the site. This well was 50 feet in depth and was reported to be a bedrock well. The NYSDOH sampled the private water well in April 2013. The results indicated that no contaminants of concern from the site were detected.

#### 5.2.2 Soil Vapor

The results of the soil vapor analysis indicated that there were VOC compounds detected in the soil vapor, indoor air, and outdoor air sampling locations. These samples included low levels of chlorinated compounds (commonly associated with solvent degreasing), and non-chlorinated compounds (commonly associated with petroleum products).

Migration of soil vapors contaminated with VOCs could occur and is less predictable than groundwater migration due to subsurface heterogeneities and subsurface structures (e.g., utilities, building foundations). The site is currently developed, and significant vapors could accumulate in enclosed areas such as basements, crawl spaces, or narrow/deep excavations. The potential for exposures exists for onsite workers and site visitors.

These highest concentrations of contaminants of concern in the soil vapor media correspond to areas beneath the western and eastern portions of the building which are suspected to be primary contaminant source areas.

#### 5.2.3 Soil

The majority of the site is landscaped with grass, gravel driveway, wooded areas, and building structures. Therefore, due to the nature of the site layout there is little to no potential for the subsurface soil contaminants to migrate off-site in the unsaturated zone.

#### 5.3 CONTAMINANT PERSISTANCE

In general, chemical compounds within a given chemical class will behave similarly in the environment. Their persistence and behavior is dependent on their physical and chemical properties as well as environmental conditions, such as the presence of bacteria, pH variations, and oxidation potential (Eh) conditions. TCA (CAS No. 71-55-6), one of the two primary contaminants of concern at the site, is a volatile organic compound that has a high vapor pressure (124.0 mm Hg at 25° C), is insoluble in water, and has a specific gravity of 1.32. TCE (CAS No. 79-01-6), the other primary contaminant of concern, is also a VOC with a high vapor pressure (69.0 mm Hg at 25° C), is sparingly soluble in water (1,100 mg/L), and has a specific gravity of 1.464. When released to the ground surface, these dense solvents will either evaporate or percolate into the subsurface.

TCA is not expected to bind with soil particles or bioaccumulate. Since it is denser than water and has a low solubility value, pure TCA can form a dense nonaqueous phase liquid, or DNAPL, at high concentrations. This class of chemicals will tend to sink through the water column (both surface and ground) until they encounter a barrier that is sufficiently impermeable to stop them. In soils they often will leave residual concentrations in pore spaces where the capillary pressure is strong enough to keep them from flowing. Once stopped, they and any residual concentrations will become a dissolved phase source. TCA has a relatively high Henry's Constant and will form a vapor plume in the vadose zone above a dissolved phase plume, which can be tracked using soil gas measurement techniques.

TCA degrades under both aerobic and anaerobic conditions into a series of compounds known as "daughter compounds" or degradation products. Degradation products include 1,1-DCA, 1,2-DCA, cis-1,2-DCE, and chloroethane. The presence of certain degradation products can indicate the conditions under which degradation takes place (i.e. Chloroethane produced from 1,1-DCA under reducing conditions). The presence of elevated levels of cis-1,2-DCE and 1,2-DCA indicate that the TCE and TCA onsite are presumed to be undergoing a reductive chlorination process in anaerobic conditions as discuss in more detail in the next section.

Trend graphs showing the concentration of several TCA "daughter compounds" over time, as well as the water table over time are included in Appendix I. The concentrations of 1,2-dichloroethane, 1,1-dichloroethane, 1,1-dichloroethylene, and Chloroethane are within an order of magnitude through the July 2012 to July 2013 timeframe depicted on the graphs. No definite trends are apparent based on these graphs. Additionally, there appears to be no correlation between variations in the water table and daughter product concentrations.

#### 5.4 MONITORED NATURAL ATTENUATION

Natural attenuation refers to the processes occurring in nature that act upon a contaminated groundwater plume to degrade or reduce its mass, volume, toxicity, and/or mobility. Such processes include dilution, dispersion, sorption, biodegradation, and volatilization. Monitored natural attenuation (MNA) is a remedial approach to plume reduction or management that involves understanding the site-specific attenuation processes at work followed by long-term monitoring of contaminant concentrations and a suite of so-called MNA parameters.

MNA parameters, which include alkalinity, chloride, nitrate, phosphorous, sulfate, sulfide, and total organic carbon, were collected from select wells in December 2012, March 2013, and June 2013 to establish a baseline MNA dataset for the site. This dataset was compared to Table 2.3 and Table 2.4 of the USEPA September 1998 Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater. These tables list analytical parameters and a weighted scoring system for Preliminary Screening for Anaerobic Biodegradation Processes. HRP selected the three most contaminated sampling events and locations where MNA analytical data had been collected (MW-2D December 2012, MW-10B March 2013, and MW-5B June 2013). All three sampling events show adequate evidence for reductive dechlorination of chlorinated organic solvents (i.e. score greater than 15 see Table 11). Based on the screening level MNA evaluation, it appears that favorable geochemical conditions exist in groundwater and that MNA may be a viable approach to remediating the groundwater at the site. It should be noted that additional parameters that were not initially collected (i.e. methane, ethane, hydrogen, and carbon dioxide) could alter the scoring and potentially increase the score for a given sampling event (potentially making MNA more favorable). In addition, the screening levels show adequate evidence for reductive dechlorination of chlorinated organic solvents despite low Total Organic Carbon (TOC) concentrations, indicating that reductive dechlorination may be enhanced with amendments to accelerate the microbial reduction process.

#### 5.5 CONTAMINANT MIGRATION

Factors affecting contaminant migration for the media of importance (i.e. soil vapor and groundwater) include future development or alteration of the on-site and off-site properties and the potential for vapors to continue to migrate to the sub-slab area of the existing buildings at the site.

#### 6.0 QUALITATIVE EXPOSURE ASSESSMENT

A qualitative baseline exposure assessment was completed based on the information presented in Sections 1.0 through 5.0. Generally, the human health evaluation involves an exposure assessment, an evaluation of Site occurrence, hazard identification and comparison to New York State risk-based criteria.

#### 6.1 <u>INTRODUCTION</u>

This Section discusses the qualitative human health exposure assessment (QHHEA). The QHHEA was performed in accordance with DER-10 which indicates that the assessment should evaluate the mechanisms or exposure pathways by which humans may be potentially exposed to contamination associated with the Site. It should be noted that several conservative assumptions were used in completing this assessment and, thus, the risks identified are expected to be "worse case scenarios."

This exposure assessment discusses potential migration routes by which chemicals in the environment may be able to reach human receptors. This discussion is based on current and hypothetical future site conditions at the Site and investigation area. It is assumed the hypothetical future conditions for the site will be similar to current conditions/use.

A complete exposure pathway must exist for an exposure to occur to the population from chemicals at the Site. A complete exposure pathway includes the following:

- 1. a source and mechanism of chemical release (Section 4.0);
- 2. a transport medium (Section 5.0);
- 3. a point of potential human contact with the contaminated medium;
- 4. an exposure route at the contact point; and
- 5. a receptor population.

#### 6.2 RECEPTORS, EXPOSURE PATHWAYS, AND EXPOSURE POINTS

The Sections below focus primarily on identifying potential points of human contact with contaminated media and exposure routes identified for the Site and investigation area.

#### 6.2.1 Groundwater

People are not drinking contaminated groundwater because the area is served by a public water supply that obtains its water from a different source. As part of the RI, a private well sample was collected from a home located north/northwest of the site to determine whether site-related contamination had migrated off-site. The results did not detect any contaminants of concern from the site in the private drinking water well.

#### 6.2.2 Soil Vapor

When volatile organics are detected within soil vapor, soils and/or groundwater it creates a potential exposure to building occupants when vapors accumulate beneath structures or have impacted indoor air quality within a structure.

The Site is currently developed, and the investigation indicates that site related contamination is present in the sub-slab vapor and indoor air of the building. The potential for exposures exists for onsite workers and site visitors.

#### 6.2.3 Soil

Potential routes of exposure to subsurface and surface soils include dermal contact, ingestion and inhalation of soil particulates. Exposure through dermal contact and ingestion is possible due to the majority of the site area being covered with grass or gravel. Exposure through inhalation is considered low since no intrusive activities occur on-site that disturbs soils and generates inhalable dust.

During future construction activities, specifically disturbance of soils, the potential for exposures to soils would increase for on-site workers, utility workers, trespassers and visitors. During development periods, construction fencing would be installed for safety reasons. This scenario would keep trespassers out and exposure to soils would be minimal to low.

The Monroe Electronics site is zoned Industrial according to the Orleans County Real Property database. Current site use is Light Industrial. Adjacent properties in the study area are zoned as follows:

- Area to the north, across West Avenue, is Light Industrial with the exception of a single family residence along West Avenue;
- Area to the south and southeast is Light Industrial; and
- Small area to the east is Single Family Residential.

Direct exposure to the surface and subsurface soils under current conditions is minimal due to presence of the existing landscaping, woods, and buildings. Exposure to the soils could increase during future construction activities, specifically disturbance of soils.

#### 7.0 CONCLUSIONS, DATA LIMITATIONS, AND RECOMMEDIATIONS

#### 7.1 CONCLUSIONS

The purpose of this remedial investigation is to identify and define the nature and extent of hazardous substances onsite. Based on the history of the site, the results of the previous investigations and this investigation, the primary contaminants of concern include chlorinated VOCs (i.e. TCE, TCA, and each of these contaminants break down products) as well as site-related metals (i.e. arsenic and chromium). These contaminants of concern were detected within soils, groundwater, and soil vapor over their applicable SCGs. During the investigation, two primary source areas were identified onsite where these contaminants of concern were released: the western end of the building and a loading/unloading area located at the southeastern corner of the building. A previous possible source area was the gravel driveway that was reported to have been sprayed with waste solvents from the facility for dust suppression.

#### Groundwater

Based on site investigation findings, the nature and extent of onsite contamination has been determined to include TCE and TCA, and their respective breakdown products. The analytical results show a higher concentration of break down products in relation to the primary contaminants (TCE, TCA).

Shallow, deep overburden and bedrock groundwater were impacted consistently over the course of multiple groundwater sampling events. The groundwater impacts were detected throughout the site, however the greater concentrations of contaminants were located to the north, east, and west of the manufacturing building on-site. These concentrations correspond to areas beneath the western and southeastern portions of the building which are suspected to be primary contaminant source areas. The concentrations of VOCs detected in the shallow overburden appear localized and are not detected site wide. The extent of groundwater contamination in the deep overburden and bedrock has not been defined.

Based on the results of the investigation, the groundwater contamination in the bedrock and deep overburden groundwater has migrated from the site to the property to the North. In addition, based on the geology observed at the site, the bedrock interface has a higher elevation at MW-10B (northern most bedrock well) as compared to the wells installed to the south (MW-5B and MW-7B). Based on the difference in the elevation at the bedrock interface, there appears to be a trough-like feature in the bedrock that runs along the northern portion of the site in a west to east direction, although additional bedrock elevation data is needed to more fully understand this phenomenon. The observed low point in bedrock surface is also where MW-2 series is

located and this MW series typically had the highest concentrations of contaminants of concern.

Competent, indurated and lithified bedrock was encountered in the borings that were converted to bedrock monitoring wells. Bedrock at the site and surrounding area lithologically consists of Queenston Shale red shale that is extremely impermeable.

Utilizing the USEPA September 1998 Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater and the MNA analytical data for the Site, there are favorable geochemical conditions existing in groundwater for MNA to occur.

The Site utilizes municipal water for drinking water only and therefore direct exposure to the contamination via ingestion of groundwater is minimal.

#### Soils

Based on HRP's findings, the nature and extent of onsite contamination has been defined and the primary contaminants of concern in subsurface soils is 1,2-DCA that marginally exceeded Unrestricted and Protection of Groundwater SCOs at two soil boring locations, SB-9 and SB-10 (located at the southeast corner of the site property).

In surface soils (top six inches), pesticides and metals were found at concentrations exceeding NYSDEC Unrestricted SCOs. It should be noted that of those compounds exceeding the Unrestricted SCOs (in the surface soils), only arsenic was detected at levels exceeding the Industrial SCOs. With the exception of one sample collected along the western side of the driveway, the samples in which arsenic exceeded the Industrial SCOs were all collected east of the current driveway on-site.

Direct exposure to the surface and subsurface soils under current conditions is minimal due to presence of the existing landscaping, woods, and buildings. Exposure to the soils could increase during future construction activities, specifically disturbance of soils.

#### Soil Vapor

The results of the soil vapor analysis indicated that there were VOC compounds detected in the soil vapor, indoor air, and outdoor air sampling locations. These samples included low levels of chlorinated compounds (commonly associated with solvent degreasing), and non-chlorinated compounds (commonly associated with petroleum products).

Migration of soil gas contaminated with VOCs could occur and is less predictable than groundwater migration due to subsurface heterogeneities and subsurface structures (e.g., utilities, building foundations). The site is currently developed, and significant vapors could accumulate in enclosed areas such as basements, crawl spaces, or narrow/deep excavations. The potential for exposures exists for onsite workers and site visitors.

These highest concentrations of contaminants of concern in the soil vapor media correspond to areas beneath the western and southeastern portions of the building which are suspected to be primary contaminant source areas.

#### Passive Soil Gas

The passive soil vapor sampling identified a possible source of TCE and PCE immediately east of the building. There were also lower concentrations of PCE at two locations south of the building.

#### 7.2 <u>DATA LIMITATIONS</u>

Data limitations were not identified in the course of HRP's investigations.

#### 7.3 RECOMMENDATIONS

The purpose of this Work Assignment was to conduct a Remedial Investigation to determine the degree and extent of contamination impacted by operations at the Monroe Electronics facility. Based on the investigation findings, the following recommendations are offered:

- Based on the groundwater investigation findings, the extent of groundwater contamination has not been adequately defined in the deep overburden and bedrock aquifers. It appears that the contamination in the deep overburden and bedrock aquifer has migrated off-site to the north. HRP recommends installing five additional monitoring wells to further delineate the extent of groundwater contamination emanating from the site. HRP proposes to install five deep overburden and bedrock wells, located at the following locations:
  - One well installed west, slightly southwest of MW-2 series, to determine the extent of groundwater contamination in the westerly direction;
  - Three off-site wells to the northwest, west and northeast of the property boundary, to determine the vertical and horizontal extent of groundwater contamination in the presumed down gradient direction;
  - One well in the southeast corner of the property to determine the lateral extent of contamination and whether groundwater in that area has been impacted.

Continuous logging of the deep overburden wells to identity the geologic strata which could indicate preferential contaminant transport pathways and clarify the conceptual site model.

These results along with the RI data should be used to develop a remedial strategy to address residual contamination on-site and off-site.

- Based on the USEPA September 1998 Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater, MNA is a viable option for this Site. However, additional parameters that were not initially collected (i.e. methane, ethane, hydrogen, total organic carbon and carbon dioxide) should be collected to complete the determination as MNA a a remedial alternative.
- The soil vapor concentrations of TCE and PCE detected were compared to NYSDOH guidance, and the recommendations based on the guidance are for mitigation for the soil vapor in relation to TCE and monitoring for PCE. A further soil vapor intrusion study need to be conducted to determine the impact throughout the building.
- Complete an evaluation of remedial alternatives to address the groundwater, soil, and soil vapor contamination in accordance with DER-10 and NYSDOH soil vapor intrusion guidance. As part of the evaluation, establish remedial action objectives for the site to address groundwater, soil, and soil vapor for the protection of public health and the environment.
- The contaminated surface soils on-site will need to be managed to ensure they are disturbed during any site activities without a proper management plan in place. Removal of the arsenic contaminated surface soils is recommended to reduce exposure to site workers and ensure the protection of public health and the environment.

#### 8.0 REFERENCES

Dupont, 1998. Supplemental Environmental Assessment Report, Lyndonville West Avenue Site. July 21, 1998

Dupont, 2001. Supplemental Remedial Investigation Report, Lyndonville West Avenue Site. September 6, 2001

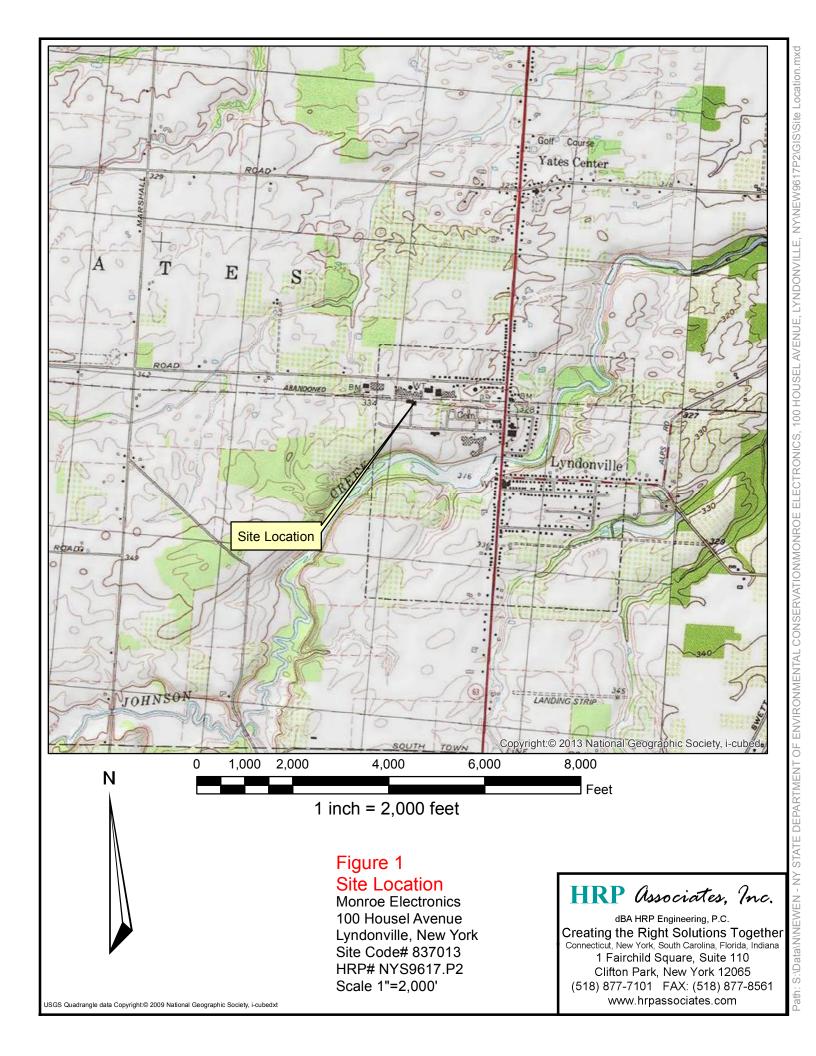
Dupont, 2003. Revised Focused Feasibility Study Report, Lyndonville West Avenue Site. November 2003

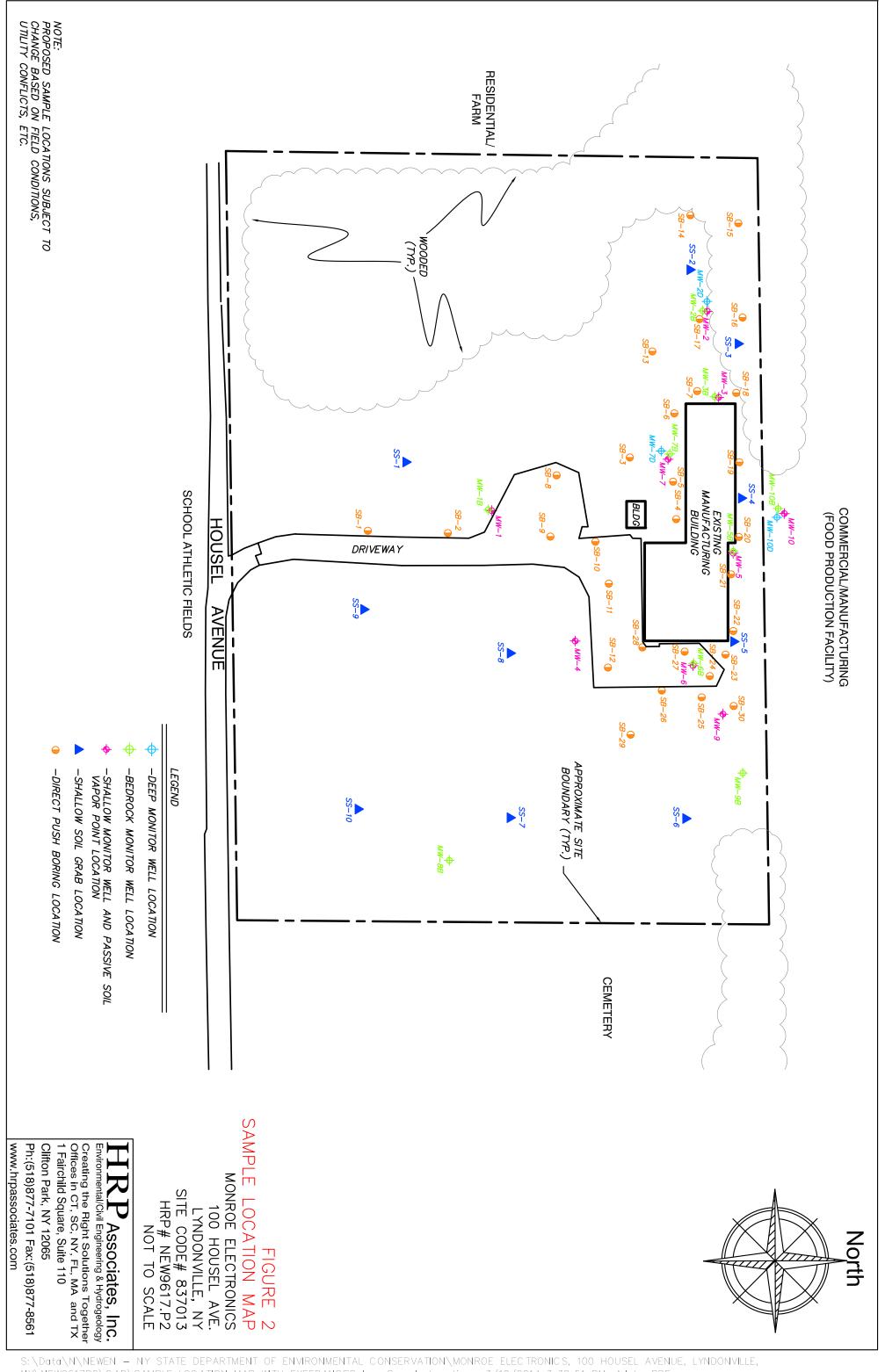
Dupont, 2003. Site Management Plan, Lyndonville West Avenue Site. April 2005

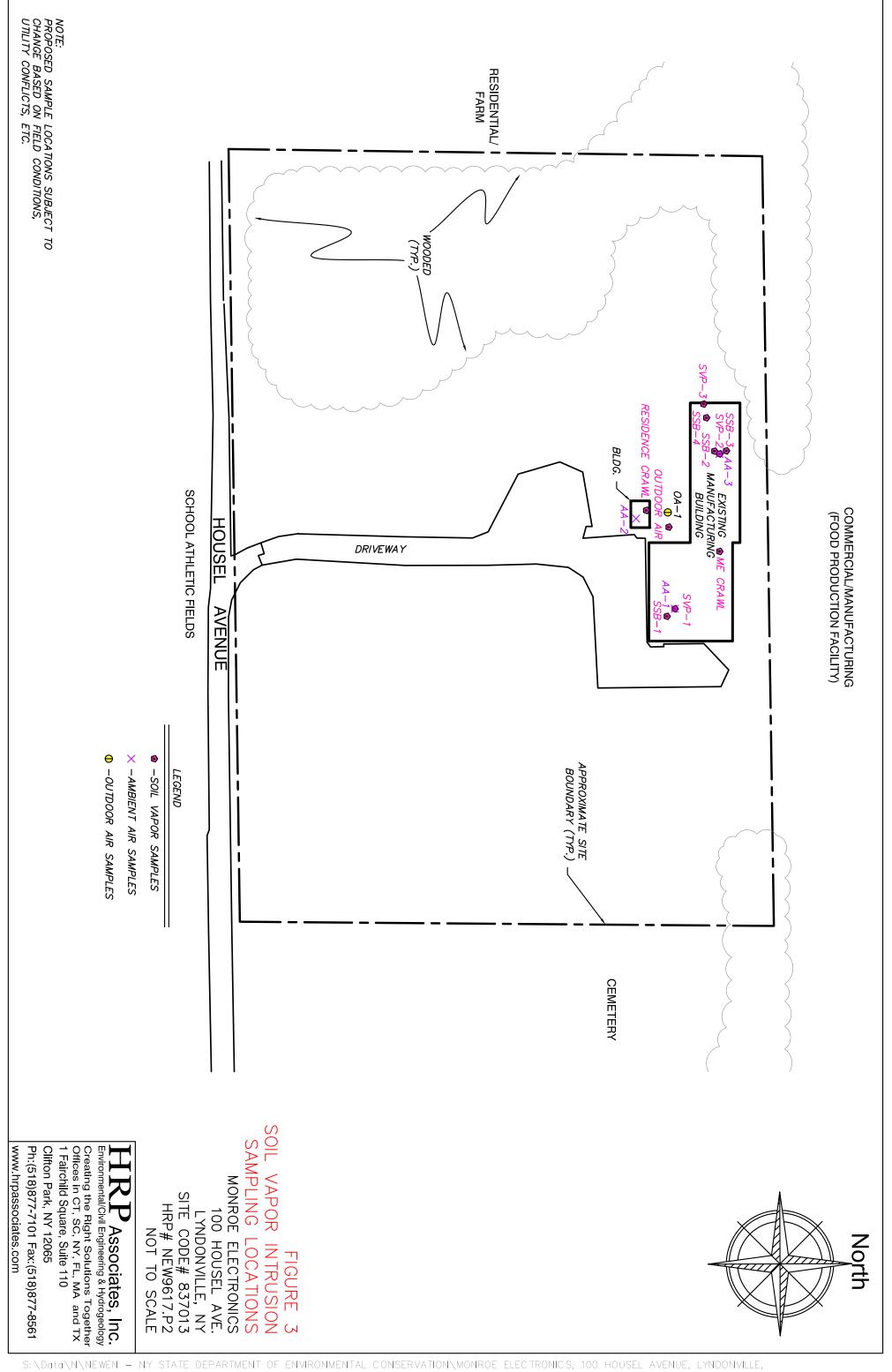
HRP, 2011. Field Activity Plan For The Remedial Investigation at Monroe Electronics. April 2011

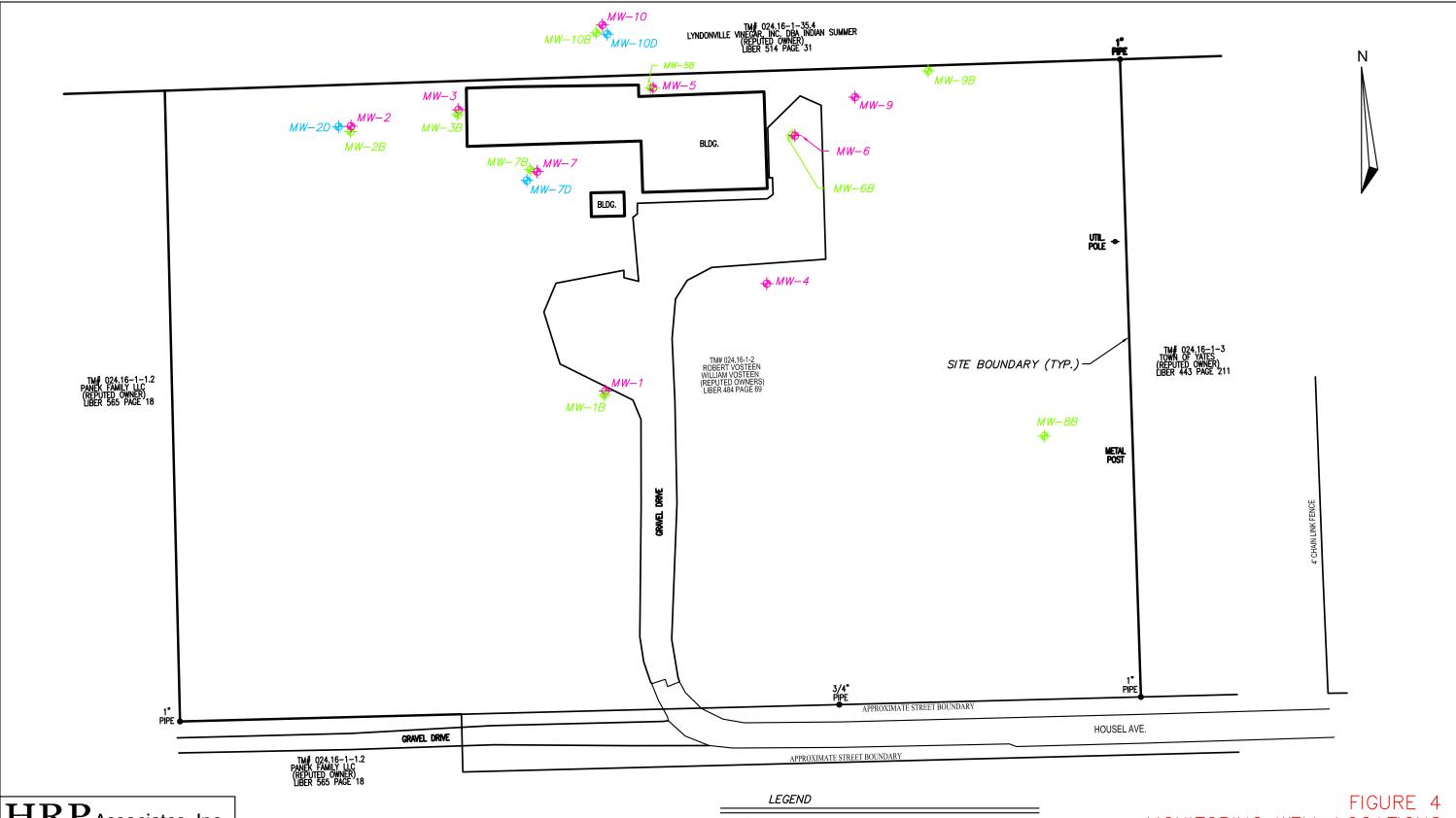
NYSDEC, 1988. Community Right-To-Know, Extended Program, 1986-87. April 1988

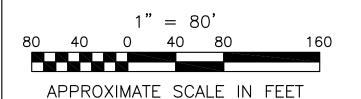
NYSDEC, 2001. Site Investigation Report. July 2001









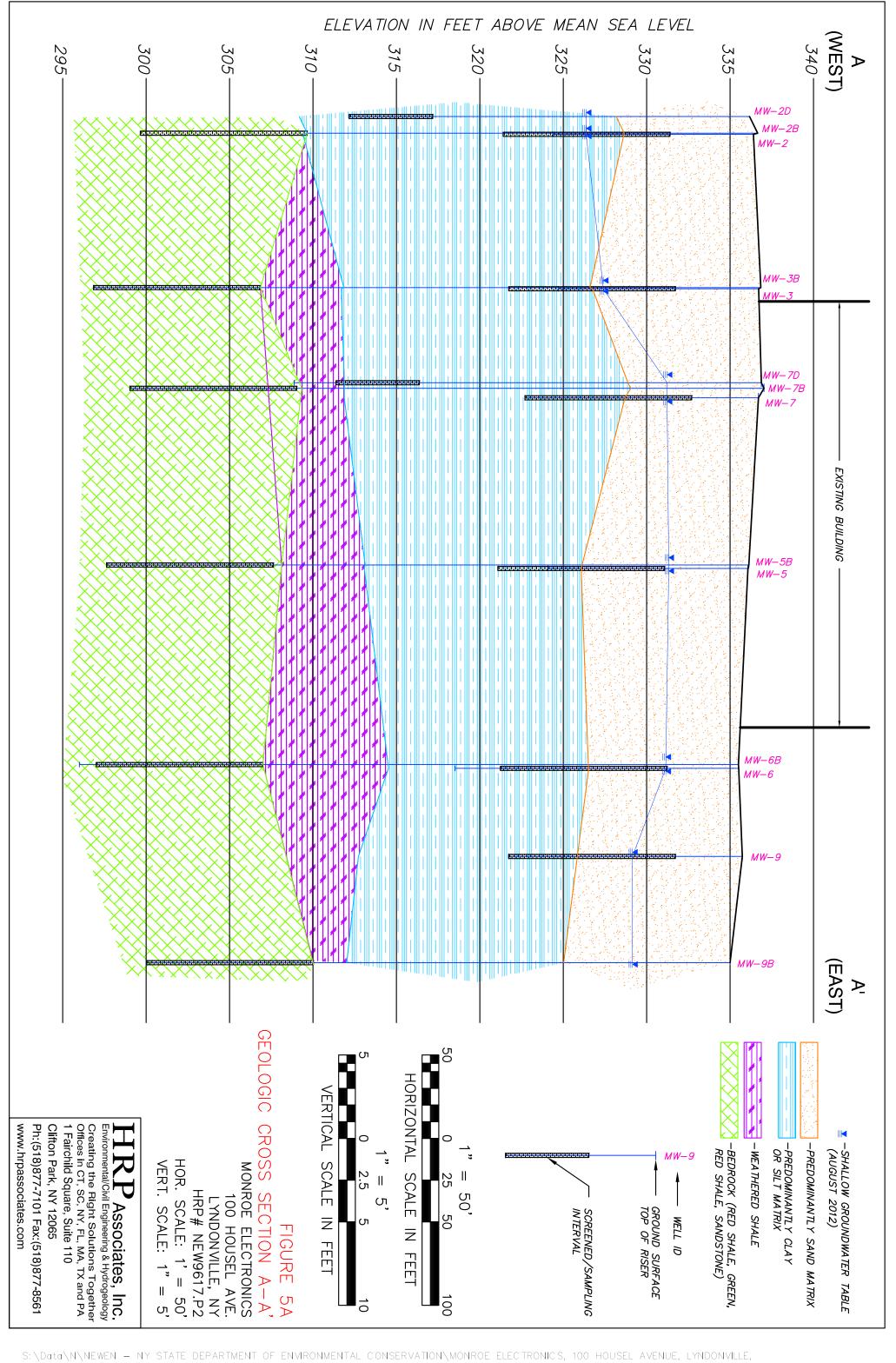


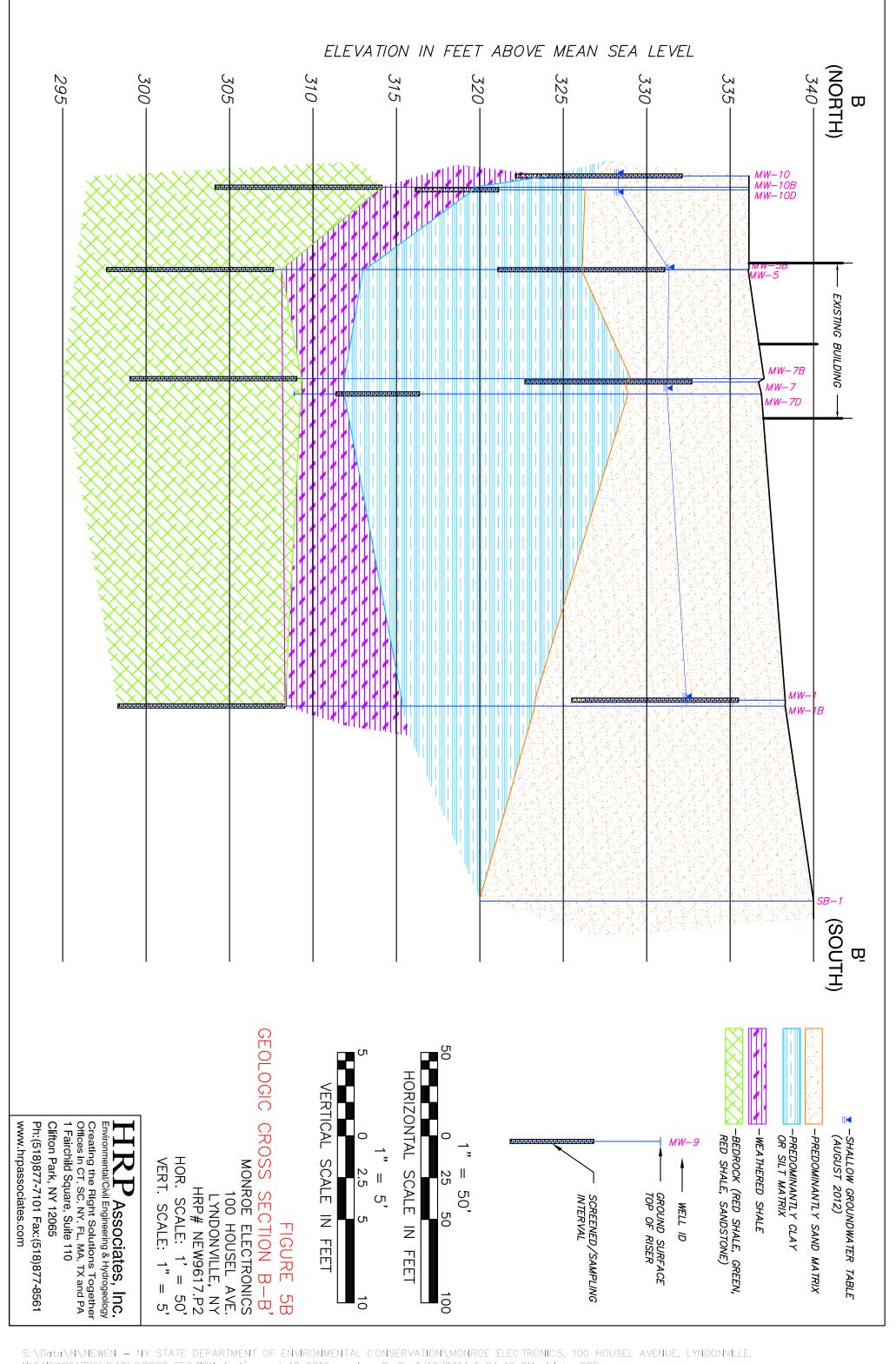
- DEEP MONITOR WELL LOCATION
- → −BEDROCK MONITOR WELL LOCATION
- -SHALLOW MONITOR WELL AND PASSIVE SOIL VAPOR POINT LOCATION

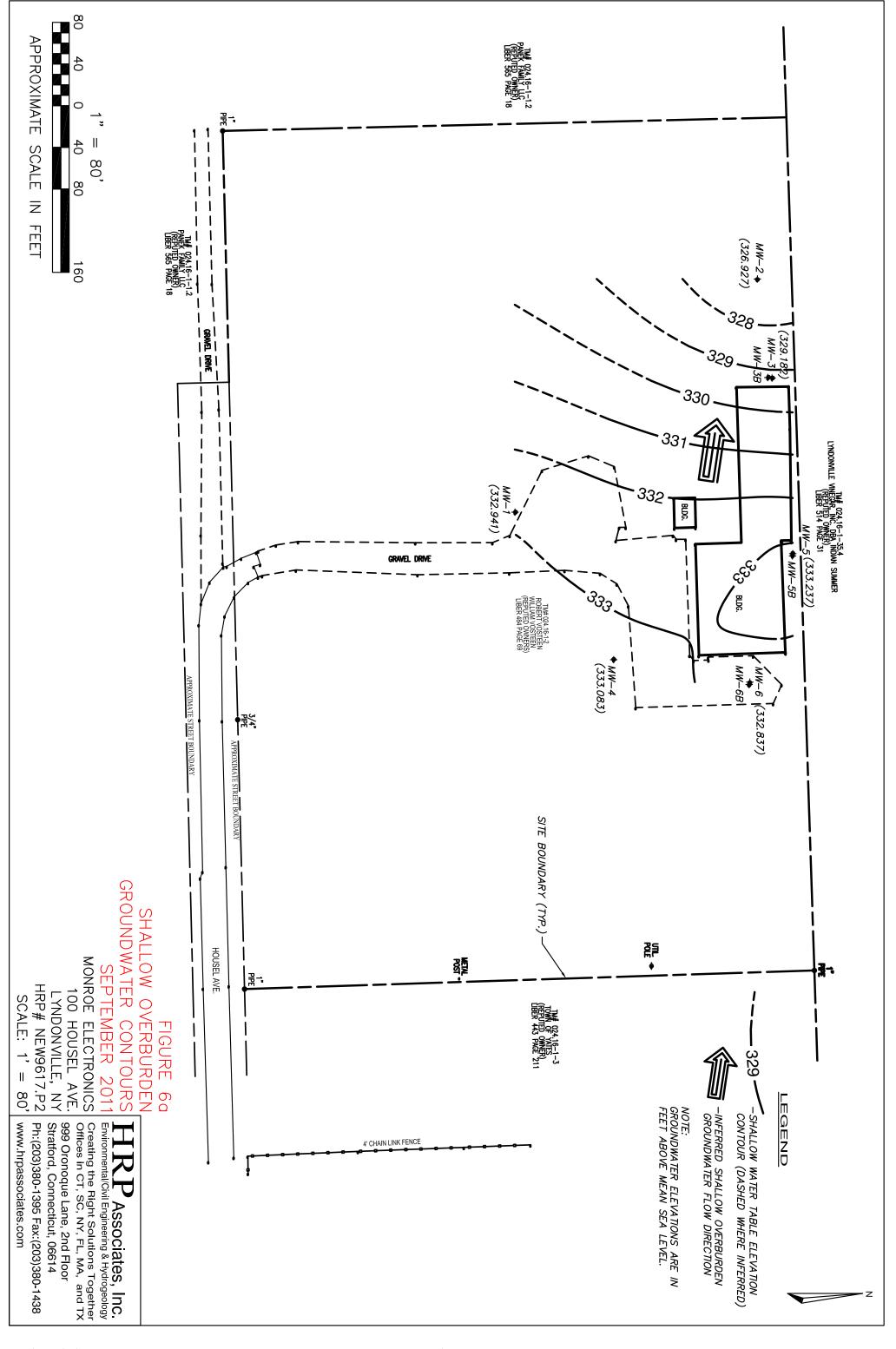
# MONITORING WELL LOCATIONS

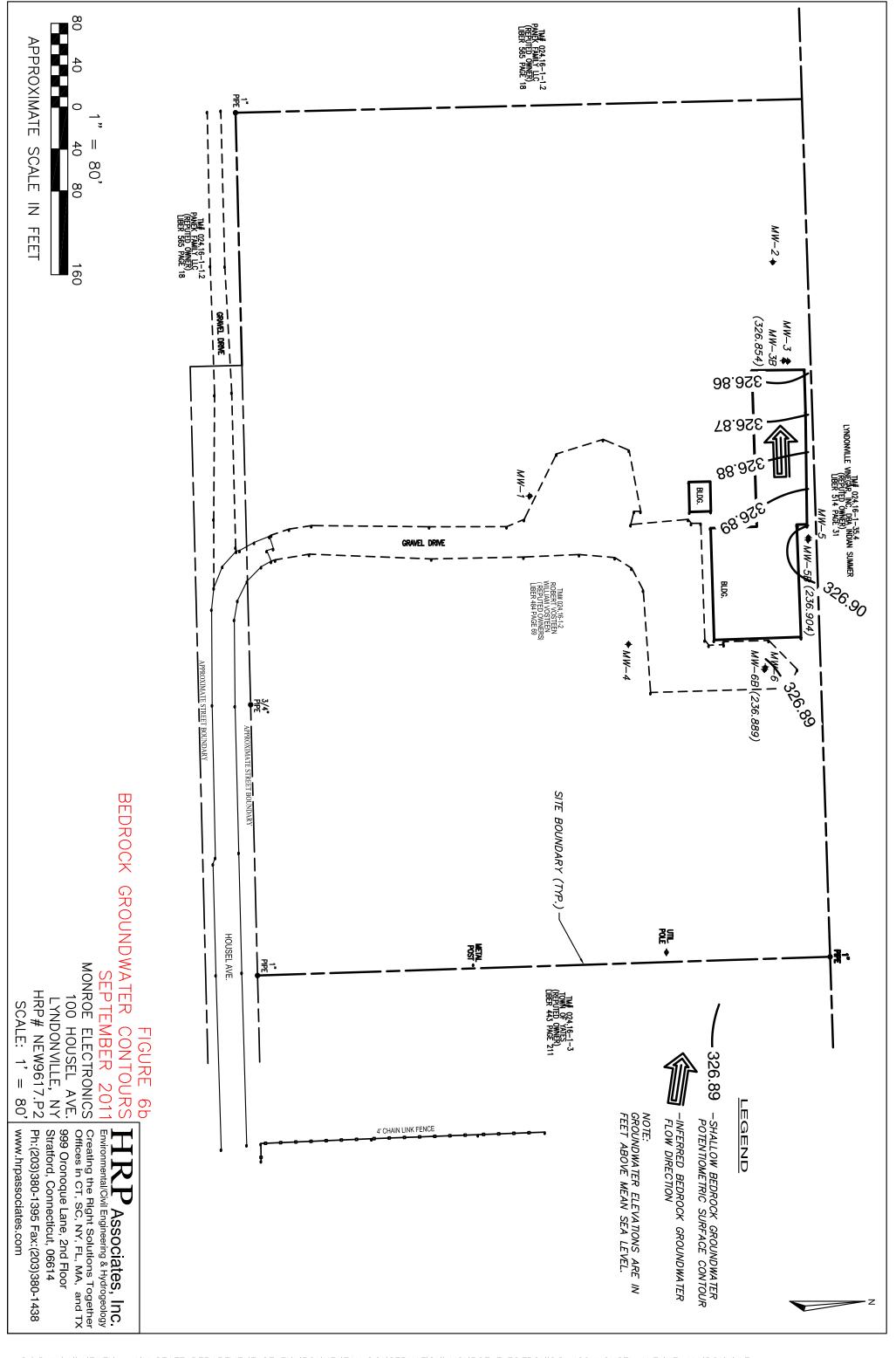
MONROE ELECTRONICS
100 HOUSEL AVE.
LYNDONVILLE, NY
HRP# NEW9617.P2
SCALE: 1' = 80'

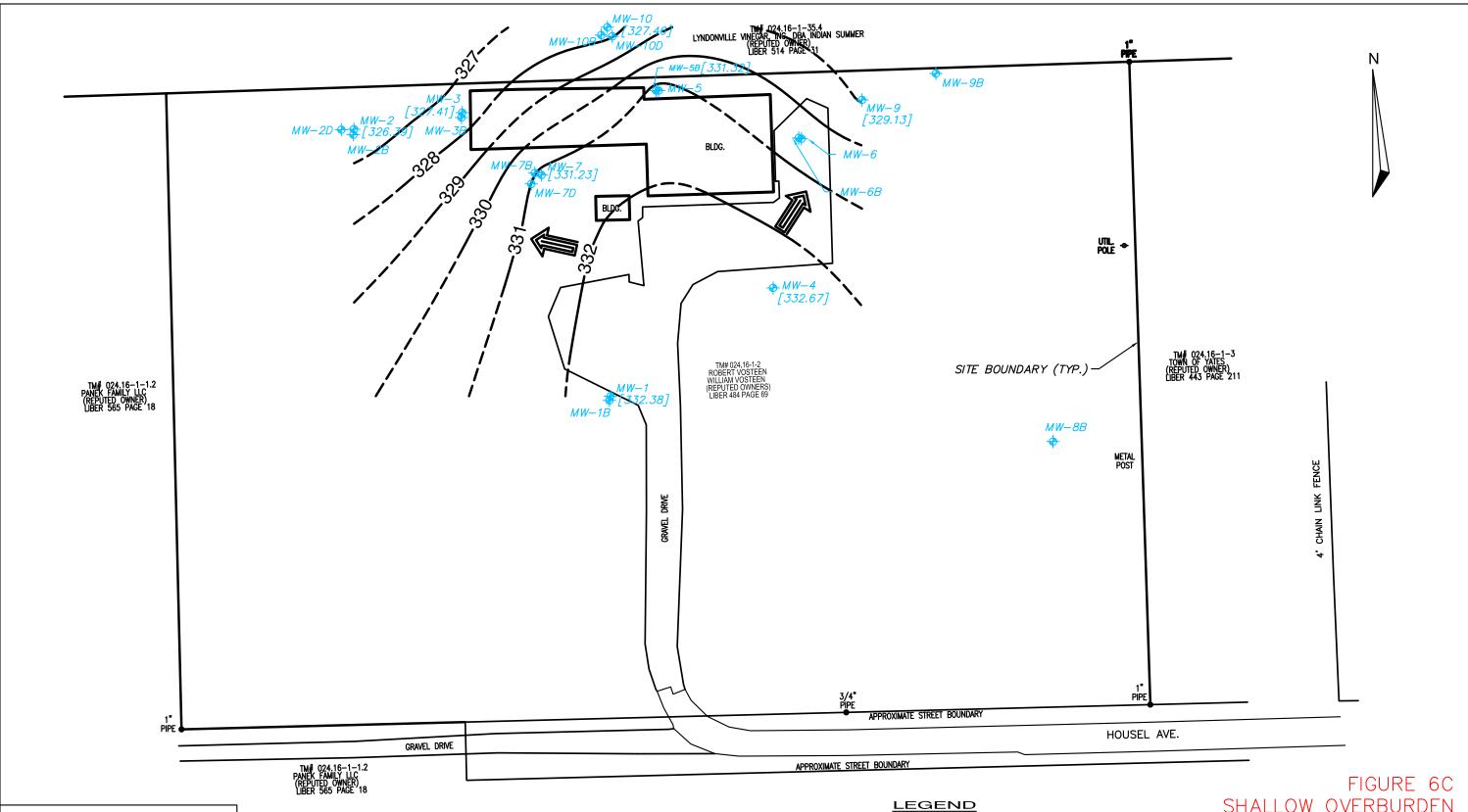
S:\Ddtd\N\NEWEN — NY STATE DEPARTMENT OF ENVRONMENTAL CONSERVATION\MONROE ELECTRONICS, 100 HOUSEL AVENUE, LYNDONVILLE, NY\NEW9617P2\CAD\FIGURE 4 — MW LOCATIONS.dwg, 11x17, 3/10/2014 3:47:57 PM, Adobe PDF

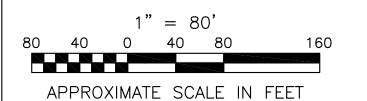












- MONITORING WELLS

[332.67] - GROUNDWATER ELEVATION

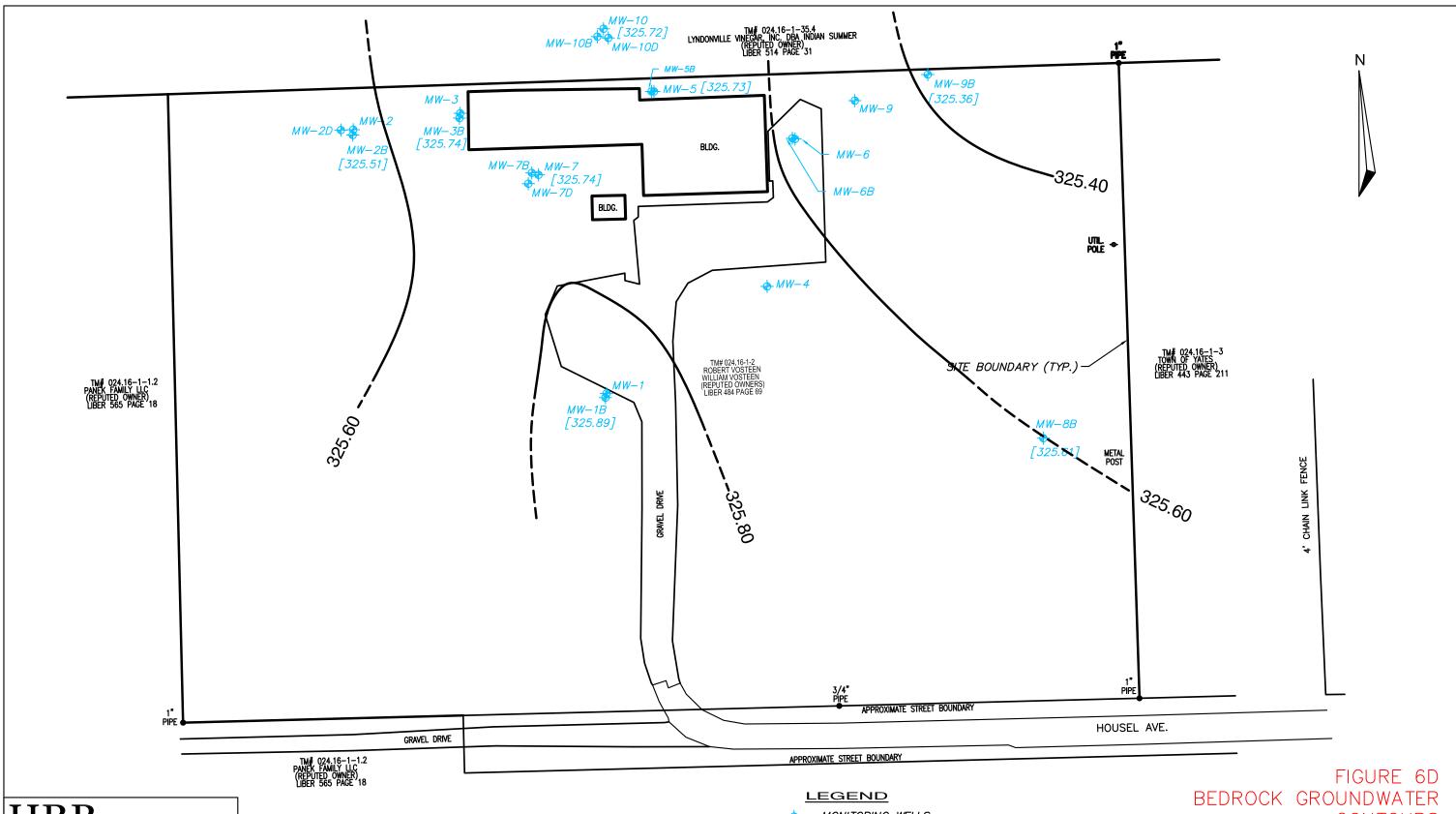
- DIRECTION OF GROUNDWATER FLOW

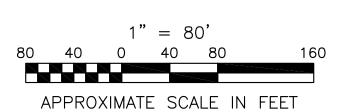
-GROUNDWATER ELEVATION CONTOUR

(DASHED WHERE INFERRED)

FIGURE 6C SHALLOW OVERBURDEN GROUNDWATER CONTOURS AUGUST 2012

MONROE ELECTRONICS 100 HOUSEL AVE. LYNDONVILLE, NY HRP# NEW9617.P2





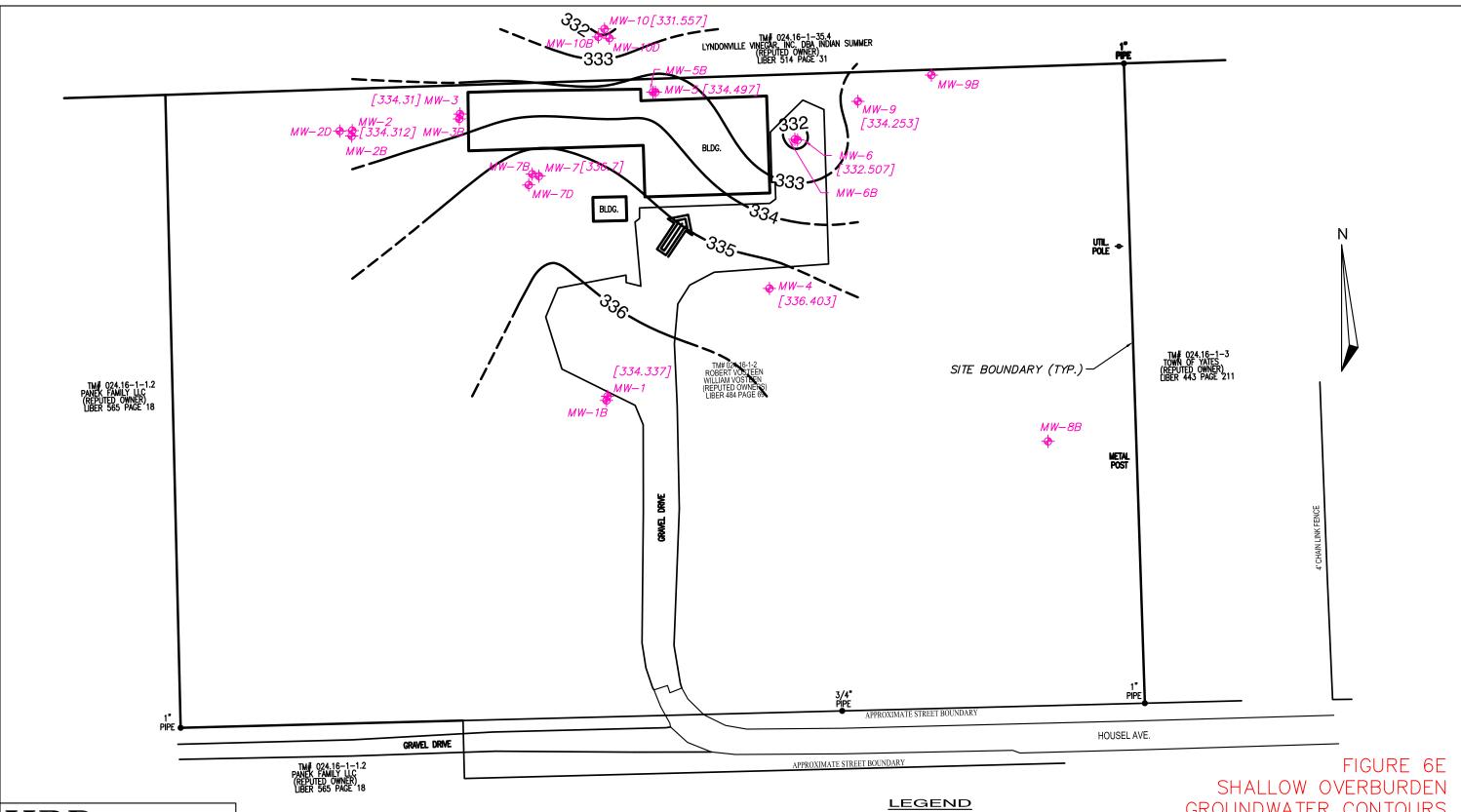
→ MONITORING WELLS

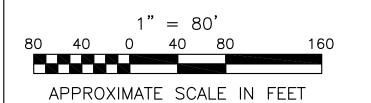
[330.78] - GROUNDWATER ELEVATION

-GROUNDWATER ELEVATION CONTOUR
(DASHED WHERE INFERRED)

FIGURE 6D
BEDROCK GROUNDWATER
CONTOURS
AUGUST 2012
MONROE ELECTRONICS
100 HOUSEL AVE.
LYNDONVILLE, NY
HRP# NEW9617.P2

ENVIRONMENTAL CONSERVATION\MONROE ELECTRONICS, 100 HOUSEL AVENUE, LYNDONVILLE, 2012 - Bedrock Aquifer - .2 ft contours.dwg, 11x17, 3/10/2014 5:42:30 PM, Adobe PDF





- MONITORING WELLS

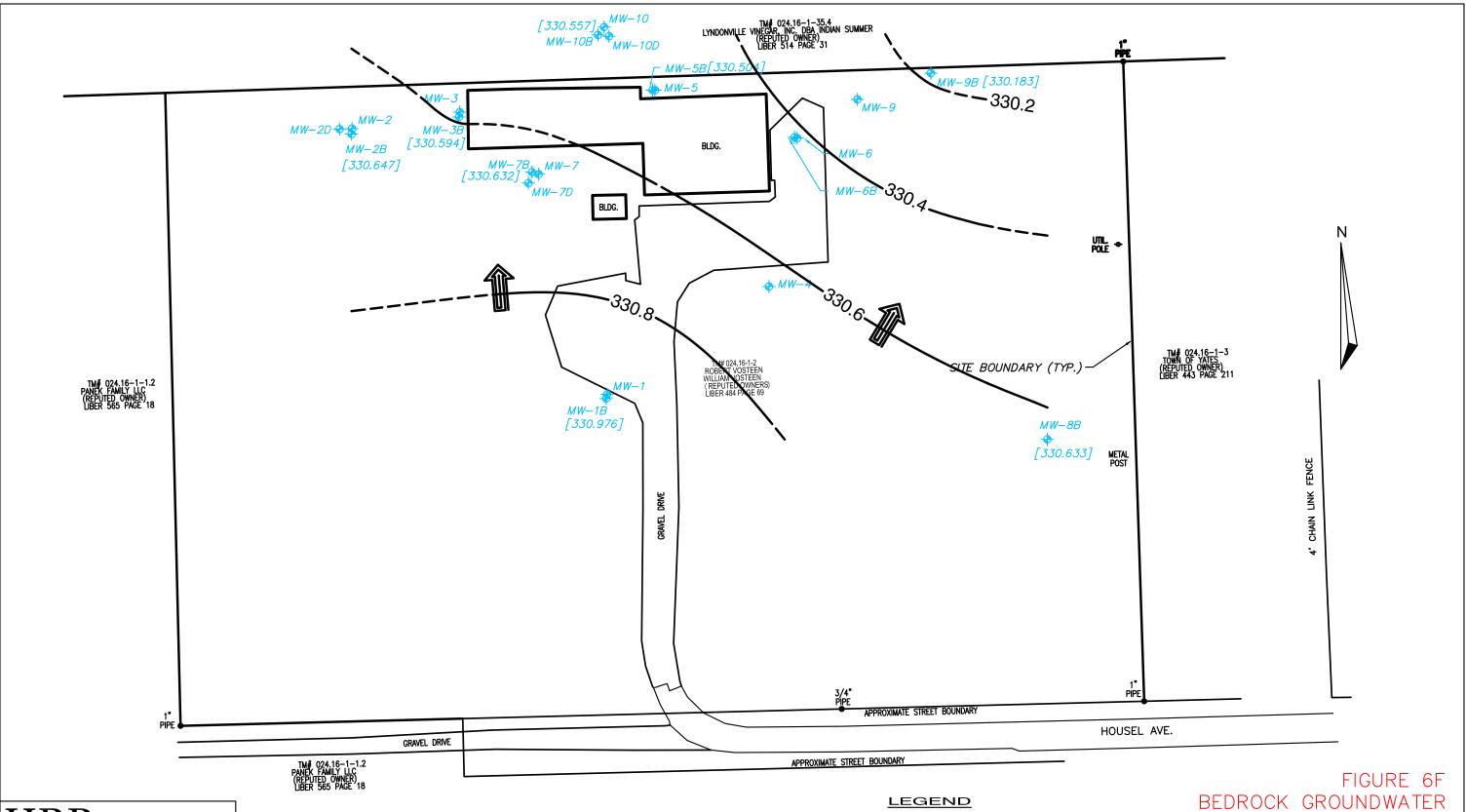
[336.40] - GROUNDWATER ELEVATION

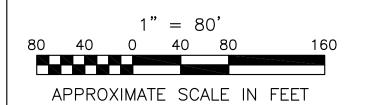
- DIRECTION OF GROUNDWATER FLOW

-GROUNDWATER ELEVATION CONTOUR
(DASHED WHERE INFERRED)

SHALLOW OVERBURDEN
GROUNDWATER CONTOURS
JUNE 10, 2013
MONROE ELECTRONICS
100 HOUSEL AVE.

100 HOUSEL AVE.
LYNDONVILLE, NY
HRP# NEW9617.P2
SCALE: 1' = 80'





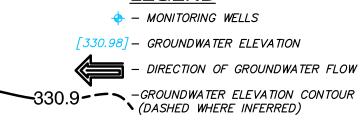
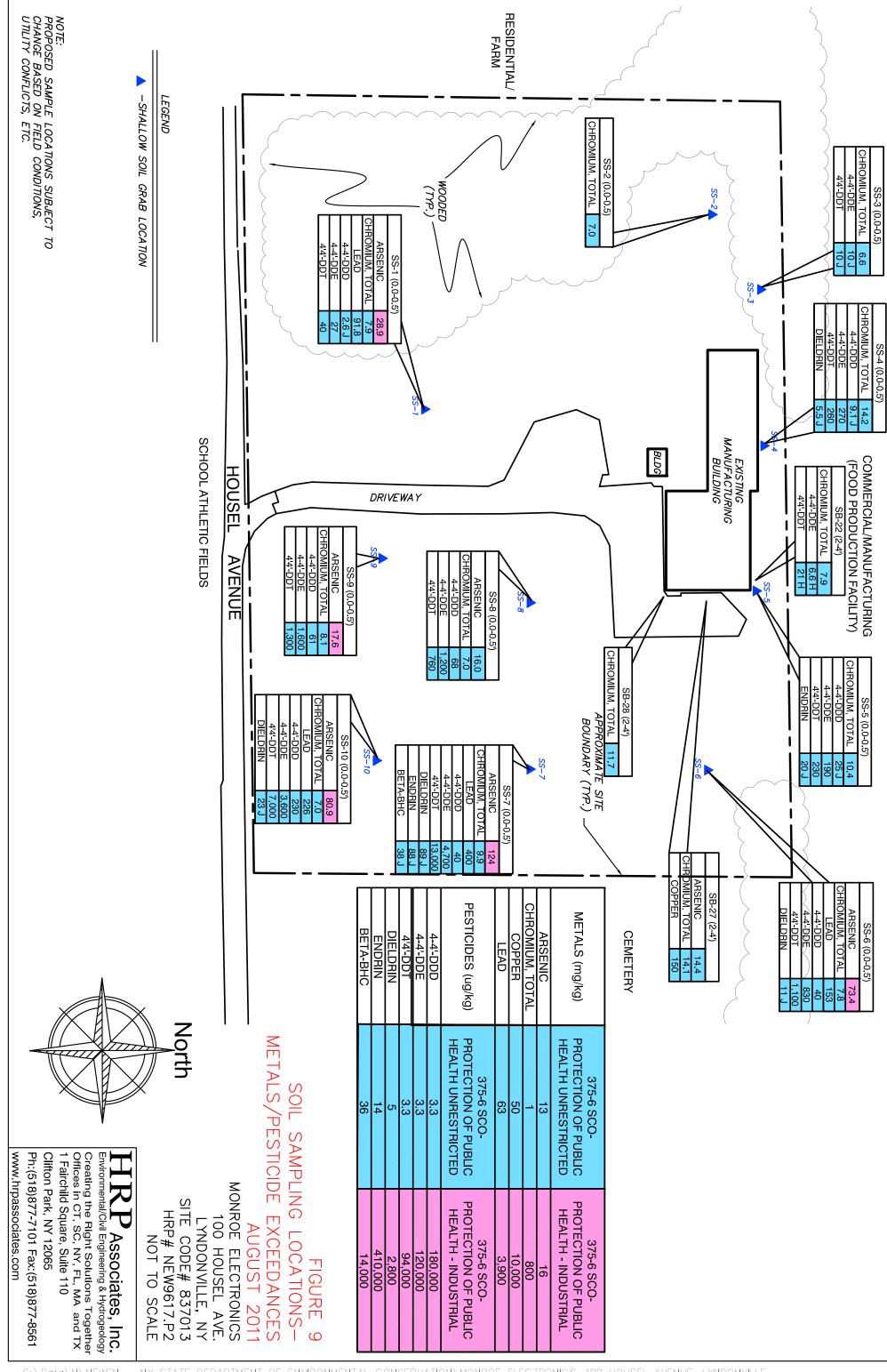


FIGURE 6F
ROCK GROUNDWATER
CONTOURS
JUNE 10, 2013
MONROE ELECTRONICS
100 HOUSEL AVE.
LYNDONVILLE, NY
HRP# NEW9617.P2

HRP Associates, Inc.
Environmental/Civil Engineering & Hydrogeology
Creating the Right Solutions Toggether
Offices in CT, SC, NY, FL, MA, TX and PA
1 Fairchild Square, Suite 110 Ph:(518)877-7101 Fax:(518)877-8561 Clifton Park, NY 12065 www.hrpassociates.com Depth to Water (feet below top of casing) Mar 09, 2013 0 Mar 23, 2013 MW-2D Depth to Water MW-2 Depth to Water Precipitation MW-2B Depth to Water Apr 06, 2013 Apr 20, 2013 May 04, 2013 May 18, 2013 Jun 01, 2013 LONG TERM MONITORING OF HRP-MW-2, HRP-MW-2B AND HRP-MW-2D 0 0.4 0.8 1.2 1.6 Rain in Inches MONROE ELECTRONICS 100 HOUSEL AVE. LYNDONVILLE, NY HRP# NEW9617.P2 **MARCH-JUNE 2012** FIGURE 7

HRP Associates, Inc.
Environmental/Civil Engineering & Hydrogeology
Creating the Right Solutions Toggether
Offices in CT, SC, NY, FL, MA, TX and PA
1 Fairchild Square, Suite 110 Ph:(518)877-7101 Fax:(518)877-8561 Clifton Park, NY 12065 www.hrpassociates.com Depth to Water (feet below top of casing)  $\stackrel{\triangleright}{\bowtie}$ Jun 09, 2013 30 40 0 0 18:00 Depth to Water HRP-MW-7B Depth to Water HRP-MW-2B Depth to Water HRP-MW-3B HRP-MW-7B Pumping 21:00 0:00 3:00 6:00 9:00 Jun 10, 2013 Time 18:00 21:00 0:00 3:00 6:00 9:00 Jun 11, 2013 FIGURE 8
HYDROGRAPH OF HRP-MW-2B
DURING PUMPING TEST OF HRP-MW-7B MONROE ELECTRONICS 100 HOUSEL AVE. LYNDONVILLE, NY HRP# NEW9617.P2



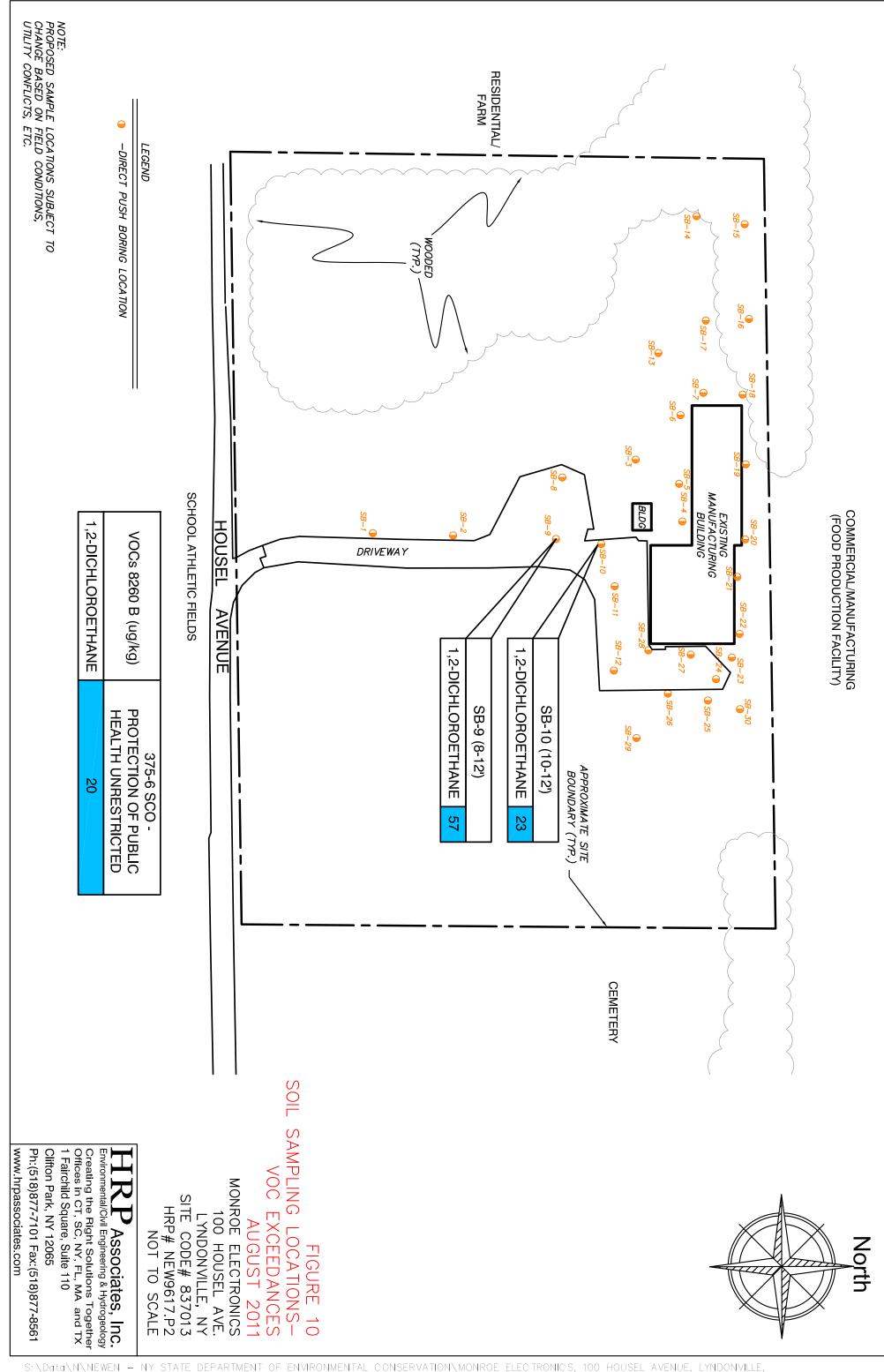


Table 1 Summary of Remedial Investigation Field Activities Monroe Electronics 100 Housel Avenue Lyndonville, NY

### Passive Gas Sampling Numbers and Locations:

Passive Soil Gas ID	Sample Location	Justification					
PSV-1	Landscaped area west of the site.						
PSV-2	Landscaped area west of the site.						
PSV-3							
PSV-4							
PSV-5	Area north of 100 Housel Ave building.						
PSV-6	Area north or 100 Houser Ave ballaing.						
PSV-7							
PSV-8							
PSV-9	Area north-east of 100 Housel Ave building.						
PSV-10							
PSV-11	Landscaped area south of 100 Housel	To assess the presence, identity, and relative					
PSV-12	Ave Building.						
PSV-13		strength of volatile organic					
PSV-14		compounds (VOCs) at strategic locations					
PSV-15		surrounding the Site.					
PSV-16	Gravel driveway south of 100 Housel	Surrounding the Site.					
PSV-17	Ave building.						
PSV-18							
PSV-19							
PSV-20	Area east of 100 Housel Ave Building						
PSV-21	Area south-east of 100 Housel Ave Building.						
PSV-22	Grass area east of 100 Housel Ave						
PSV-23	building.						
PSV-24	Area south-east of 100 Housel Ave						
PSV-25	Building.						

## Soil Gas Sampling Activities:

Sample ID	Location	Sampling Event	Justification
SSB-1	Eastern edge	May 2011	To assess the
SVP-1	of office space	March 2012	presence, identity,
AA-1	in		and relative
	manufacturing		strength of volatile
	building		organic compounds
SSB-2	Western side	May 2011	(VOCs) at strategic
SSB-3	of production		locations

Table 1 Summary of Remedial Investigation Field Activities Monroe Electronics 100 Housel Avenue Lyndonville, NY

SVP-2	area in	March 2012	surrounding the
AA-3	manufacturing		Monroe Electronics
	building		Site.
SSB-4	Storage area	May 2011	
SVP-3	in west side of	March 2012	
	building		
ME Crawl	Crawl space	May 2011	
	under central		
	portion of		
	manufacturing		
	building		
Residence Crawl	On site	May 2011	
AA-2	residence	March 2012	
Outdoor Air	Outside both	May 2011	
OA-1	onsite	March 2012	
	buildings		

# Soil Borings:

Soil Boring ID	Sample Location	Justification				
SB-1	West of the driveway near entrance to					
SB-2	site.					
SB-3						
SB-4	South of Manufacturing building.					
SB-5						
SB-6						
SB-7	West of Manufacturing building.					
SB-8						
SB-9	Parking lot area south of	To assess the presence,				
SB-10	1 2 3	identity, and relativ				
SB-11	Manufacturing building.	strength of volatile organic				
SB-12		compounds (VOCs) at				
SB-13		strategic locations at the				
SB-14		Monroe Electronics				
SB-15	Grass area west of Manufacturing	property.				
SB-16	building.					
SB-17	_					
SB-18						
SB-19						
SB-20	Cross area morth of Manufacturing					
SB-21	Grass area north of Manufacturing					
SB-22	building.					
SB-23						

Table 1 Summary of Remedial Investigation Field Activities Monroe Electronics 100 Housel Avenue Lyndonville, NY

Soil Boring ID	Sample Location	Justification
SB-24		
SB-25		
SB-26		
SB-27	Area east of Manufacturing building.	
SB-28		
SB-29		
SB-30		

# Groundwater Monitoring Wells:

Well ID	Location	Justification
MW-1/1B	South of western parking lot.	
MW-2/2D/2B	Lawn west of building.	
MW-3/3B	West side of building.	
MW-4	South of eastern parking lot.	To assess the
MW-5/5B	North of building.	presence, identity,
MW-6/6B	In eastern parking lot.	and relative strength of volatile organic
MW-7/7D/7B	South of building.	compounds (VOCs).
MW-8B	Southeast corner of the site	
MW-9/9B	East of parking lot	
MW-10/10D/10B	Off-site to the north of building	

Table 2
MONROE ELECTRONICS
100 HOUSEL AVENUE
Lyndonville, New York
Test Location Coordinates

Sample Locations	Туре	Latitude	Longitude
MW-1	Monitoring Well	43.324553703	-78.39616576
MW-1B	Monitoring Well	43.324544037	-78.39616829
MW-2	Monitoring Well	43.325192026	-78.39700269
MW-2D	Monitoring Well	43.325191514	-78.3970429
MW-2B	Monitoring Well	43.325179148	-78.39700371
MW-3	Monitoring Well	43.325231324	-78.39664748
MW-3B	Monitoring Well	43.325220552	-78.39665021
MW-4	Monitoring Well	43.324811548	-78.39563362
MW-5	Monitoring Well	43.325283597	-78.39601469
MW-5B	Monitoring Well	43.325282965	-78.39600645
MW-6	Monitoring Well	43.325169773	-78.39554832
MW-6B	Monitoring Well	43.325167927	-78.39554039
MW-7	Monitoring Well	43.325087099	-78.39641179
MW-7D	Monitoring Well	43.325061679	-78.39642275
MW-7B	Monitoring Well	43.325082420	-78.3963876
MW-8B	Monitoring Well	43.324444890	-78.39472027
MW-9	Monitoring Well	43.325260116	-78.39534139
MW-9B	Monitoring Well	43.325323093	-78.39510291
MW-10	Monitoring Well	43.325415911	-78.3961935
MW-10D	Monitoring Well	43.325411496	-78.3961583
MW-10B	Monitoring Well	43.325434303	-78.39617535
SVP-1	Sub Slab Soil Vapor	43.325113	-78.395784
SVP-2	Sub Slab Soil Vapor	43.325245	-78.396407
SVP-3	Sub Slab Soil Vapor	43.325197	-78.396612
AA-1	Sub Slab Soil Vapor	43.325113	-78.395784
AA-2	Sub Slab Soil Vapor	43.324988	-78.396164
AA-3	Sub Slab Soil Vapor	43.324997	-78.396145
OA-1	Sub Slab Soil Vapor	43.325091	-78.396171
SSB-1	Sub Slab Soil Vapor	43.325113	-78.395784
SSB-2	Sub Slab Soil Vapor	43.325245	-78.396407
SSB-3	Sub Slab Soil Vapor	43.32526	-78.396425
SSB-4	Sub Slab Soil Vapor	43.325197	-78.396612
ME Crawl	Sub Slab Soil Vapor	43.325245	-78.396045
Residence Crawl	Sub Slab Soil Vapor	43.32502	-78.396196
Outdoor Air	Sub Slab Soil Vapor	43.325091	-78.396171
HRPSB1	Soil Boring	43.32410524	-78.39612103
HRPSB2	Soil Boring	43.32441043	-78.39612006
HRPSB3	Soil Boring	43.32494073	-78.39641433
HRPSB4	Soil Boring	43.32511466	-78.39615261
HRPSB5	Soil Boring	43.32511402	-78.39629087
HRPSB6	Soil Boring	43.32511288	-78.3965925
HRPSB7	Soil Boring	43.325220550	-78.3966502
HRPSB8	Soil Boring	43.32475369	-78.39635683
HRPSB9	Soil Boring	43.32476955	-78.39613787
HRPSB10	Soil Boring	43.32483489	-78.39604719
HRPSB11	Soil Boring	43.32491582	-78.39588188
HRPSB12	Soil Boring	43.32489547	-78.39560281
HRPSB13	Soil Boring	43.32501115	-78.39675562
HRPSB14	Soil Boring	43.325108	-78.39723259
HRPSB15	Soil Boring	43.325283	-78.397245

Sample Locations	Туре	Latitude	Longitude
HRPSB16	Soil Boring	43.325301	-78.396902
HRPSB17	Soil Boring	43.32515606	-78.39690266
HRPSB18	Soil Boring	43.325302	-78.39661372
HRPSB19	Soil Boring	43.32531779	-78.39633462
HRPSB20	Soil Boring	43.32531827	-78.39606401
HRPSB21	Soil Boring	43.32529646	-78.39594938
HRPSB22	Soil Boring	43.325277	-78.395712
HRPSB23	Soil Boring	43.32527764	-78.39561612
HRPSB24	Soil Boring	43.32525611	-78.39553513
HRPSB25	Soil Boring	43.32523254	-78.39546384
HRPSB26	Soil Boring	43.32512606	-78.39546368
HRPSB27	Soil Boring	43.32514557	-78.39563697
HRPSB28	Soil Boring	43.3250541	-78.39562064
HRPSB29	Soil Boring	43.32495489	-78.39516976
HRPSB30	Soil Boring	43.32529468	-78.3954148
HRPSS 1	Surface Soil Sample	43.32432776	-78.39634084
HRPSS 2	Surface Soil Sample	43.32513764	-78.39712567
HRPSS 3	Surface Soil Sample	43.325302	-78.396842
HRPSS 4	Surface Soil Sample	43.32531673	-78.39617917
HRPSS 5	Surface Soil Sample	43.32528828	-78.39566242
HRPSS 6	Surface Soil Sample	43.32519375	-78.39464671
HRPSS 7	Surface Soil Sample	43.32479047	-78.39456116
HRPSS 8	Surface Soil Sample	43.32471832	-78.39563126
HRPSS 9	Surface Soil Sample	43.32414227	-78.39568076
HRPSS 10	Surface Soil Sample	43.3240906	-78.3946259
PSV-1	Passive Soil Vapor	43.325207	-78.396897
PSV-2	Passive Soil Vapor	43.325184	-78.396744
PSV-3	Passive Soil Vapor	43.325278	-78.396669
PSV-4	Passive Soil Vapor	43.325316	-78.396567
PSV-5	Passive Soil Vapor	43.325383	-78.396368
PSV-6	Passive Soil Vapor	43.325393	-78.396171
PSV-7	Passive Soil Vapor	43.325383	-78.395985
PSV-8	Passive Soil Vapor	43.32537	-78.395837
PSV-9	Passive Soil Vapor	43.325336	-78.395615
PSV-10	Passive Soil Vapor	43.325117	-78.396623
PSV-11	Passive Soil Vapor	43.32514	-78.396439
PSV-12	Passive Soil Vapor	43.325101	-78.396328
PSV-13	Passive Soil Vapor	43.325132	-78.39613
PSV-14	Passive Soil Vapor	43.325063	-78.396617
PSV-15	Passive Soil Vapor	43.325051	-78.396454
PSV-16	Passive Soil Vapor	43.325038	-78.396307
PSV-17	Passive Soil Vapor	43.325061	-78.396132
PSV-18	Passive Soil Vapor	43.324996	-78.395989
PSV-19	Passive Soil Vapor	43.325024	-78.395729
PSV-20	Passive Soil Vapor	43.325158	-78.395598
PSV-21	Passive Soil Vapor	43.325002	-78.395545
PSV-22	Passive Soil Vapor	43.325153	-78.395465
PSV-23	Passive Soil Vapor	43.324919	-78.395462
PSV-24	Passive Soil Vapor	43.324879	-78.395623
PSV-25	Passive Soil Vapor	43.324856	-78.395883

# Table 3 MONROE ELECTRONICS 100 HOUSEL AVENUE Lyndonville, New York

#### Monitoring Well Locations, Elevations, and Depth to Water Listings

				13-Se	ep-11	7-	Aug-12	19-D	ec-12	14-M	ar-13	10-Jun-13	
Wells	North	West	at Top PVC	DTW	Elevation	DTW	DTW Elevation		DTW Elevation		DTW Elevation		Elevation
MW-1	43.324553703	-78.396165756	338.311	5.37	332.941	5.93	332.381	3.36	334.951	0.92	337.391	1.33	336.981
MW-1B	43.324544037	-78.396168294	338.316	NA	NA	12.43	325.886	9	329.316	6.89	331.426	7.34	330.976
MW-2	43.325192026	-78.397002694	336.397	9.47	326.927	10.01	326.387	7.7	328.697	1.82	334.577	2.06	334.337
MW-2D	43.325191514	-78.397042902	336.177	NA	NA	10.36	325.817	6.85	329.327	4.51	331.667	4.79	331.387
MW-2B	43.325179148	-78.397003705	336.647	NA	NA	11.14	325.507	7.04	329.607	5.74	330.907	6	330.647
MW-3	43.325231324	-78.396647483	336.712	7.53	329.182	9.3	327.412	4.55	332.162	2.44	334.272	2.4	334.312
MW-3B	43.325220552	-78.396650210	336.844	9.99	326.854	11.1	325.744	7.6	329.244	6.09	330.754	6.25	330.594
MW-4	43.324811548	-78.395633616	337.823	4.74	333.083	5.15	332.673	2.07	335.753	1.14	336.683	1.42	336.403
MW-5	43.325283597	-78.396014694	336.077	2.84	333.237	4.75	331.327	1.72	334.357	1.55	334.527	1.58	334.497
MW-5B	43.325282965	-78.396006445	336.124	9.22	326.904	10.39	325.734	6.86	329.264	5.35	330.774	5.62	330.504
MW-6	43.325169773	-78.395548322	336.517	3.68	332.837	NA	NA	1.9	334.617	2.04	334.477	4.01	332.507
MW-6B	43.325167927	-78.395540387	336.509	9.62	326.889	NA	NA	7.35	329.159	5.73	330.779	4.6	331.909
MW-7	43.325087099	-78.396411787	336.702	NA	NA	5.47	331.232	1.9	334.802	0.38	336.322	artisian	331.232
MW-7D	43.325061679	-78.396422754	336.872	NA	NA	10.92	325.952	7.51	329.362	5.51	331.362	5.68	331.192
MW-7B	43.325082420	-78.396387598	337.032	NA	NA	11.29	325.742	7.76	329.272	6.82	330.212	6.4	330.632
MW-8B	43.324444890	-78.394720272	337.933	NA	NA	12.32	325.613	8.92	329.013	6.86	331.073	7.3	330.633
MW-9	43.325260116	-78.395341386	335.733	NA	NA	6.6	329.133	1.46	334.273	1.37	334.363	1.48	334.253
MW-9B	43.325323093	-78.395102911	335.013	NA	NA	9.65	325.363	6.08	328.933	4.6	330.413	4.83	330.183
MW-10	43.325415911	-78.396193503	333.607	NA	NA	6.15	327.457	1.15	332.457	1.3	332.307	2.05	331.557
MW-10D	43.325411496	-78.396158304	333.797	NA	NA	7.83	325.967	4.44	329.357	2.4	331.397	2.82	330.977
MW-10B	43.325434303	-78.396175347	333.847	NA	NA	8.13	325.717	4.56	329.287	2.94	330.907	3.29	330.557

# Table 4 MONROE ELECTRONICS 100 HOUSEL AVENUE Lyndonville, New York Air Samples - Analyzed for VOCs TO-15

(Only detected constituents are listed)

Date Surplies   Margin   Mar																			
1.100000000000000000000000000000000000	Location	SSB-1	SVP-1	AA-1	SSB-2	SSB-2DL	SSB-3	SVP-2	AA-3	SSB-4	SVP-3			AA-2		OA-1	•		NYSDOH
1.24 Transferentem	Date Sampled				5/26/2011														
12-Instructures																			
	1,1,2,2-Tetrachloroethane																		
Contract	1,1,2-Trichloroethane	ND			ND		ND	ND		ND	ND	ND		ND		ND			
1,24   Forthermores	1,1-Dichloroethane	2.7 J	2.8 J	0.047 J	220 E	250 D	1.8 J	0.87		17 J	1.6 J	0.031 J		0.094 J					
2.4 THENTY-VERNER   41	1,1-Dichloroethylene																		
2	, ,				ND														
Applications	1,2,4-TRIMETHYLBENZENE																		
254 Marchanes	1,2-Dibromoethane (EDB) (ethylene dibromide)																		
	1,2-Dichlorobenzene																		
3.3. THING PLY REPUTENCY   120 NO																			
Abstractions   No	,																		
2-0.00000000000000000000000000000000000	1,3,5-TRIMETHYLBENZENE (MESITYLENE)																		
Appendix company (as a part of the company	1,2-Dichloropropane																		
Abstractorer (Mail No	1,3-Dichlorobenzene																		
Administration   ADMINISTRATE   ADMINISTRATE   ADMINISTRATION   ADMINISTRATE	1,3-Dichloropropene (cis)																		
Achantemente 2 J 32 22 22 NO NO NO NO D 39 023 ND 026 0659 J ND 0.15 J ND 0.5 J ND NO																			
BROMO-F-LUCRÓSENZER BROMOF-LUCRÓSENZER BROMOF-LUCRÓSENZE BROMOF-L	1,3-Dichloropropene (trans)																		
Processing   Pro	,																		
**Performance   No	1-BROMO-4-FLUOROBENZENE BROMOFLUOROBENZENE)	99	ND	ND	100		96	ND	ND	99	ND	101	101	ND	100	ND		98	NE
NETHYLTOLUENE	2-Butanone (MEK)																		
Methods   1.5 J   ND	2-Hexanone (Methyl butyl ketone/MBK)		ND	0.13 J	0.21 J	0.21 DJ	0.19 J	ND			0.32 J	0.047 J	ND	0.096 J	0.027 J	0.037 J	0.018 J	0.018 J	
Comparison	4-ETHYLTOLUENE		ND		1.3 J	1.6 J	1.6 J	ND		0.62 J	ND	0.14 J	1.1 J	ND	0.13 J	ND	ND	0.14 J	
Marchane   May   2,8 J   0,55 J   2,5   2,6 D   2,1   1,6   0,47 J   2,J   0,38 J   0,55   22   0,61 J   1   0,49 J   ND   0,66   NE	4-Methyl-2-pentanone						0.96 J												
No	Acetone						81							36	6.9 J				
No.	Benzene	4.8 J	2.8 J	0.55 J	2.5	2.6 DJ	2.1	1.6	0.47 J	2 J	0.98 J	0.95	22	0.61 J	•	0.49 J	ND	0.66	
No	Bromodichloromethane	ND	0.41 J	ND	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE
Section of the content of the cont	Bromoform																		
Content content of the content of	Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			ND	
Decidence   ND   0.29 J   ND   ND   ND   ND   ND   ND   ND	Carbon disulfide		76	0.064 J	14	16 D	8	10	0.14 J	1.4 J	1.4 J	0.4 J	0.22 J	0.047 J	0.14 BJ	ND		0.23 J	NE
19   23   ND   ND   ND   ND   ND   ND   ND   N	Carbon tetrachloride	0.82 J					0.25 J	0.31						0.56					
Delications   38	Chlorobenzene							0.05 J											
Decomposition   Decompositio	Chloroethane		23					ND		ND	ND			ND					NE
18-12-Dictivocethylene	Chloroform		44	0.13 J	3.5	3.8 DJ	0.26 J	0.6 J		1.4 J	0.45 J	0.22 J		0.13 J	0.077 J	0.068 J	ND	0.094 J	
Cyclohexare	Chloromethane	0.57 J	ND		0.18 J	0.18 DJ	0.18 J	0.18 J		ND	0.29 J			1.4		1.3	0.02 J		
No   No   No   No   No   No   No   No	cis-1,2-Dichloroethylene																		
Dichlorodifluoromethane	Cyclohexane																		
ETHYL ACETATE  2 J ND	Dibromochloromethane																		
Ethylbenzene 35 8.7 4.1 5.1 5.D 3.6.J 2.5 0.98 J 1.6.J 2.5 J 0.67 J 4.4 10 0.36 J 0.058 J ND 0.36 J NE phy-Xylenes 46 10 J 13 16 17 DJ 12 8 2.5 J 5.2 J 8.J 1.8 J 14 33 1.2 J 0.13 J ND	Dichlorodifluoromethane											_							
Afebral   Afeb	ETHYL ACETATE																		
No.	Ethylbenzene																		
Methylene chloride (Dichloromethane)	m/p-Xylenes																		
Metrytertbutyl ether   ND   2.8 J   ND   ND   ND   ND   ND   ND   ND	Methyl isobutyl ketone (MIBK)													0.65 J					
N-HEPTANE  1.7 J ND ND 3.7 J 3.3 DJ 1.9 J ND ND 1.4 J ND 0.64 J 14 ND 0.62 J ND ND 0.3 J NE N-HEXANE  8.1 J ND ND 5.7 5.7 DJ 3 J ND ND 2.6 J ND 1.8 58 ND 1.9 ND ND ND 0.83 J NE N-Kylene  200 35 3.4 6.2 5.9 DJ 4.9 2.3 0.87 J 1.8 J 1.9 J 0.66 J 5.2 8.4 0.4 J 0.06 J ND	Methylene chloride (Dichloromethane)																		
N-HEXANE  8.1 J ND ND 5.7 5.7 DJ 3 J ND ND 2.6 J ND 1.8 58 ND 1.9 ND ND 0.83 J NE  Extyrene  ND N	Methyltertbutyl ether																		
Stylene   200   35   3.4   6.2   5.9 DJ   4.9   2.3   0.87 J   1.8 J   1.9 J   0.66 J   5.2   8.4   0.4 J   0.06 J   ND   0.48 J   NE	N-HEPTANE																		
ND   ND   ND   ND   ND   ND   ND   ND	N-HEXANE																		
Effective of the property of	o-Xylene												-						
Toluene 31 16 6.3 10 11 D 9.1 7.8 3.8 5.3 J 5.8 2.5 40 13 2.3 0.42 J ND 1.9 NE TAILS STATE	Styrene																		
Tank   1,2-Dichloroethylene   0.7 J   0.78 J   ND   0.31 J   0.3 DJ   0.1 J   0.23 J   ND   ND   ND   ND   ND   ND   ND	Tetrachloroethylene	_																	
Frichloroethylene 600 460 0.27 0.94 1 D 0.21 J 0.26 ND 1.8 J 0.41 J 0.25 0.051 J 0.66 ND ND ND ND ND ST Trichlorofluoromethane 9.2 3.3 J 2.8 11 13 D 15 12 1.4 8.7 J 2.6 J 1.6 1.3 4.6 1.4 1.3 ND 1.4 NE Trichlorotrifluoroethane 2.4 1.2 J 0.91 260 280 D 240 560 E 0.61 3.5 J 2 0.65 0.6 1.3 0.59 0.62 ND 0.62 NE Trichlorotrifluoroethane ND	Toluene																		
Trichloroffluoromethane 9.2 3.3 J 2.8 11 13 D 15 12 1.4 8.7 J 2.6 J 1.6 1.3 4.6 1.4 1.3 ND 1.4 NE Trichlorotriffluoromethane 2.4 1.2 J 0.91 260 280 D 240 560 E 0.61 3.5 J 2 0.65 0.6 1.3 0.59 0.62 ND 0.62 NE MINIOR MINIO	trans-1,2-Dichloroethylene																		
Tricklorotrifluoroethane         2.4         1.2 J         0.91         260         280 D         240         560 E         0.61         3.5 J         2         0.65         0.6         1.3         0.59         0.62         ND         0.62         NE           /inyl acetate         ND         ND         0.095 J         ND         ND <t< td=""><td>Trichloroethylene</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Trichloroethylene																		
/inyl acetate	Trichlorofluoromethane																		
/inyl chloride	Trichlorotrifluoroethane																		
	Vinyl acetate																		
Kylene-Total ND   45 J,   16.4   ND   ND   10.3   3.37 J   ND   9.9 J   ND   ND   41.4   ND   0.19 J   ND   ND   NE	Vinyl chloride																		
	Xylene-Total	ND	45 J,	16.4	ND	ND	ND	10.3	3.37 J	ND	9.9 J	ND	ND	41.4	ND	0.19 J	ND	ND	NE

Sample Exceeds NYSDOH Guidance Values

Bold VOC NE Volatile Organic Compound Not Established ND Sample is Non-Detect at Laboratory ug/m3 BGS micrograms per cubic meter Below Ground Surface

The analytes was positively identified; the associated numerical value is the approximate concentration of the analytes in the sample

The sample was analyzed from a dilution

#### Table 5 MONROE ELECTRONICS 100 HOUSEL AVE. Lyndonville, New York August 3, 2011

375-6 SCO - Protection of Public Health - Unrestricted, Commercial, and Industrial Soil Samples - Analyzed for Metals and Pesticides (Only detected constituents are listed)

			ii .								1				1	11
0.110	00.00	00.07	00.00	00.4	00.0	00.0	00.4	00.5	00.0	00.7	00.0	00.0	00.40			
Soil Sample ID	SB-22	SB-27	SB-28	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10		375-6 SCO - Protection	375-6 SCO - Protection
														of Public Health	of Public Health -	of Public Health -
Depth (Feet BGS)	2-4	2-4	2-4	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	0.0-0.5	Unrestricted	Commercial	Industrial
Date Collected	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11	8/3/11			
Metals (mg/kg)		·	·	·	·	·	·	·	N	letals (mg/kg	)	·				
Aluminum, Total	8,720	3,480	10,600	7,350	4,790	4,520	10,700	6,880	9,000	10,300	8,160	9,030	8,920	NE	NE	NE
Arsenic	2.7 J	14.4	2.2 J	28.9	3.2	2.7	6.2	3.9	73.4	124	16.0	17.6	80.9	13	16	16
Barium	33.0	64.0	44.5	38.0	31.8	25.1	64.3	101	34.4	33.7	25.9	33.7	23.2	350	400	10,000
Beryllium	0.54	0.13 J	0.18 J	0.35	0.25	0.21	0.50	0.35	0.28	0.35	0.29	0.28	0.25	7.2	590	2,700
Cadmium	0.21 J	0.32	0.067 J	0.25	0.24 J	0.19 J	0.24	0.60	0.26	0.37	0.23 J	0.25	0.22 J	2.5	9.3	60
Calcium	2,070 B	15,000 B	1,020 B	2490 B	33,800 B	36,000 B	3,800 B	23,800 B	923 B	932 B	1450 B	1,930 B	420 B	NE	NE	NE
Chromium, Total	7.9	14.1	11.7	7.9	7.0	6.6	14.2	10.4	7.8	9.9	7.0	8.1	7.0	1	400	800
Cobalt	4.9	13.6	3.6	4.6	4.3	4.7	8.1	5.9	3.9	4.6	2.7	3.0	2.9	NE	NE	NE
Copper	9.1	150	7.0	26.9	10.0	12.8	20.3	17.0	24.0	37.6	12.0	13.8	31.0	50	270	10,000
Iron	12,200 B	5,590 B	9,390 B	10,400 B	9,150 B	9,120 B	17,300 B	12,200 B	9,640 B	14,800 B	8,700 B	9,810 B	8,970 B	NE	NE	NE
Lead	7.1	12.0	4.9	91.8	23.5	10.8	19.9	24.2	153	400	48.2	57.2	226	63	1,000	3,900
Magnesium	1,330 B	362 B	1,800 B	1,880	18,700	7,410	3,880	13,100	1,500	1,940	1,240	1,410	1,120	NE	NE	NE
Manganese	156 B	37.8 B	136 B	262	397	402	380	526	135	350	91.6	97.7	67.7	1,600	10,000	10,000
Mercury	0.024 J H	0.033 H	0.014 J H	0.025	0.037	0.014 J	0.038	0.15	0.072	0.18	0.053	0.050	0.073	0.18	2.8	5.7
Nickel	9.6	21.6	10.2	9.2	8.7	9.6	16.5	13.1	8.3	8.9	5.5 J	6.4	6.5	30	310	10,000
Potassium, Total	353	295	657	762	757	648	855	742	388	343	311	324	249	NE	NE	NE
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.83 J	ND	0.66 J	ND	3.9	1,500	6,800
Sodium, Total	79.3 J	133 J	77.1 J	47.3 J	84.9 J	73.3 J	46.9 J	59.3 J	33.6 J	39.8 J	38.7 J	36.3 J	28.4 J	NE	NE	NE
Vanadium	15.4	47.0	15.2	13.3	11.9	10.1	20.2	14.1	12.9	19.5	13.1	15.1	13.0	NE	NE	NE
Zinc	28.3 B	52.6 B	28.9 J	32.0 B	40.9 B	31.2 B	77.6 B	70.0 B	33.8	38.3 B	26.4 J	31.9 B	27.6 B	109	10,000	10,000
Pesticides (ug/kg)									Pe	sticides (ug/l	(g)					
4-4'-DDD	1.8 J H	ND	ND	2.6 J	ND	ND	9.1 J	25 J	40	40	68	61	230	3.3	92,000	180,000
4-4'-DDE	6.6 H	ND	ND	27	ND	10 J	270	190	830	4,700	1,200	1,600	3,600	3.3	62,000	120,000
4'4'-DDT	21 H	1.0 J H	0.78 J H	40	ND	10 J	260	230	1,100	13,000	760	1,300	7,000	3.3	47,000	94,000
Dieldrin	ND	ND	ND	ND	ND	ND	5.5 J	ND	11 J	89 J	ND	ND	23 J	5	1,400	2,800
Ednosulfan sulfate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13 J	ND	30 J	2,400	200,000	920,000
Endrin	ND	ND	ND	ND	ND	ND	ND	20 J	ND	88 J	ND	ND	ND	14	89,000	410,000
Methoxychlor	ND	ND	ND	ND	ND	ND	ND	ND	ND	73 J	ND	ND	ND	NE	NE	NE
alpha-BHC	1.7 J H	ND	1.0 J H	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	3,400	6,800
beta-BHC	ND	ND	ND	ND	ND	ND	ND	ND	ND	38 J	ND	ND	ND	36	3,000	14,000
Bold				Sample is Abo	ve Non-Detect '	Value but Below	/ Objective									

Sample is Above Non-Detect Value but Below Objective Bold

Sample Exceeds Unrestricted Objective Sample Exceeds Commercial Objective

Sample Exceeds Industrial Objective

Not Established

Bold

NE

ND Sample is Non-Detect at Laboratory mg/kg Milligrams per Kilogram ug/kg Micrograms per Kilogram BGS Below Ground Surface

Chromium, Total Chromium DEC standards as shown are for Hexavalent Chromium.

The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

The sample was anaalized beyond the sspecified holding time

The analyte was detected in the blank

The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified

# Table 6 MONROE ELECTRONICS 100 HOUSEL AVENUE Lyndonville, New York 8/1/2011-8/3/2011

375-6 SCO - Protection of Public Health - Unrestricted, Commercial, and Industrial Soil Samples - Analyzed for VOCs 8260 B (Only detected constituents are listed)

Soil Sample ID  Date Collected	SB-1 (4-5) 8/1/11	SB-2 (3-4) 8/1/11	SB-3 (2-3) 8/1/11	SB-4 (12-16) 8/1/11	SB-5 (8-12) 8/1/11	SB-6 (5-6) 8/1/11	SB-7 (4-5) 8/2/11	SB-8 (4-5) 8/2/11	SB-9 (8-12) 8/2/11	SB-10 (10-12) 8/2/11	SB-11 (5-6) 8/2/11	SB-12 (7-8) 8/2/11	SB-13 (3-4) 8/2/11	SB-14 (5-6) 8/2/11	SB-15 (5-7) 8/2/11	SB-16 (5-6) 8/2/11	375-6 SCO - Protection of Public Health Unrestricted	375-6 SCO - Protection of Public Health - Commercial	375-6 SCO - Protection of Public Health - Industrial
VOCs 8260 B (ug/kg)										V	OCs 8260 B (ı	ıg/kg)							
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	ND	ND	ND	680	500,000	1,000,000
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	NE	NE
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.9	ND	ND	ND	270	240,000	480,000
1,1-Dichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	330	500,000	1,000,000
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	57	23	ND	ND	ND	ND	ND	ND	20	30,000	60,000
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	NE	NE
Acetone	29	ND	ND	20J	16J	21J	ND	7.5J	8.1J	ND	9.8J	7.0J	ND	ND	ND	6.9J	50	500,000	1,000,000
Carbon disulfide	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	8.2	6.9	ND	ND	ND	ND	NE	NE	NE
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	NE	NE
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	NE	NE
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NE	NE	NE
Methylene chloride	ND	ND	ND	ND	3.0J	ND	ND	ND	ND	ND	3.0J	ND	2.9J	2.7J	ND	ND	50	500,000	1,000,000
Tetrachloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,300	150,000	300,000
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	700	500,000	1,000,000
Trichloroethylene	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.7J	ND	ND	ND	ND	ND	ND	470	200,000	400,000
Xylene-Total	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	260	500,000	1,000,000

Sample is Above Non-Detect Value but Below Objective

Bold Sample Exceeds Commercial Objective
Bold Sample Exceeds Industrial Objective

VOC Volitile Organic Compound
NE Not Established
ND Sample is Non-Detect at Laboratory
mg/kg Milligrams per Kilogram

mg/kg Milligrams per Kilogram
BGS Below Ground Surface

Bold

Chromium, Total

Chromium DEC standards as shown are for Hexavalent Chromium.

The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

The sample was anaalized beyond the sspecified holding time

The analyte was detected in the blank

Sample Exceeds Unrestricted Objective

The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified

# Table 6 MONROE ELECTRONICS 100 HOUSEL AVENUE Lyndonville, New York 8/1/2011-8/3/2011

375-6 SCO - Protection of Public Health - Unrestricted, Commercial, and Industrial Soil Samples - Analyzed for VOCs 8260 B
(Only detected constituents are listed)

Soil Sample ID (Depth Feet BGS)  Date Collected	SB-17 (5-6) 8/2/11	SB-18 (5-6) 8/2/11	SB-19 (5-6) 8/2/11	SB-20 (5-6) 8/2/11	SB-21 (4-5) 8/3/11	SB-22 (2-4) 8/3/11	SB-23 (0-4) 8/3/11	SB-24 (3-4) 8/3/11	SB-25 (1-2) 8/3/11	SB-25 (3-4) 8/3/11	SB-26 (2-4) 8/3/11	SB-27 (2-4) 8/3/11	SB-28 (2-4) 8/3/11	SB-29 (2-4) 8/3/11	SB-30 (2-4) 8/3/11	375-6 SCO - Protection of Public Health Unrestricted	375-6 SCO - Protection of Public Health - Commercial	375-6 SCO - Protection of Public Health - Industrial
VOCs 8260 B (ug/kg)										V	OCs 8260 B (u	ıg/kg)						
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	8.3	ND	680	500,000	1,000,000							
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	6.6	ND	NE	NE	NE							
1,1-Dichloroethane	ND	ND	ND	ND	ND	72	36	16	ND	4.2J	ND	ND	ND	ND	19	270	240,000	480,000
1,1-Dichloroethylene	ND	ND	ND	ND	ND	25	1.3J	ND	330	500,000	1,000,000							
1,2-Dichloroethane	ND	20	30,000	60,000														
2-Butanone (MEK)	62	ND	ND	ND	ND	24J	ND	21J	ND	6.4J	7.5J	ND	3.6J	ND	38	NE	NE	NE
Acetone	320	ND	ND	16J	10J	130	5.4J	130	21J	39	51	53	18J	5.1	180	50	500,000	1,000,000
Carbon disulfide	ND	ND	ND	ND	7.5	4.9J	ND	3.2J	9.7	12	44	50	44	ND	ND	NE	NE	NE
Cyclohexane	ND	24	ND	ND	NE	NE	NE											
Isopropylbenzene	ND	2.0J	ND	ND	NE	NE	NE											
Methylcyclohexane	ND	ND	ND	ND	1.6J	ND	87	ND	ND	NE	NE	NE						
Methylene chloride	ND	5.5J	5.9J	5.6J	4.9J	3.6J	4.3J	3.8J	5.4J	4.4J	3.5J	3.9J	3.2J	3.2	3.6J	50	500,000	1,000,000
Tetrachloroethylene	ND	2.1J	ND	ND	ND	ND	ND	1,300	150,000	300,000								
Toluene	ND	ND	ND	ND	ND	0.97 J B	ND	ND	ND	1.2 J B	ND	ND	0.58 J B	ND	ND	700	500,000	1,000,000
Trichloroethylene	ND	ND	ND	ND	ND	2.7J	ND	ND	25	140	ND	ND	5.5J	ND	74	470	200,000	400,000
Xylene-Total	ND	3.3J	ND	ND	260	500,000	1,000,000											

Sample is Above Non-Detect Value but Below Objective

Bold Sample Exceeds Unrestricted Objective
Bold Sample Exceeds Commercial Objective

Bold

VOC

ND

mg/kg

Chromium, Total

BGS

Sample Exceeds Industrial Objective

Volitile Organic Compound

Not Established

Sample is Non-Detect at Laboratory

Milligrams per Kilogram

Below Ground Surface

Chromium DEC standards as shown are for Hexavalent Chromium.

The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample

The sample was anaalized beyond the sspecified holding time

The analyte was detected in the blank

The sample results is rejected due to serious deficiencies. The presence or absence of the analyte cannot be verified

Table 7 - Groundwater Analytical Results
Monroe Electronics
100 Housel Ave.
Lyndonville, New York
(Only detected constituents are listed)

											VOC	Cs 8260 B (ug/L)										
Groundwater Sample ID	Date Collected	1,1,1-Trichloroethane	,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	2-Butanone (MEK)	) Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chloroethane	Chloroform	cis-1,2-Dichloroethylene	Cyclohexane	Dibromochloromethane	Methylene chloride (Dichloromethane)	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
	09/13/11	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-1	12/20/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/13/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	ND	ND	ND	4.5	ND	1.8	ND	3.5 J	ND	ND	ND	12	7.8	ND	ND	0.55 J	1.1	ND	ND	ND	ND
MW-1 B	12/20/12	5.5	ND	ND	360	7.9	64	ND	ND	ND	ND	ND	66	0.55 J	ND	ND	ND	2.9 J	ND	ND	ND	ND
	03/13/13	ND	ND	ND	160	2.7	35	ND	ND	ND		ND	51	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND	43	0.49 J	12	ND	ND	ND		ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/13/11	3.2	ND	ND	12	1.1	ND	16	36	ND		2.8	1	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	3.1	ND	ND	19	3.1	ND	ND	ND	ND		ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	12/20/12	25	ND	ND	67	13	0.73 J	ND	ND	ND		ND	0.58 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/13/13	8.6	ND	ND	18	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	8.8	ND	ND	18	1.7	ND	ND	ND	ND	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	2.8	ND	ND	230	33	14	ND	ND	ND		ND	170	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-2 D	12/20/12	30	ND	1.5 J	1300	77	46	ND	ND	ND		ND 	490	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/13/13	ND	ND	ND	54	66	10	ND	ND	ND	ND	ND	480	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND	28	59	5.2	ND	ND	ND	ND	ND	230	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	ND	ND	ND	26	1.6	20	ND	3.3 J	ND		ND	36	6.1	ND	ND	0.69 J	ND	ND	ND	ND	ND
MW-2 B	12/20/12	ND	ND	ND	28	3.2	24	ND	ND	ND		ND	76	ND	ND	ND	ND	ND 	ND	ND	ND	ND
	03/13/13	ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND ND	ND	ND	ND ND	ND	ND ND	ND	ND ND
	06/06/13	ND		ND ND	7.1	ND	19	ND	ND	ND		ND	50	ND		ND	ND		ND		ND	
	09/13/11 08/07/12	62 530	ND 1.3	4.1	12 63	8.7 160	ND 0.98 J	ND ND	ND ND	ND ND		ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 0.46 J	ND 0.77 J	ND ND	ND 2.3	ND ND
MW-3	12/20/12	9.2	ND	4.1 ND	13	3.1	0.98 J ND	ND ND	ND ND	ND ND	_	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	0.46 J ND	0.77 J ND	ND ND	ND	ND ND
WW-5	03/13/13	1.7	ND ND	ND ND	4.4	0.38 J	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	06/06/13	1.5	ND ND	ND ND	3.8	0.30 J	ND ND	ND ND	ND	ND	ND ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND	ND ND
	09/14/11	34	1.2	3.9	2000	55	150	ND ND	ND	ND	ND	ND	250	ND	ND	ND	ND	0.73 J	ND	ND	ND	1.4
	08/07/12	ND ND	ND	ND	450	ND ND	40	ND	ND	ND ND		ND	54	ND	ND ND	ND	ND	ND	ND	ND ND	ND	ND
MW-3B	12/20/12	ND ND	ND	ND	650	25	84	ND	ND.	ND.		ND ND	230	ND ND	ND	ND	ND	5.1 J	ND	ND ND	ND	ND
	03/13/13	ND	ND	ND	120	1.8 J	18	ND	ND	ND	_	ND	43	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND	140	6.5	23	ND	ND	ND	ND	ND	100	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/13/11	1.5	ND	ND	0.79 J	ND	ND	ND	6.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	12/20/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/13/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/13/11	ND	ND	ND	3.3	ND	ND	ND	ND	ND	_	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
	08/08/12	ND	ND	ND	1	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5	12/20/12	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/14/13	ND	ND	ND	0.67 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.59 J	ND	ND	ND	ND	0.94 J	ND
	06/07/13	ND	ND	ND	0.89 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.65 J	ND
	09/14/11	9.2	0.98 J	ND	1700	57	150	ND	ND	ND	ND	ND	180	ND	ND	ND	ND	0.57 J	ND	ND	ND	1.4
	08/08/12	ND	ND	ND	530	ND	70	ND	ND	ND	ND	ND	48	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-5B	12/20/12	ND	ND	ND	200	ND	41	ND	ND	ND	ND	ND	19	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/14/13	ND	ND	ND	200	3	27	ND	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/07/13	16	ND	ND	1300 RE	33	130	ND	ND	ND	ND	ND	180	ND	ND	ND	ND	ND	ND	ND	ND	ND

#### Table 7 - Groundwater Analytical Results Monroe Electronics 100 Housel Ave. Lyndonville, New York (Only detected constituents are listed)

											VO	Cs 8260 B (ug/L)										
Groundwater Sample ID	Date Collected	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane (freon 113)	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Dichloroethane	2-Butanone (MEK)	Acetone	Benzene	Bromodichloromethane	Carbon disulfide	Chloroethane	Chloroform	cis-1,2-Dichloroethylene	Cyclohexane	Dibromochloromethane	Methylene chloride (Dichloromethane)	Tetrachloroethylene	trans-1,2-Dichloroethylene	Trichloroethylene	Vinyl chloride
	09/13/11	ND	ND	ND	210	22	ND	ND	ND	ND	ND	0.89 J	ND	ND	69	1.1	ND	ND	ND	100	54	ND
	08/07/12	ND	ND	ND	240	21	ND	ND	ND	ND	ND	ND	ND	ND	39	ND	ND	ND	ND	44	41	ND
MW-6	12/20/12	ND	ND	ND	190	16	ND	ND	ND	ND	ND	ND	ND	ND	57	0.46 J	ND	ND	ND	65	36	ND
	03/14/13	ND	ND	ND	160	16	ND	ND	ND	ND	ND	ND	ND	ND	48	ND	ND	ND	ND	60	27	ND
	06/07/13	ND	ND	ND	200	15	ND	ND	ND	ND	ND	ND	ND	ND	52	ND	ND	ND	ND	66	32	ND
	09/14/11	ND	ND	ND	110	2	12	ND	4.1 J	ND	ND	ND	8.3	2.5	6	ND	ND	ND	ND	1.3	ND	ND
	08/07/12	ND	ND	ND	88	ND	5.5	ND	9.5 J	ND	ND	ND	3.1	ND	6.1	ND	ND	ND	ND	ND	ND	ND
MW-6B	12/20/12	ND	ND	ND	45	ND	3.6	ND	16	ND	ND	ND	1.6	ND	2.8	ND	ND	ND	ND	ND	ND	ND
	03/13/13	ND	ND	ND	2.5	ND	ND	2.2 J	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/07/13	ND	ND	ND	3.6	ND	ND	2 J	15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/13/11	ND	ND	ND	220	22	ND	ND	4 J	0.94 J	ND	0.84 J	ND	ND	62	1.2	ND	ND	ND	88	54	ND
	08/07/12	ND	ND	ND	ND	ND	0.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7	12/20/12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	03/13/13	ND	ND	ND	0.80 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/07/13	ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	08/07/12	22	ND	ND	1400	31	56	ND	ND	ND	ND	ND	51	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/20/12	ND	ND	ND ND	22	19	1.8	ND	ND	ND	ND	ND	24	ND	ND ND	ND	ND	ND ND	ND	ND	ND	ND
MW-7 D	03/13/13	4.3	ND	0.49 J	290	41	9.1	ND	ND	ND	ND	ND	280	ND	ND	ND	ND	ND	ND	ND	ND	ND
	06/07/13	ND	ND	ND	66	34	4.5	ND	ND	ND	ND	ND	130	ND	ND	ND	ND	ND	ND	ND	ND	ND
	09/14/11	ND	ND	ND	110	1.9 J	12	ND	4.4 J	ND	ND	ND	8.4	2.4	5.9	ND	ND	ND	ND	1.3	ND	ND
	08/07/12	ND	ND	ND ND	11	ND ND	7.9	ND ND	7.7 J	ND	ND ND	ND	15	ND ND	ND.	ND	ND	ND ND	ND ND	ND	ND ND	ND
MW-7B	12/20/12	ND	ND	ND ND	16	0.45 J	8	ND ND	16	ND	ND	ND	14	ND	ND	ND	ND	ND ND	ND ND	ND	ND ND	ND
	03/13/13	ND	ND	ND ND	1.9	ND	0.68	1.3 J	9.9 J	ND	ND ND	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND
	06/07/13	ND	ND	ND ND	4.6	ND	0.8 J	ND	10	ND	ND	ND	3.3	ND	ND	ND	ND	ND ND	ND	ND	ND	ND
	08/08/12	ND	ND	ND ND	17	0.59 J	9.7	ND	4.1 J	ND	ND	ND	15	4.5	ND	ND	ND	0.54 J	ND	ND	ND	ND
	12/21/12	ND	ND	ND ND	19	ND	14	ND ND	ND	ND	ND ND	ND	9.1	ND	ND	ND	ND	ND	ND ND	ND ND	ND	ND
MW-8 B	0/13/13	ND	ND	ND ND	0.78 J	ND ND	0.58	ND	ND	ND	ND	ND	2.2	ND	ND ND	ND	ND	ND ND	ND	ND	ND	ND
	06/06/13	ND	ND	ND ND	15	0.72 J	12	ND	ND	ND	ND	ND	36	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND
	08/08/12	ND	ND	ND	270	26	1.1	ND	ND	ND	ND	ND	ND	ND	5.6	0.77 J	ND	ND ND	ND	7.9	270	ND
	12/21/12	ND	ND	ND ND	130	16	ND	ND	ND	ND	ND	ND	ND	ND	4	ND	ND ND	ND ND	ND	4.5	210	ND
MW-9	03/14/13	ND	ND	ND	360	46	1.7 J	ND	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND ND	ND	7.6	120	ND
	06/07/13	ND	ND	ND ND	230	26	ND	ND ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND ND	ND	4.3	130	ND
	08/07/12	ND	ND	ND	62	2.7	12	ND	6.1 J	ND	0.72 J	ND	36	14	ND	ND	ND	1.2	ND	ND	ND	ND
	12/21/12	2.9	ND	ND ND	150	7.3	27	ND ND	ND	ND	ND	ND	60	ND	ND	ND	ND	ND	ND ND	ND	ND ND	1.2
MW-9 B	03/14/13	ND	ND	ND ND	210	13	54	1.5 J	17 J	ND	ND ND	ND ND	280	ND ND	ND	ND	ND	ND ND	ND ND	ND	ND ND	ND
	06/07/13	ND	ND	ND ND	150	11	70	ND	18 J	ND	ND ND	ND	190	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND
	08/07/12	ND	ND	ND ND	56	ND.	ND	ND ND	ND	ND	ND ND	ND ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND
	12/21/12	ND	ND	ND ND	14	1.2	1.6	ND	ND	ND	ND ND	ND ND	ND	ND ND	1.1	ND	ND	ND ND	ND ND	ND	ND ND	ND ND
MW-10	03/14/13	ND	ND	ND ND	16	1.9	3.5	ND	ND	ND	ND	0.32 J	ND	ND	1.8	ND	ND	ND ND	ND	ND	0.71 J	ND ND
	06/07/13	ND ND	ND ND	ND ND	48	2.1	2.1	ND	ND ND	ND	ND ND	0.32 J ND	ND	ND ND	1.1	ND	ND ND	ND ND	ND	ND	0.71 J	ND
	08/07/12	ND	ND	ND ND	4.5	ND	13	ND	ND	ND	ND	ND	1.6 J	ND	ND	ND	ND	ND ND	ND	ND	ND	ND
	12/21/12	ND ND	ND ND	ND ND	0.65 J	ND ND	2.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
MW-10 D	03/14/13	ND ND	ND ND	ND ND	0.65 J 0.51	ND ND	1.8	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	06/07/13	ND ND	ND ND	ND ND	33	5	2.1	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	3.3	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND ND
	08/07/13	ND ND	ND ND	ND ND	13	3.4	8.5	ND ND	ND ND	ND ND	0.83 J	ND ND	30		ND	ND ND	0.48 J	0.65 J	ND ND	ND ND	ND ND	ND ND
	12/21/12	ND ND	ND ND	ND ND	6.8	3.4	8.5 25	ND ND	ND ND	ND ND	0.83 J ND	ND ND	13	16 ND	ND ND	ND ND	0.48 J ND	0.65 J ND	ND ND	ND ND	ND ND	ND ND
MW-10 B	03/14/13		0.49 J	2.4				ND ND				ND ND		ND ND		1		ND ND		ND ND	+	1.2
	03/14/13	29	0.49 J ND	2.4 ND	1200 120	62	87 25	ND ND	ND ND	ND ND	ND ND	ND ND	350 94		ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	
NIVODEO OL.		5												ND -								ND
NYSDEC Class GA	Criteria	5	1	5	5	5	0.6	50	50	1	50	60	5	7	5	NE	50	5	5	5	5	2

NYSDEC class GA criteria are from NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1),

Ambient water quality, class GA standards/guidance values from Table 1.

Bold Sample is above Non-Detect Value but Below NYSDEC Class GA Criteria <## U Sample is Non-Detect at Lab
Indicates the stated minimum detectable level exceeds an RSR criteria.
Monitor Well
Not Established
Not analyzed
micrograms per liter Sample is above Non-Detect Value but Below NYSDEC Class GA Criteria ( ) An estimated concentration MW

Result exceeds calibration range NE

Re-extraction of the sample Ug/I

VOCs Volatile Organic Compounds

#### Table 8 Monroe Electronics 100 Housel Ave. Lyndonville, New York

#### Sample Dates: 9/13/2011-9/14/2011, 8/7/2012-8/8/2012, and 12/20/2012-12/21/2012 Groundwater Samples - Analyzed for Pesticides 8081A (9/13/2011-9/14/2011) (Only detected constituents are listed)

ndwater Sample ID MW-1 MW-1 MW-1 MW-1 B MW-1B MW-1BRE MW-2 MW-2 MW-2 MW-2 D MW-2 DRE MW-2D MW-2DRE MW-2 B MW-2B MW-3 MW-3 MW-3RE MW-3 NYSDEC Class GA Criteria 09/13/11 08/07/12 12/20/12 08/07/12 12/20/12 12/20/12 09/13/11 08/07/12 12/20/12 08/07/12 08/07/12 12/20/12 12/20/12 08/07/12 12/20/12 09/13/11 08/07/12 08/07/12 12/20/12 Date Collected Pesticides (ug/L) CAS# 4,4'-DDD 4,4'-DDE 72-54-8 0.3 0.2 NA NA NA NA 72-55-9 <0.011 U NA NA NA NA <0.012 U NA NA NA NA NA NA NA 319-84-6 <0.0071 U 0.01 NE 0.004 5103-71-9 NA NA NA NA NA NA 60-57-1 Dieldrin (<0.0097) U NA NA NA NA (<0.011) U NA NA NA NA NA NA NA NA (<0.0098) U NA NA NA 76-44-8 8001-35-2 NA NA NA 0.019 J NA NA NA 0.04 <0.0084 U <0.0085 U NA 0.06 MW-3B-DF25 MW-3 B MW-4 MW-5 MW-5 MW-5B MW-5B-DF25 MW-5 B MW-5B MW-6-DF5 MW-6 MW-6RE NYSDEC Class GA Criteria 12/20/12 09/13/11 09/13/11 12/20/12 09/14/11 12/20/12 09/13/11 12/20/12 Date Collected Pesticides (ug/L) CAS# 72-54-8 4,4'-DDD 0.061 0.038 J NA <0.0092 U NA 0.3 72-55-9 NA NA NA 0.017 J NA NA NA <0.011 U NA NA 0.2 alpha-BHC 319-84-6 NA NA NA NΙΔ <0.0065 U NA NA <0.0066 U NΙΔ NA NA NA NA NA <0.0065 U NΙΔ NA NA NA 0.01 5103-71-9 lpha-chlordane NA NA NA 0.022 J NA NA <0.015 U NA NA NA NA NA NA 0.016 J NA NA NE 60-57-1 NA NA NA 0.023 J NA (<0.0098) U NA NA NA 0.023 J NA NA NA 0.004 76-44-8 NA NA NA NA NA <0.0084 U NA <0.0085 U NA NA NA NA NA <0.0083 U NA NA NA 0.04 0.06 8001-35-2 NA NA (<0.12) U (<0.12) U (<0.12) U oundwater Sample ID MW-6B MW-6B-DF2 MW-6 B MW-6B MW-7 MW-7-DF5 MW-7 MW-7 MW-7 D MW-7D MW-7B MW-7B-DF2 MW-7 B MW-7B MW-8 B MW-8B MW-9 MW-9RE MW-9 MW-9RE NYSDEC Clas GA Criteria 12/21/12 09/14/11 09/14/11 08/07/12 12/20/12 09/13/11 09/13/11 08/07/12 12/20/12 08/07/12 12/20/12 09/14/11 09/14/11 08/07/12 12/20/12 08/08/12 12/21/12 08/08/12 08/08/12 12/21/12 Date Collected Pesticides (ug/L) CAS# 72-54-8 NA <0.009 U NA NA NA NA 4,4'-DDD NA 0.3 72-55-9 4.4'-DDE NA NA NA NA <0.011 U NA 0.2 319-84-6 alpha-BHC NA NA NA NA <0.0065 U NA 0.01 5103-71-9 Alpha-chlordane NA NA NA NA 0.016 J NA NE Dieldrin 60-57-1 NA NA NA NA 0.023 J NA 0.004 Heptachlor 76-44-8 NA NA NA NA <0.0083 U NA 0.04 8001-35-2 NA NA

Groundwater Sample ID		FIELD DUPLICATE 122112	FIELD DUPLICATE 122112RE	MW-9 B	MW-9 B DUP	MW-9B	MW-9BRE	MW-10	MW-10	MW-10 D	MW-10D	MW-10 B	MW-10B	Private Well	NYSDEC Class GA Criteria
Date Collected		12/21/12	12/21/12	08/08/12	08/07/12	12/21/12	12/21/12	08/07/12	12/21/12	08/07/12	12/21/12	08/07/12	12/21/12	04/04/13	
Pesticides (ug/L)	CAS#														
4,4'-DDD	72-54-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0099 U	0.3
4,4'-DDE	72-55-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.012 U	0.2
alpha-BHC	319-84-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0071 U	0.01
Alpha-chlordane	5103-71-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.016 U	NE
Dieldrin	60-57-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(<0.011) U	0.004
Heptachlor	76-44-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0092 U	0.04
Toxaphene	8001-35-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(<0.13) U	0.06

NYSDEC class GA criteria are from NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1), Ambient water quality, class GA standards/guidance values from Table 1.

Sample Exceeds NYSDEC Class GA Criteria

Sample is above Non-Detect Value but Below NYSDEC Class GA Criteria An Estimated Concentration

Sample was Not-Detected at the reporting limit ( or MDL or EDL if shown on data reports)

Indicates the stated minimum detectable level exceeds an RSR criteria.

( ) MW Monitor Well NE Not Established Not analyzed micrograms per liter

<## U

#### Table 9 Monroe Electronics 100 Housel Ave.

#### Lyndonville, New York

### Sample Dates: 9/13/2011-9/14/2011, 8/7/2012-8/8/2012, and 12/20/2012-12/21/2012 Groundwater Samples - Analyzed for 8 RCRA Metals (9/13/2011-9/14/2011) (Only detected constituents are listed)

Groundwater Sample ID		MW-1	MW-1	MW-1	MW-1	MW-1 B	MW-1B	MW-1B	MW-1B	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2D	MW-2D	MW-2D	MW-2 B	MW-2B	MW-2B	NYSDEC Class GA Criteria
Date Collected		09/13/11	12/20/12	03/13/13	06/06/13	08/07/12	12/20/12	03/13/13	06/06/13	09/13/11	08/07/12	12/20/12	03/13/13	06/07/13	12/20/12	03/13/12	06/06/13	12/20/12	03/13/12	06/06/13	
Metals (mg/L)	CAS#																				
Arsenic	7440-38-2	<0.0056 U	NA	ND	ND	NA	NA	ND	ND	0.011	NA	NA	ND	ND	NA	0.012	0.012	NA	ND	0.0077	0.025
Ferric Iron	Ferric Iron	NA	<0.075 U	0.47	ND	NA.	3.7	4.5	3.4	NA.	NA NA	0.22	1.9	0.47	1.5	4.8	3.5	NA NA	8.9	2.2	NE NE
Barium	7440-39-3	0.05	NA NA	NA	NA	NA	NA	NA NA	NA	0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	1
Cadmium	7440-43-9	<0.00033 U	NA	0.00051 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.005						
Chromium, Total	7440-47-3	0.0021 J	NA	0.015	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.05						
Lead	7439-92-1	0.0033 J	NA	0.007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.025						
		1																			
Groundwater Sample ID		MW-3	MW-3	MW-3	MW-3	MW-3B	мw-зв	MW-3 B	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5B	MW-5B	MW-5B		NYSDEC Class GA Criteria
Date Collected		09/13/11	12/20/12	03/13/13	06/06/13	12/20/12	03/13/13	06/06/13	09/13/11	12/20/12	03/13/13	06/06/13	09/13/11	12/20/12	03/14/13	06/07/13	12/20/12	03/14/13	06/07/13		
Metals (mg/L)	CAS#																				
Arsenic	7440-38-2	0.0084 J	NA	ND	ND	NA	ND	ND	<0.0056 U	NA	ND	ND	0.03	NA	0.036	0.087	NA	ND	0.0098 J		0.025
Ferric Iron	Ferric Iron	NA	1.3	5.4	6.4	25.1	23.8	8.3	NA	0.14	0.64	0.55	NA	14	63.9	174	13	18.6	19.1		NE
Barium	7440-39-3	0.25	NA	NA	NA	NA	NA	NA	0.005	NA	NA	NA	0.048	NA	NA	NA	NA	NA	NA		1
Cadmium	7440-43-9	<0.00033 U	NA	NA	NA	NA	NA	NA	<0.00033 U	NA	NA	NA	<0.00033 U	NA	NA	NA	NA	NA	NA		0.005
Chromium, Total	7440-47-3	0.0016 J	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	0.0018 J	NA	NA NA	NA NA	0.0037 J	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA		0.05
Lead	7439-92-1	<0.003 U	NA	NA	NA	NA	NA	NA	0.0031 J	NA	NA	NA	0.0046 J	NA	NA	NA	NA	NA	NA		0.025
Groundwater Sample ID		MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7D	MW-7D	MW-7D	MW-7B	MW-7B	MW-7B	MW-8B	MW-8B	MW-8B			NYSDEC Class GA Criteria
Date Collected		09/13/11	12/20/12	03/14/13	06/07/13	09/13/11	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/21/12	03/13/13	06/07/13			
Metals (mg/L)	CAS#																				
Arsenic	7440-38-2	0.0074 J	NA	0.014	0.010	0.0065 J	NA	ND	ND	NA	0.041	0.026	NA	ND	ND	NA	ND	ND			0.025
Ferric Iron	Ferric Iron	NA	11.8	38	40	NA	0.11	0.12	0.057	2.4	4.3	1.9	0.23	3.6	2.3	1.8	18.7	14			NE
Barium	7440-39-3	0.01	NA	NA	NA	0.011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			1
Cadmium	7440-43-9	0.00041 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			0.005						
Chromium, Total	7440-47-3	0.0023 J	NA	NA	NA	0.0024 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			0.05
Lead	7439-92-1	0.0036 J	NA	NA	NA	0.0053	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			0.025
	-	-1'																			
Groundwater Sample ID		MW-9	MW-9	MW-9	MW-9B	MW-9B	MW-9B	MW-10	MW-10	MW-10	MW-10	MW-10D	MW-10D	MW-10D	MW-10 B	MW-10B	MW-10B	MW-10B			NYSDEC Class GA Criteria
Date Collected		12/21/12	03/14/13	06/07/13	12/21/12	03/14/13	06/07/13	08/07/12	12/21/12	03/14/13	06/07/13	12/21/12	03/14/13	06/07/13	08/07/12	12/21/12	03/14/13	06/07/13			
Metals (mg/L)	CAS#		•			•					•										1
Arsenic	7440-38-2	NA	0.024	0.022	NA	0.0059	ND	NA	NA	ND	ND	NA	ND	ND	NA	NA	0.012	0.0082	Ì		0.025
Ferric Iron	Ferric Iron	46.5	51.1	96.9	8.1	0.68	0.098	NA	0.4	1.7	1.7	0.49	0.50	2.2	NA	10.6	5.2	3.9			NE
Barium	7440-39-3	NA	NA NA	NA	NA NA	NA	NA.	NA NA	NA	NA	NA NA	NA	NA	NA	NA NA	NA NA	NA	NA			1
Cadmium	7440-43-9	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			0.005
Chromium, Total	7440-47-3	NA.	NA NA	NA NA	NA NA	NA NA	NA.	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			0.05
Lead	7439-92-1	NA.	NA NA	NA NA	NA NA	NA NA	NA.	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA			0.025
		11/1	I N/A	I N/A	I IVA	I NA	14/7	I N/C	11/7	I IVA	I NA	IN/A	INA	IN/A	I NA	IN/A	I IVA	I IVA	1	1	0.023

NYSDEC class GA criteria are from NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1), Ambient water quality,

class GA standards/guidance values from Table 1.

Sample Exceeds NYSDEC Class GA Criteria

Sample is above Non-Detect Value but Below NYSDEC Class GA Criteria An Estimated Concentration

Sample is Non-Detect at Lab

Indicates the stated minimum detectable level exceeds an RSR criteria.

J <## U ( ) MW NE Monitor Well Not Established NA Not analyzed ND Not Detected mg/L milligrams per liter

RCRA Resource Conservation and Recovery Act

### Table 10 Monroe Electronics 100 Housel Ave.

# Lyndonville, New York Sample Dates: 9/13/2011-9/14/2011, 8/7/2012-8/8/2012, 12/20/2012-12/21/2012, 3/13/2013-3/14/2013, and 6/6/2013-6/7/2013 Groundwater Samples - Analyzed for MNA Parameters (Only detected constituents are listed)

roundwater Sample ID		MW-1	MW-1	MW-1	MW-1B	MW-1B	MW-1B	MW-2	MW-2	MW-2	MW-2 D	MW-2 D	MW-2D	MW-2B	MW-2B	MW-2B	MW-3	MW-3	MW
ate Collected		12/20/12	03/13/13	06/06/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/06/13	12/20/12	03/13/13	06/0
INA Parameters (mg/L, pH-SU)	CAS#																		
Ikalinity (CaCO3)	471-34-1	256	159	252	108	97.9	62.9	464	369	355	392	510	562	300	66.8	256	388	406	37
hloride	16887-00-6	267	154	244	26.6	32.0	27.4	45.5	26.4	29.8	42.2	44.8	50.0	64.1	1.8	44.4	68.6	47.2	3
litrate ion	14797-55-8	1.2	0.66	0.68	0.025 J	0.12	0.25	0.05	2.9	0.59	<0.011 U	ND	0.021	<0.011 U	0.13	ND	0.05	0.025	0.0
ITRITE NITROGEN	14797-65-0	<0.02 U ^	<0.02 U ^	<0.02 U ^	0.026 JB ^	ND	ND	<0.02 U ^	0.061	ND	<0.02 U	ND	ND	<0.02 U	ND	ND	0.029 JB ^	ND	N
Н	PH	6.89	6.9	6.92	11.5	10.8	10.4	6.83	6.71	6.59	7.16	6.95	6.83	7.7	7.75	7.87	6.88	6.8	6.
hosphorus	7723-14-0	<0.005 U	ND	ND	<0.005 U	ND	0.017	<0.005 U	ND	ND	<0.005 U	0.052	ND	<0.005 U	ND	0.014	<0.005 U	ND	0.
ulfate	14808-79-8	241	70.6	225	93.6	49.2	64.0	151	74.6	71.0	169	124	122	64.2	14.1	53.4	59.2	55.3	4
ulfide	18496-25-8	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND	1
KN (Total Kjeldahl Nitrogen)	TKN353.1	<0.15 U	0.22	0.16	0.71	0.83	0.65	0.22	0.63	0.31	0.33	0.54	0.27	0.87	0.65	0.87	0.34	0.67	0
otal Organic Carbon - Quad	7440-44-0	1.3	1.1	2.0	<0.43 U	0.85	3.2	3	4.1	4.3	2.1	2.6	3.2	1.4	1.9	1.0	4.1	6.0	7
		TI .							I					1					1
roundwater Sample ID		MW-3B	MW-3B	MW-3B	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5B	MW-5B	MW-5B	MW-6	MW-6	MW-6	MW-6B	MW-6B	MV
ate Collected		12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/14/13	06/
INA Parameters (mg/L, pH-SU)	CAS#																		
kalinity (CaCO3)	471-34-1	256	94.0	113	192	139	148	172	694	477	96	120	272	332 B	352	350	16 B	8.6	1 9
hloride	16887-00-6	71.2	46.4	48.5	9.4	22.6	17.5	28.7	156	245	53.6	56.8	56.9	160	165	186	73.4	246	1 2
itrate ion	14797-55-8	<0.011 U	ND	ND	0.076	0.040	0.076	<0.011 U	0.054	ND	<0.011 U	ND	ND	0.028 J	0.075	0.026	<0.011 U	0.52	0
ITRITE NITROGEN	14797-65-0	<0.02 U	ND	ND	<0.02 U ^	ND	ND	0.067	0.041	ND	<0.02 U	ND	ND	<0.02 U	ND	ND	<0.02 U	0.071	0.
Н	PH	7.42	7.65	8.37	7.48	7.51	7.29	6.49	6.51	6.83	8.49	7.95	7.83	6.9 H	7.12	7.23	9.43 H	9.2	9
hosphorus	7723-14-0	<0.005 U	ND	ND	<0.005 U	ND	ND	0.12	0.27	0.35	<0.005 U	ND	ND	<0.005 U	ND	ND	<0.005 U	ND	1
ulfate	14808-79-8	220	88.7	84.7	401	1090	753	1130	2110	2270	82.5	89.0	173	1450	1840	1920	423	208	5
ulfide	18496-25-8	<0.052 U	ND	ND	<0.052 U	ND	ND	0.053 J	0.22	0.089	<0.052 U	<0.052 U	ND	<0.052 U	<0.052 U	<0.052 U	<0.052 U	<0.052 U	<0.0
KN (Total Kjeldahl Nitrogen)	TKN353.1	1.3	1.6	0.83	<0.15 U	0.43	ND	2.5	4.7	4.1	1	1.4	0.76	3.5	4.3	3.9	2.3	4.3	1
otal Organic Carbon - Quad	7440-44-0	1.3	1.5	1.0	0.9 J	1.5	1.0	5.1	5.5	8.0	1.4	1.6	1.3	3.9	3.9	4.4	1.9	1.6	0.
		1																	
roundwater Sample ID		MW-7	MW-7	MW-7	MW-7D	MW-7D	MW-7D	MW-7B	MW-7B	MW-7B	MW-8B	MW-8B	MW-8B	MW-9	MW-9	MW-9	MW-9B	MW-9B	MW
Date Collected		12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/20/12	03/13/13	06/07/13	12/21/12	03/13/13	06/07/13	12/21/12	03/13/13	06/07/13	12/21/12	03/13/13	06/0
NA Parameters (mg/L, pH-SU)	CAS#		•	•				•						•	•				
kalinity (CaCO3)	471-34-1	272 B	262	281	352 B	388	397	720 B	162	82.0	58.8	46.7	99.1	200	444	304	292	142	9
hloride	16887-00-6	88.3	80.8	73.0	23.1	30.9	34.6	18.6	13.3	25.3	12.3	2.2	11.2	207	260	315	52.3	19.8	2
itrate ion	14797-55-8	2.5	4.6	2.3	<0.011 U	ND	ND	0.048 J	0.28	0.35	<0.011 U	ND	ND	<0.011 U	0.035	ND	0.023 J	0.035	<u> </u>
ITRITE NITROGEN	14797-65-0	<0.02 U	ND.	ND.	<0.02 U	ND	ND	<0.02 U	0.037	0.090	<0.02 U	ND	ND	0.072	0.034	ND	<0.02 U	ND	<u> </u>
4	PH	7.69 H	7.8	7.72	7.38 H	7.62	7.71	12.1 H	11.5	11.0	8.64 H	8.7	8.33	6.23 H	6.7	6.90	7.78 H	9.1	1
nosphorus	7723-14-0	<0.005 U	ND	ND	<0.005 U	0.019	ND	<0.005 U	ND	ND	<0.005 U	0.023	ND	<0.005 U	ND	ND	<0.005 U	ND	<u> </u>
ulfate	14808-79-8		200	159		153	143	<0.005 U	160	249	<0.005 U 55.3		44.5	<0.005 U	1910	2010	<0.005 U	160	٠.
		172			118							5.5							
ulfide	18496-25-8	<0.052 U	ND	ND	<0.052 U	ND 0.57	ND	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND	ND	<0.052 U	ND 0.00	<u> </u>
KN (Total Kjeldahl Nitrogen)	TKN353.1	0.15 J	0.38	0.19	0.27	0.57	0.31	3.1	1.1	1.0	0.47	1.0	0.42	8.3	7.8	7.2	0.75	0.82	
otal Organic Carbon - Quad	7440-44-0	3.2	3.0	3.3	2.7	2.5	3.5	0.83 J	1.3	3.2	<0.43 U	4.0	1.2	2.9	2.5	3.5	1.6	2.5	
oundwater Sample ID		MW-10	MW-10	MW-10	MW-10D	MW-10D	MW-10D	MW-10B	MW-10B	MW-10B									

Groundwater Sample ID		MW-10	MW-10	MW-10	MW-10D	MW-10D	MW-10D	MW-10B	MW-10B	MW-10B
Date Collected		12/21/12	03/13/13	06/07/13	12/21/12	03/13/13	06/07/13	12/21/12	03/13/13	06/07/13
MNA Parameters (mg/L, pH-SU)	CAS#									
Alkalinity (CaCO3)	471-34-1	324 B	376	264	136	120	177	316 B	410	404
Chloride	16887-00-6	196	231	230	42	50.3	138	67.9	54.8	68.2
Nitrate ion	14797-55-8	0.029 J	ND	ND	0.035 J	0.036	0.080	0.026 J	ND	ND
NITRITE NITROGEN	14797-65-0	<0.02 U	ND	ND	<0.02 U	ND	ND	<0.02 U	ND	ND
pH	PH	7.29 H	7.5	7.65	7.54 H	7.49	7.51	7.73 H	7.58	7.65
Phosphorus	7723-14-0	0.086	0.13	0.023	<0.005 U	0.0061	ND	<0.005 U	ND	ND
Sulfate	14808-79-8	707	803	1370	816	1200	1110	409	244	446
Sulfide	18496-25-8	2.8	2.3	13.7	<0.052 U					
TKN (Total Kjeldahl Nitrogen)	TKN353.1	0.46	0.20	ND	0.27	0.24	0.39	0.32	0.51	0.27
Total Organic Carbon - Quad	7440-44-0	4.7	2.7	4.0	4	3.2	3.3	3.1	2.1	4.4

Bold	Sample is above Non-Detect Value
MNA	Monitoring Natural Attenuation
SU	Standard Units
J	An Estimated Concentration
Н	Past Hold Time
В	Compound was Found in the Blank and Sample
<## U	Sample is Non-Detect at Lab
( )	Indicates the stated minimum detectable level exceeds an RSR criteria.
٨	Intstrument Related QC Exceeds the Control Limits
MW	Monitor Well
NE	Not Established
NA	Not Analyzed
ND	Not Detected
mg/l	milligrams per liter

#### Table 11 MNA Scoring based on EPA Protocol MW-2D

				Concentration in	
	Scoring Parameters for			Most	
	Concentration in Most			Contaminated	Points
Analysis	Contaminated Zone	Interpretation	Value	Zone	awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0	3
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3		
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2	nd	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III)reducing conditions	3	1.5	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2	169	0
Sulfide*	>1 mg/L	Reductive pathway possible	3	ND	
Methane*	<0.5 mg/L >0.5 mg/L	VC oxidizes Ultimate reductive daughter product, VC Accumulates	03	NA	
Oxidation Reduction Poten	tial*   <50 millivolts (mV) <-100mV	Reductive pathway possible Reductive pathway likely	12	-73	1
рН*	5 < pH < 9 5 > pH >9	Optimal range for reductive pathway Outside optimal range for reductive pathway	0 -2	7.82	0
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	2.1	0
Temperature*	> 20 <sub>o</sub> C	At T >20₀C biochemical process is accelerated	1	7.96	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1	NA	
Alkalinity	>2x background	Results from interaction between CO2 and aquifer minerals	1	392	1
Chloride*	>2x background	Daughter product of organic chlorine	2	42.2	
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3	NA	
Hydrogen	<1 nM	VC oxidized	0	NA	
		Intermediates resulting from biodegradation of more complex compounds; carbon and			
Volatile Fatty Acids	> 0.1 mg/L	energy source	2	NA	
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	NA	
Tetrachloroethene		Material released	0	NA	
Trichloroethene*		Material released Daughter product of PCE	0 2a/		
		Material released Daughter product of TCE If cis is > 80% of total DCE it is likely a daughter		"	_
DCE*		product 1,1-DCE can be chemical reaction product of TCA	0 2a/	46 ug/kg	2
VC*		Material released Daughter product of DCE	0 2a/	"	
1,1,1-Trichloroethane*		Material released	0	30 ug/kg	0
DCA		Daughter product of TCA under reducing conditions	2	1,300 ug/kg	2
Carbon Tetrachloride		Material released	0		
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2	490 ug/kg	2
Ethene/Ethane	>0.01mg/L >0.1 mg/L	Daughter product of VC/ethene	2 3		
Chloroform		Material released Daughter product of Carbon Tetrachloride	0 2		
Dichloromethane		Material released Daughter product of Chloroform	0 2		

Total for MW-2D December 2012 sampling event = 16

#### Score interpretation

0-5 Inadequate evidence for anaerobic biodegradation\* of chlorinated organics
6 to 14 Limited evidence for anaerobic biodegradation\* of chlorinated organics
15 to 20 Adequate evidence for anaerobic biodegradation\* of chlorinated organics
>20 Strong evidence for anaerobic biodegradation\* of chlorinated organics

<sup>\*</sup>reductive dechlorination

Table 11

MNA Scoring based on EPA Protocol

MW-5B

	Scoring Parameters for			Concentration in	
	Concentration in Most			Most Contaminated	
Analysis	Contaminated Zone	Interpretation	Value	Zone	Points awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0.11	3
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3		
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2	nd	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III) reducing conditions	3	19.1	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2	173	0
Sulfide*	>1 mg/L	Reductive pathway possible	3	ND	
Methane*	<0.5 mg/L >0.5 mg/L	VC oxidizes Ultimate reductive daughter product, VC Accumulates	03	NA	
Oxidation Reduction Potenti	al*   <50 millivolts (mV) <-100mV	Reductive pathway possible Reductive pathway likely	12	-180	2
рН*	5 < pH < 9 5 > pH >9	Optimal range for reductive pathway Outside optimal range for reductive pathway	0 -2	7.95	0
тос	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	1.3	0
Temperature*	> 20 <sub>0</sub> C	At T >20₀C biochemical process is accelerated	1	12.99	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1	NA	
Alkalinity	>2x background	Results from interaction between CO₂ and aquifer minerals	1	272	1
Chloride*	>2x background	Daughter product of organic chlorine	2	56.9	
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3	NA	
Hydrogen	<1 nM	VC oxidized	0	NA	
		Intermediates resulting from biodegradation of more complex compounds; carbon and			
Volatile Fatty Acids	> 0.1 mg/L	energy source	2	NA	
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	NA	
Tetrachloroethene		Material released	0	NA	
Trichloroethene*		Material released Daughter product of PCE	0 2a/		
		Material released Daughter product of TCE If cis is > 80% of total DCE it is likely a daughter			
DCE*		product 1,1-DCE can be chemical reaction product of TCA	0 2a/	130 ug/kg	2
VC*		Material released Daughter product of DCE	0 2a/		
1,1,1-Trichloroethane*		Material released	0	16 ug/kg	0
DCA		Daughter product of TCA under reducing conditions	2	1,300 ug/kg	2
Carbon Tetrachloride		Material released	0		
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2	180	2
Ethene/Ethane	>0.01mg/L >0.1 mg/L	Daughter product of VC/ethene	2 3		
Chloroform		Material released Daughter product of Carbon Tetrachloride	02		
Dichloromethane		Material released Daughter product of Chloroform	0 2		

Total for MW-5B June 2013 sampling event = 17

#### Score interpretation

0-5 Inadequate evidence for anaerobic biodegradation\* of chlorinated organics
6 to 14 Limited evidence for anaerobic biodegradation\* of chlorinated organics
15 to 20 Adequate evidence for anaerobic biodegradation\* of chlorinated organics
>20 Strong evidence for anaerobic biodegradation\* of chlorinated organics

<sup>\*</sup>reductive dechlorination

### Table 11 MNA Scoring based on EPA Protocol MW-10B

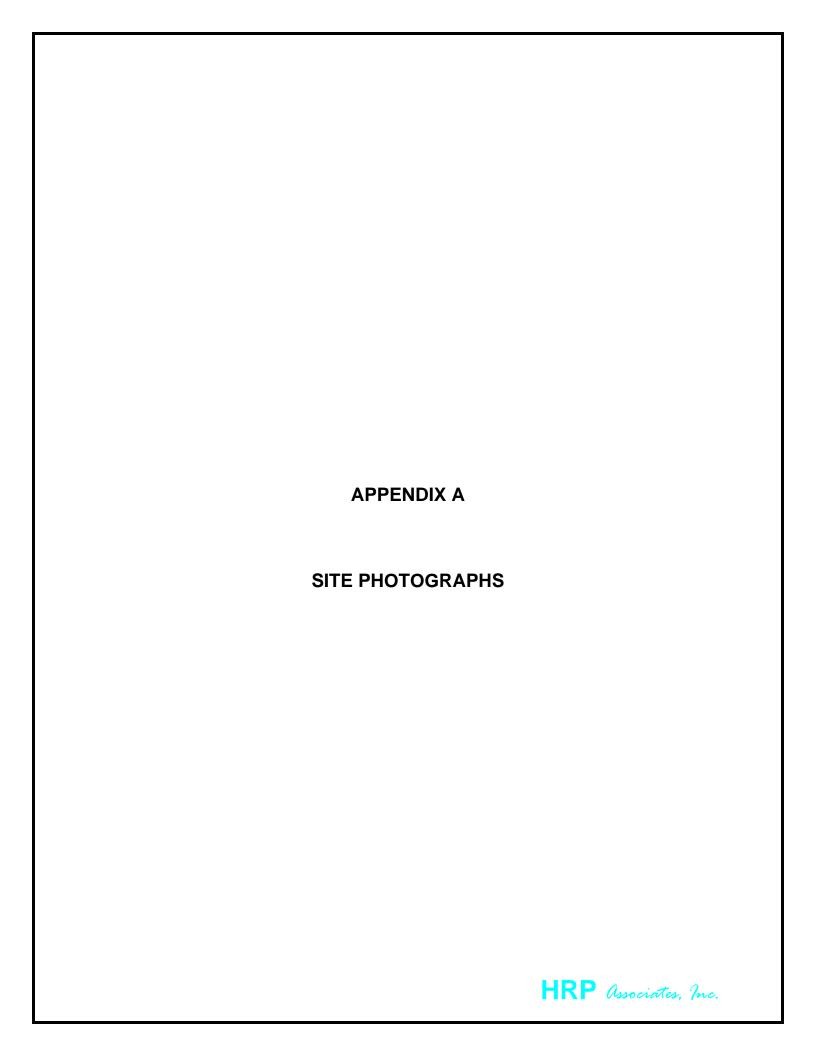
	Scoring Parameters for Concentration in Most			Concentration in Most Contaminated	
Analysis	Contaminated Zone	Interpretation	Value	Zone	Points awarded
Oxygen*	<0.5 mg/L	Tolerated, suppresses the reductive pathway at higher concentrations	3	0	3
Oxygen*	>5 mg/L	Not tolerated; however, VC may be oxidized aerobically	-3		
Nitrate*	<1 mg/L	At higher concentrations may compete with reductive pathway	2	nd	2
Iron II*	>1 mg/L	Reductive pathway possible; VC may be oxidized under Fe(III) reducing conditions	3	5.2	3
Sulfate*	<20 mg/L	At higher concentrations may compete with reductive pathway	2	244	0
Sulfide*	>1 mg/L	Reductive pathway possible	3	ND	
Methane*	<0.5 mg/L >0.5 mg/L	VC oxidizes Ultimate reductive daughter product, VC Accumulates	03	NA	
Oxidation Reduction Potential*	<50 millivolts (mV) <-100mV	Reductive pathway possible Reductive pathway likely	12	-55	1
рН*	5 < pH < 9 5 > pH >9	Optimal range for reductive pathway Outside optimal range for reductive pathway	0 -2	7.13	0
TOC	> 20 mg/L	Carbon and energy source; drives dechlorination; can be natural or anthropogenic	2	2.1	0
Temperature*	> 20 <sub>0</sub> C	At T >20₀C biochemical process is accelerated	1	8.9	0
Carbon Dioxide	>2x background	Ultimate oxidative daughter product	1	NA	
Alkalinity	>2x background	Results from interaction between CO2 and aquifer minerals	1	410	1
Chloride*	>2x background	Daughter product of organic chlorine	2	54.8	
Hydrogen	>1 nM	Reductive pathway possible, VC may accumulate	3	NA	
Hydrogen	<1 nM	VC oxidized	0	NA	
		Intermediates resulting from biodegradation of more complex compounds; carbon and			
Volatile Fatty Acids	> 0.1 mg/L	energy source	2	NA	
BTEX*	> 0.1 mg/L	Carbon and energy source; drives dechlorination	2	NA	
Tetrachloroethene		Material released	0	NA	
Trichloroethene*		Material released Daughter product of PCE	0 2a/		
		Material released Daughter product of TCE If cis is > 80% of total DCE it is likely a daughter		"	
DCE*		product 1,1-DCE can be chemical reaction product of TCA	0 2a/	87 ug/kg	2
VC*		Material released Daughter product of DCE	0 2a/	"	
1,1,1-Trichloroethane*		Material released	0	29 ug/kg	0
DCA		Daughter product of TCA under reducing conditions	2	1,200 ug/kg	2
Carbon Tetrachloride		Material released	0		
Chloroethane*		Daughter product of DCA or VC under reducing conditions	2	350 ug/kg	2
Ethene/Ethane	>0.01mg/L >0.1 mg/L	Daughter product of VC/ethene	23		
Chloroform		Material released Daughter product of Carbon Tetrachloride	0 2		
Dichloromethane		Material released Daughter product of Chloroform	0 2		

Total for MW-10B March 2013 sampling event = 16

#### Score interpretation

0-5 Inadequate evidence for anaerobic biodegradation\* of chlorinated organics
 6 to 14 Limited evidence for anaerobic biodegradation\* of chlorinated organics
 15 to 20 Adequate evidence for anaerobic biodegradation\* of chlorinated organics
 >20 Strong evidence for anaerobic biodegradation\* of chlorinated organics

<sup>\*</sup>reductive dechlorination





Looking west from the western end of the building on-site



Looking North from Monroe property to the Bowman Apple Products property to the North



Northwest corner of the Monroe Electronics Building



Western end of Monroe Electronics Building



East end of Monroe Electronics building, facing north. Bowman Apple can be seen in background



Front of Monroe Electronics building. Small residence can be seen in background to left



Monroe Electronics loading dock area facing north



Western addition to Monroe Electronics building



Entrance driveway facing southwest



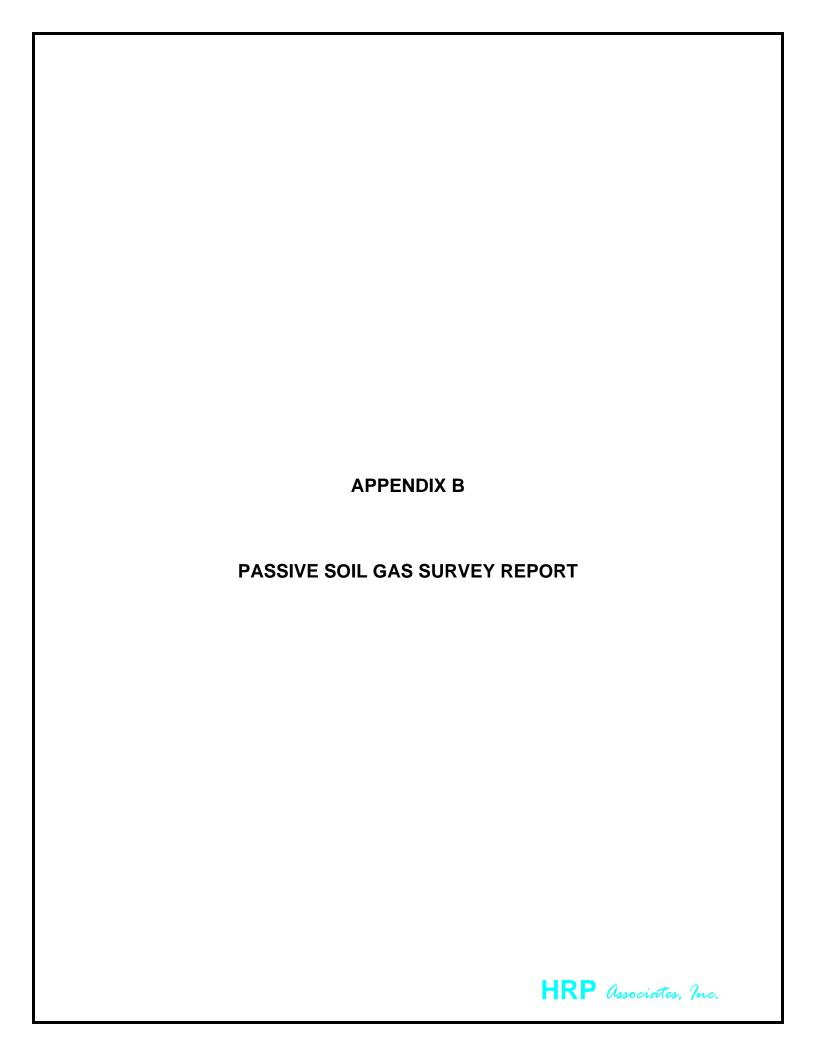
Gravel parking lot in front of building



Facing west along edge of onsite residence



Facing southeast from parking lot





179 Lake Avenue Rochester, NY 14608 USA Tel: (585) 727-2825 www.vaportrailanalytics.com

30-Jun-2011

## **Analytical Results Report Cover Sheet**

For VTA Project Number 201116

Total Number of Pages Including This Cover:

7

Please refer to the bottom of each page for identification of the individual page number.

The results in this report refer to samples collected by the Client.

Results from samples collected by the Client or an associated party relate to the samples or components within as received by the laboratory.

This report is part of a multipart document, and should only be evaluated in its entirety.

Partial reproduction is prohibited without the prior written consent of Vapor Trail Analytics LLC.

Please refer to the chain of custody for additional sample information.

Any deviations from, additions to, exclusions from, or non-standard conditions that may affect the quality of the results are communicated in the report in text or qualifier form. The following data qualifiers are defined and, where necessary, are utilized on an individual analyte basis in the report:

- B The method blank contained trace levels of analyte; refer to the method blank report.
- E The calibration limit was exceeded; the associated numerical value is the approximate concentration of analyte in the sample.
- U The analyte was not detected at or above the Reporting Limit.
- J The associated numerical value is the approximate concentration of analyte in the sample.
- UJ The analyte was not detected at or above the Reporting Limit; however the associated numerical value is the approximate concentration of analyte in the sample.

#### Narrative

One of the two method blanks (#2, run after samples) contained a small amount of carryover from a high-level sample run just before it. Thus any samples having an analyte level less than five times higher than the method blank amount are flagged "B" and should be considered estimates. The field blank FB-3 also contained carryover of PCE and TCE from the same high-level sample run previous to it. Since the pattern of VOCs detected on FB-3 does not match those of the field samples, per EPA TO-17 this field blank result does not invalidate the field samples. The absence of any detected analytes in field blanks 1 and 2 demonstrates good capping and supports this position.



**HRP** Associates

Joanna Wozniak

999 Oronoque Lane

179 Lake Avenue Rochester, NY 14608 USA Tel: (585) 727-2825 www.vaportrailanalytics.com

30-Jun-2011

NYSDOH ELAP ID Number: 11932

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

address 2 Stratford, CT 06614 phone 203.380.1395 x-105

Client:

Report To:

address 1

#### **Analysis Report for Passive Soil Vapor**

Field Location:	Monroe Ele	ectronics	1:: 		Date Sample	ed:	5/23-5/27/11
Client Project Number:	Not Indicat	ed			Date Receiv	ed:	5/27/2011
Client Job Site:	Monroe Ele	ectronics, Ly	ndonville,	NY	Date Analyz	zed:	6/1/2011
Sample Type: Long-Te	rm Passive S	Soil Vapor			Lab Project	Number:	201116
Lab Sample Number	1464	1465	1466	1467	1468	1469	1470
Field ID Number	PSV-12	PSV-2	PSV-18	PSV-17	PSV-13	PSV-21	PSV-23
Sorbent Tube Number	GO158987	GO158930	GO122005	GO125843	GO158928	GO158906	GO158984
Data File:	060111-18.D	060411-18.D	060411-19.D	060111-34.D	060111-35.D	060111-38.D	060111-36.D
<u>Analyte</u>			<u>Sample Res</u>	ults in Nanc	ograms (ng)		: 
1,1,1-Trichloroethane	U	U	U	U	81	U	6.4
1,2-Dichloroethane	U	U	U	υ	U	47	U
Benzene	6.6	5.9	U	8.6	9.8	11	5.7
Chloroform	U	2.9	13	2.3	3.5	33 :	61
Cyclohexane	UJ	5.9 J	UJ	30 J	8.7 J	12 J	3.8 J
Ethylbenzene	U	U	U	2.2	3.1	2.3	U.
Isopropylbenzene	U	U	6.1	U	U	: . <b>U</b> .	U
Methyl acetate	U	U	U	U	U	U.	U
Methylcyclohexane	U	4.7	U	47	8.0	12	5.5
m,p-Xylenes	4	U	U	5.1	8.5	6.4	U
o-Xylene	U	U	U	2.6	4.3	3.2	Ü
Styrene	UJ .	UJ	UJ.	UJ	UJ	UJ	UJ .
Tetrachloroethylene	U	U	U	U	60	11	U
Toluene	5.5	2.9	U	U	6.4	7.3	2.5
Trichloroethylene	U	2.7 B	8 B	U	U	676	U

Comments:

Jack D. Fox PhD, Technical Director

Signature:\_

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179 Lake Avenue Rochester, NY 14608 USA Tel: (585) 727-2825 www.vaportrailanalytics.com

30-Jun-2011

Client:

HRP Associates

Report To:

Joanna Wozniak

address 1

999 Oronoque Lane

address 2

Stratford, CT 06614

phone

203.380.1395 x-105

Sample Type: Long-Term Passive Soil Vapor

NYSDOH ELAP ID Number: 11932

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

Analysis Report for Passive Soil Vapor

Field Location:

Monroe Electronics

Date Sampled:

5/23-5/27/11

Client Project Number:

Not Indicated

Date Received: Date Analyzed: 5/27/2011 6/1/2011

Client Job Site:

Monroe Electronics, Lyndonville, NY

Lab Project Number:

201116

Lab Sample Number

1471

1472 1473 PSV-22 PSV-14

1474 PSV-11

1475 PSV-25

1476 PSV-19

1477

Field ID Number Sorbent Tube Number GO157992

PSV-20

GO156933

GO122028

GO124449

GO158901

55.0

U

13.0

4.2

26 J Ü

U

IJ

16.0

7.2

3.6

UJ.

U

11.0

3.1 B

GO156964

PSV-24

Data File: 060411-30.D

UJ

4086

060111-39.D

2.9 J

U

2.4

U

3.3

U

U

UJ

8.9

2.3

266

060111-21.D

U

U

U

U

UI

U

U

U

U

U

U

UJ

U

3.80

U

060111-50.D

Sample Results in Nanograms (ng)

4.4

U

U

U

UI

U

Ú

U

U

U

U

UJ

U

Ù

U

060111-33.D

060111-32.D

4.8

U

5.7

5.8

UJ.

U

U

IJ

U

U

U

UI

66.0

3.8

18 B

GO158970 060111-31.D

14

U

5.6

3.2

UJ

U

Ü

U

5.3

U

U

UJ

U

U

3 B

<u>Analyte</u>

1,1,1-Trichloroethane 799 5.2

1,2-Dichloroethane U 3.6 Benzene 50 8.8 Chloroform 22 24

Cyclohexane 126 J Ethylbenzene 5.9 Isopropylbenzene 3.1 Methyl acetate U

78 Methylcyclohexane m,p -Xylenes 24 o-Xylene 12

Styrene Tetrachloroethylene Toluene

Comments:

23 Trichloroethylene 37864

Signature:

Jack D. Fox PhD, Technical Director

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30-Jun-2011

Client:

**HRP** Associates

Report To:

Joanna Wozniak

address 1

999 Oronogue Lane

address 2

Stratford, CT 06614

phone

203.380.1395 x-105

NYSDOH ELAP ID Number: 11932

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

Analysis Report for Passive Soil Vapor

1480

PSV-5

U

U

7.6

U

UJ

IJ

U

Ü

U

U

U

UJ

U

3.5

13 B

Field Location:

Monroe Electronics

Date Sampled:

5/23-5/27/11

Client Project Number:

Not Indicated

Date Received:

5/27/2011

Client Job Site:

Date Analyzed:

6/1/2011

Sample Type: Long-Term Passive Soil Vapor

Monroe Electronics, Lyndonville, NY

Lab Project Number:

201116

Lab Sample Number Field ID Number

1478 FB-2

1479 PSV-7

12 J

7

U

U

11

4.7

2.3

UJ

U

4.2

U

U

U

U

1481 PSV-16

1482 PSV-10

1483 PSV-1

1484 PSV-6

Sorbent Tube Number GO158957

GO158907 GO125859 060111-41.D

GO124916 060111-37.D

Sample Results in Nanograms (ng)

U

U

9.8

Ú

2.9 J

U

U

U

U

5.1

2.6

UJ

U

6.7

U

GO124471 060111-30.D

3.7

U

U

2.3

UI

U

U

U

U

5.10

2.50

UJ

U

3.1

2.3 B

GO125895

GO124984

6.0

U

U

179

U

U

U

U

Ũ

U

U

UI

U

U

Data File: 060111-27.D 060111-29.D

060111-22.D

U

U

22

U

8.6 J

2.6

U

9.70

9.00

4.50

UJ

U

9.0

U

060111-40.D

**Analyte** 1,1,1-Trichloroethane

U U U U 1,2-Dichloroethane Benzene U 8 Chloroform Ù 14

Cyclohexane UI Ethylbenzene U Isopropylbenzene U Methyl acetate U

Methylcyclohexane U m,p-Xylenes U o-Xylene U Styrene UJ

Tetrachloroethylene Toluene Trichloroethylene

Comments:

Signature:\_ Jack D. Fox PhD, Technical Director

Note: This report is part of a multipart document, and should only be evaluated in its entirety.



179 Lake Avenue Rochester, NY 14608 USA Tel: (585) 727-2825 www.vaportrailanalytics.com

30-Jun-2011

Client:

**HRP** Associates

Report To:

Joanna Wozniak

address 1

999 Oronoque Lane

address 2

Stratford, CT 06614

phone

203.380.1395 x-105

NYSDOH ELAP ID Number: 11932

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

Analysis Report for Passive Soil Vapor

Field Location:

Monroe Electronics

Date Sampled:

5/23-5/27/11

Client Project Number:

Not Indicated

Date Received:

5/27/2011

Client Job Site:

Monroe Electronics, Lyndonville, NY

1486

U

Ū

U

U

UJ

U

U

U

IJ

U

U

UI

U

U

3.0 B

Date Analyzed:

6/1/2011

Sample Type: Long-Term Passive Soil Vapor

Lab Project Number:

201116

Lab Sample Number Field ID Number

1485 PSV-9 1487 FB-3

1488 PSV-8

1489 PSV-15

1491 PSV-4

Sorbent Tube Number GO156944

UI

4.9

3.8

12 B

PSV-3 GO158981 GO158979

GO122076

GO158969

18

U

U

U

UJ

U

U

U

U

U

U

UI

U

U

12 B

GO127354

GO156957

U

U

U

U

UJ

U

Ū

U

U

U

U

UJ

2.4

U

15 B

Sample Results in Nanograms (ng)

84

2.2

10

29

17 J

4.3

Ú

U

28

7.1

3.5

UJ

17

5.2

38

060111-17.D

1490

FB-1

Data File: 060411-20.D 060111-25.D

060111-45.D

060111-42.D

060411-21.D

U

U

U

U

UI

U

U

U

U

U

Ũ

UJ

U

U

U

060111-54.D

U

U

U

U

76 J

U

U

U

Ù

U

U

UJ

U

57

U

**Analyte** 1,1,1-Trichloroethane

565 1,2-Dichloroethane U Benzene 6.7 Chloroform ' 8.7

Cyclohexane 8.9 J Ethylbenzene U Isopropylbenzene U

Methyl acetate U Methylcyclohexane 12 m,p-Xylenes 4.3 o-Xylene 2.1

Tetrachloroethylene Toluene Trichloroethylene

Comments:

Styrene

Signature:\_

Jack D. Fox PhD, Technical Director

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30-Jun-2011

Client:

HRP Associates

Report To:

Joanna Wozniak

address 1

999 Oronoque Lane

address 2

Stratford, CT 06614

phone

203.380.1395 x-105

Laboratory Blank Report for Air

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

NYSDOH ELAP ID Number: 11932

Field Location: Field ID Number: NA

GO120562

**Lab Sample Number:** Date Sampled:

1492 NA

Client Project Number:

Not Indicated

Date Received:

5/27/2011

Client Job Site:

Monroe Electronics, Lyndonville, NY

Date Analyzed:

6/1/2011

Sample Type: Lab Method Blank #1 (Before Samples)

Lab Project Number:

201116

.11)		(ng)	(n <sub>z</sub>	g)
<u>Analyte</u>	Repo	orting Limit	Mass or	<u>ı Tube</u>
1,1,1-Trichloroethane		2.0	N	D
1,2-Dichloroethane		2.0	N	<b>)</b>
Benzene		5.0	NI	)
Chloroform		2.0	NI	)
Cyclohexane		2.0	N	) ) )
Ethylbenzene	:	2.0	N	)
Isopropylbenzene		2.0	NI	D
Methyl acetate		10	NI	)
Methylcyclohexane		5.0	NI	<b>o</b> ::
m,p -Xylenes		4.0	NI	)· · · ·
o-Xylene		2.0	NI	
Styrene		10	NI	) J
Tetrachloroethylene		2.0	NI	)
Toluene		2.0	.:: .NI	)
Trichloroethylene		2.0	NI	<b>)</b>

Comments: ng = nanograms; NA = Not Applicable; ND = Not Detected.

Data File:

060111-16.D

Signature:

Jack D. Fox PhD, Technical Director

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30-Jun-2011

Client:

**HRP** Associates

Report To:

Joanna Wozniak

address 1

999 Oronoque Lane

address 2 Stratford, CT 06614

phone

203.380.1395 x-105

NYSDOH ELAP ID Number: 11932

Analytical Method: Modified USEPA TO-17

Sampling Method: ASTM D6196-03 (Axial Diffusive)

#### Laboratory Blank Report for Air

**Field Location:** 

NA

Field ID Number:

GO158980

Not Indicated

Client Project Number: Client Job Site:

Monroe Electronics, Lyndonville, NY

Sample Type: Lab Method Blank #2 (After Samples)

Lab Sample Number:

1493

Date Sampled:

NA

Date Received:

5/27/2011

Date Analyzed:

6/1/2011

Lab Project Number:

201116

			(ng)			(ng)	
<u>Analyte</u>	:	Repo	rting L	<u>imit</u>		Mass on Tu	<u>ıbe</u>
1,1,1-Trichloroethane			2.0			ND	
1,2-Dichloroethane		::	2.0			ND	
Benzene			5.0			ND	
Chloroform			2.0			ND	
Cyclohexane			2.0	•		ND	J.
Ethylbenzene		٠.	2.0			ND	
Isopropylbenzene		. :	2.0	:		ND	
Methyl acetate		:	10			ND	
Methylcyclohexane			5.0			ND	
m,p-Xylenes			4.0		-	ND	
o -Xylene	::		2.0	:		ND	
Styrene			10			ND	J
Tetrachloroethylene		.:	2.0			ND	
Toluene	::	. :	2.0			ND	
Trichloroethylene			2.0			6.0	:

Comments: ng = nanograms; NA = Not Applicable; ND = Not Detected.

Data File:

060111-46.D

Signature:

Jack D. Fox PhD, Technical Director

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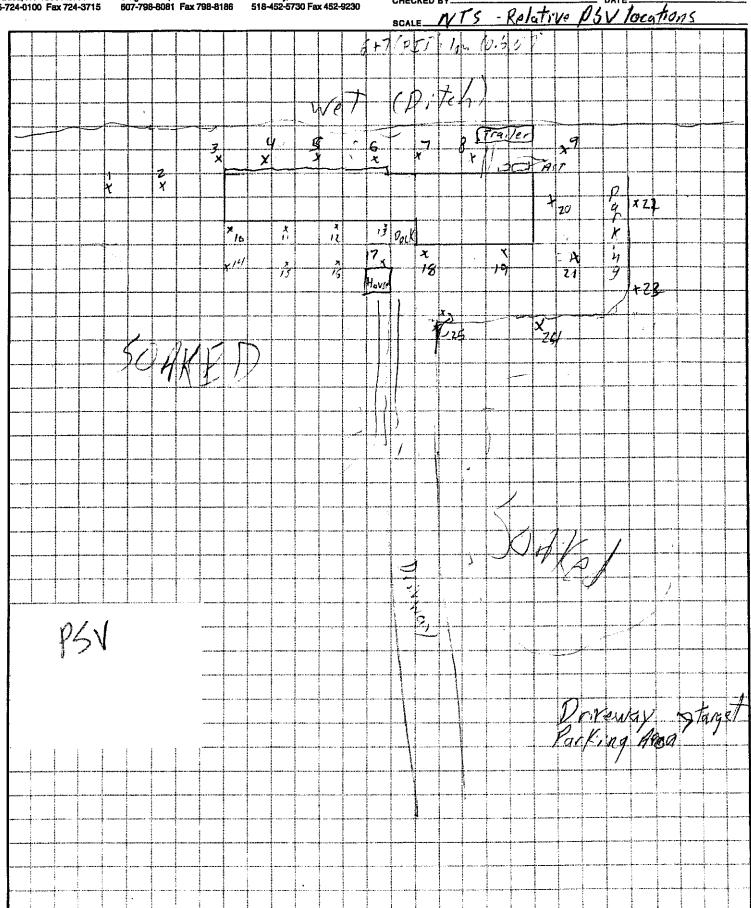
**UTICA OFFICE** 181 Genesee Street, Suite 200 Utica, NY 13501-2168 315-724-0100 Fax 724-3715

BINGHAMTON OFFICE 143 Court Street Binghamton, NY 13901-3528 ALBANY OFFICE 1510 Central Avenue, Suite 330 Albany, NY 12205-5046 518-452-5730 Fax 452-9230

CALCULATED BY-

JOB Monroe Electronics SHEET NO. \_ DATE 5/24/1)

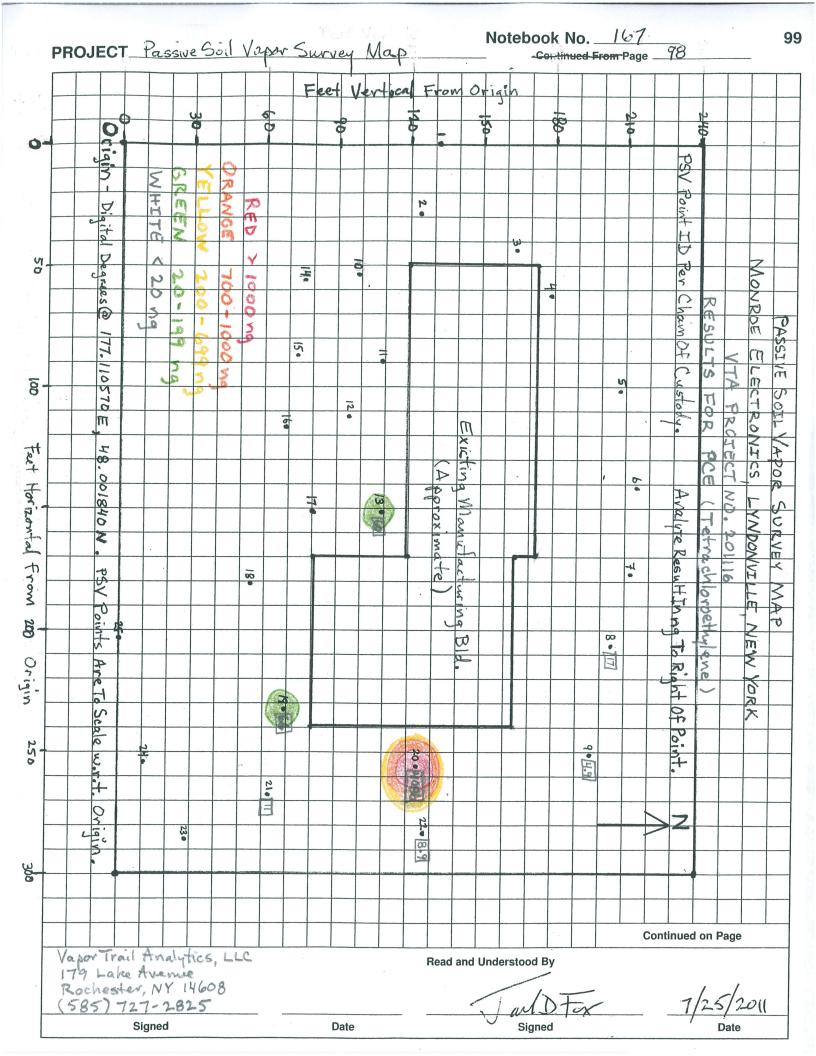
- Relative PSV locations CHECKED BY.

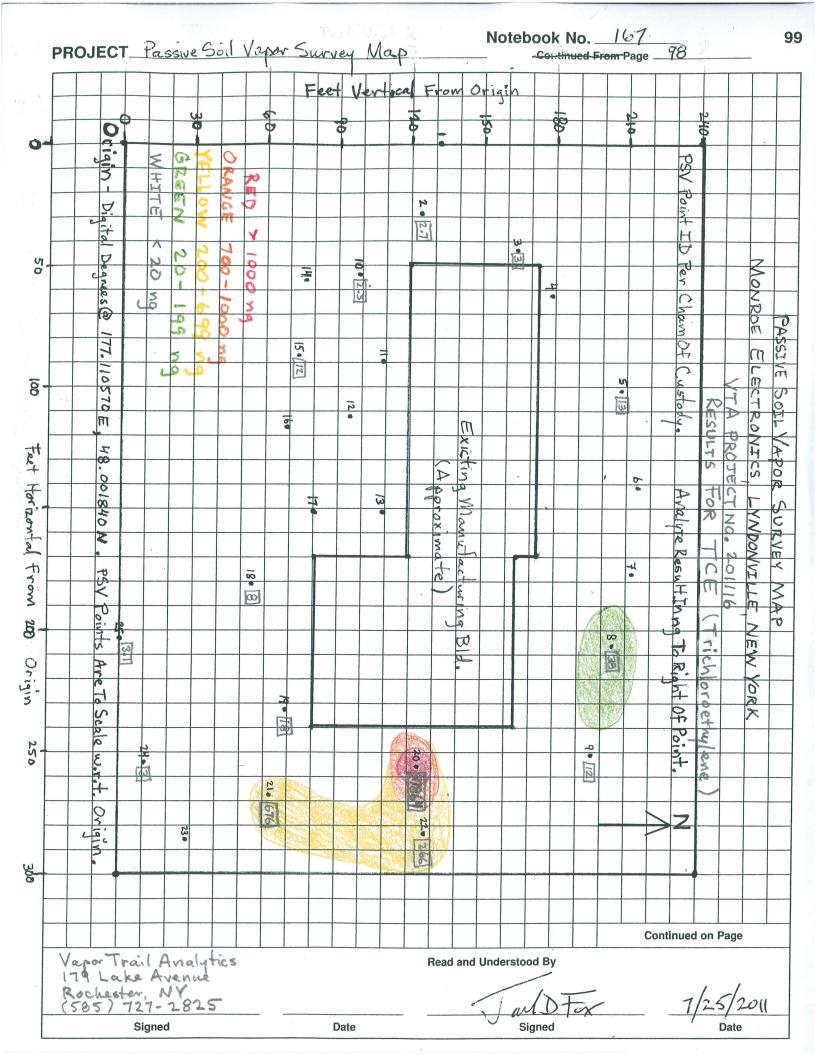


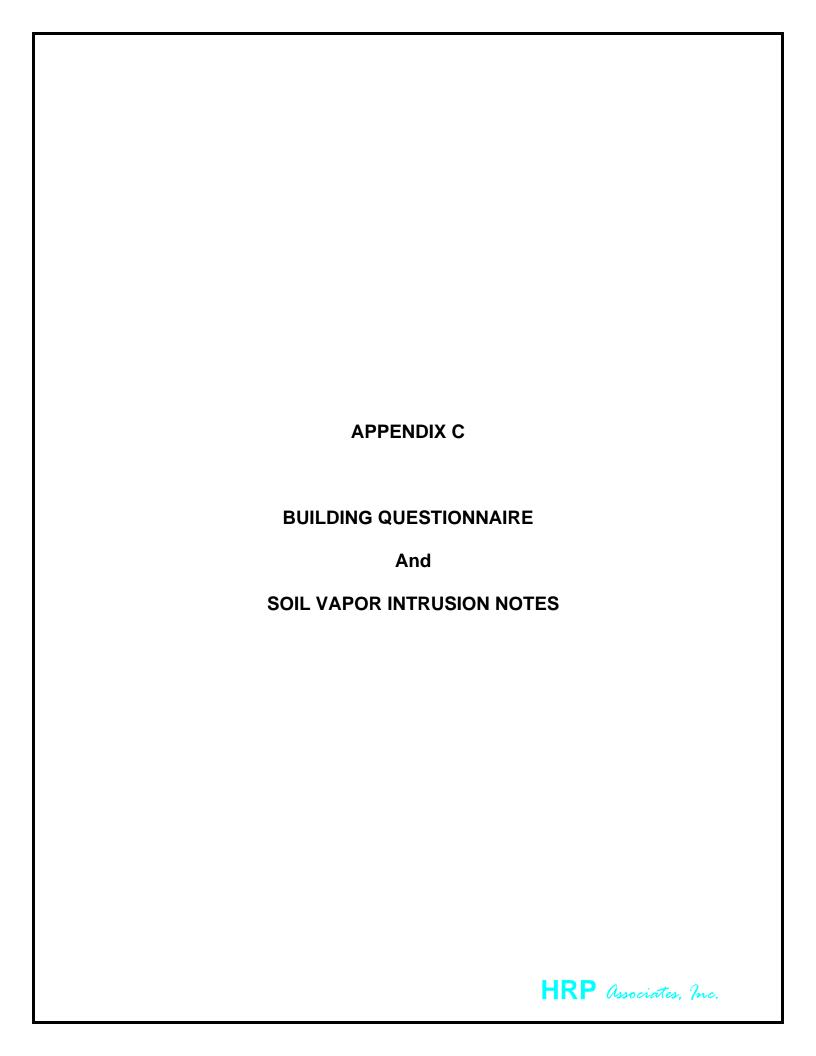
	Stratospheric	pheric		CHAIN	OFCU	CHAIN OF CUSTODY RECORD	RD	1043
Analytics		lance	SEND REPORT TO:		S	SEND INVOICE TO:		
		PERSON/CO	PERSON/COMPANY: JOANA WOZNIAK (HRP)		PERSON/COMPANY:	NY: SHIM E	LAB PROJECT #:	[#: CLIENT PROJECT#:
179 Lake Avenue Rochester, New York 14608 USA		ADDRESS: C	ADDRESS: 999 Grang VE LA. STATE: CT ZE P6614 CITY.	DE <b>26/14</b> CT	ADDRESS:		20116	. 0.
Phone: (585) 727-2865 2825		PHONE: FAX	PHONE: FAX: 263-380-1395/ 780-1458 PHONE: FAX:	80 - 1/38 РН	ONE: FAX:	•	<u> </u>	REQUESTED TURNAROUND TIME
PROJECT/SITE:		EMAIL: je	EMAIL. Je Gana, woznigkehrpassaciates.	de safet. EM	EMAIL:		1 2	SID SAMEDAY  3 X 5/10 [
Morroe Electronics	165	COMMENTS		(om			Quotation #	
						REQUESTED ANALYSIS	SIS	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix Cor	Number C-1/2		Remarks	VTA Sample Number
		٩		Soil Vaper	190			
(PSV-12)	2211 1/2/5/11/12/5	598 / 2211	150	Air	1		J MID 0.0	1441
(P(V-Z)	1/23/11	844/05/1					J PTO.0.8	5941
(PSV-18)		1324/ 840					V PID-010	9941
(PSV-17)	2/z4/11/	1142 /807			1		1 PEO-0.1	1467
(PSU-13)	924/n/	116/809			1		1 120-0.2	894
	Stryfn/	1348/725			_		1 120-6.3	1469
(1281-13)	sp:4/11/	1400/723			1		1 820-0.2	07 HJ
(PSV-20)	Julya/s	1338/731			1		P.T7.4	11/4/1
(PSU 22)	f:11/ h2/g	1349 / 729	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				V 720-0.4	72/1)
10 30122028 (1954-14)	5/24/14 V	1130 / 755	Þ	>			1 PLD 0.0	1473
Sample Condition: Per NELAC/ELAP 210/241/242/243/244	0/241/242/243/244		3 2 2 1 222	Receiving:				
Teevalu	Temperature:	90	Y N	la la				
Comments:	7	  ر		Sampled By	"Walker	110 11.0	Date/Time	
	Holding Time:	dau	Z X		Prof	Methol	5/27/1	940
	General Comments:	ıts:		Relinquished		1- July 1	Date/Time	
Several tubes got damp due 10	amp due	Bextrame	, Cq.'%	Record to			Date Time	25
6twn 5/23 + 5/27,				Received At I ah Bu	A A A	2	5 /2 //// Date/Time	70/
						•		

	Stratospheric	ic		CHA]	IN OF C	CHAIN OF CUSTODY RECORD	CORD	7	2073
			SEND REPORT TO:			SEND INVOICE TO:	Ö		
		PER SON/COMPANY	Š		PERSON/COMPANY:	PANY:		LAB PROJECT #:	CLIENT PROJECT#
179 Lake Avenue		ADDRESS:	( / 22/		ADDRESS:			201116	
Rochester, New York 14608 USA		CITY:	STATE:	ZIP:	CITY:	STATE	B: ZIP:	BANT CINITONA NATITY CHARACTER	POTIND TIME
Phone: (585) 727- <del>2865-</del> 2625		PHONE: FAX:			PHONE: FAX:				STD SAMEDA
PROJECT/SITE:		EMAIL:			EMAÏL:			1 2 3	
Monae Electronics	MICS	COMMENTS:						Quotation #	
						REQUESTED ANALYSIS	NALYSIS		
Sample Identification S	Sample Date San	Sample Time	Sample Type	Matrix	Number Containers	11-01/96		Remarks	VTA Sample Number
	,			Vagor		90			
(11:150)	2 (24) /2/2/ 111 d	008	15d	Hir	f			0.0.014	<i>HLH</i> 1
(PSV-25)	~	512/	•				<u> </u>	PID-B.1	1475
(61-18d)	8281 / 11/x1/s	1/812			1		<u> </u>	PID-01	1476
(KZ-NSd)	264/11/ 1 140E	511/9			1		\frac{1}{2}	1.8-020	12 M
(FB-2)		0041			1		<b>&gt;</b>		82 h]
(r.Nsd)	0151 "/22/5/11/21/5	452/0,			1			120.0.4	61.h1
(5-NSd)	2051 1/1/21/2	0/2/20			į		\( \)	PJD-0,0	(8h)
(B1-NSd)	Str / 1188	1			1		\ <u>\</u>	158-0.2	1481
6 (01/15d) 124421086	5/11 N /m2/5	254/	<b>&gt;</b>		1		1/	1.0.02	7841
10	,				/				
Sample Condition: Per NELAC/ELAP 210/241/242/243/244	0/241/242/243/244		NET AGG.	Receiving	ing:				
Keceipt F	Keceipt Parameter Temperature:		INELAC COmpusance		19.1	101		÷	
Comments	23°C		z		L MITTER	11/18			
	Holding Time:		□z X	Sampled By	By Mad	Makel		Date/Time 5 /27/11	940
Comments:	General Comments:		,	Relinquis	shed By	ON THE	,	Date/Time /	S
				Recorded		7		Date/Time	150
				<u></u>	った	Mar	5,	11110	10
-				Received	Received At Lab By			Date/Time	

		heric		CHA	NOFC	CHAIN OF CUSTODY RECORD	RECOR	Ð	3043
Analytics	s	alice	SEND REPORT TO:			SEND INVOICE TO:	CE TO:		
The state of the s	<u> </u>	PERSON/COMPANY:	7,7		PERSON/COMPANY:	PANY:		LAB PROJECT #:	F#: CLIENT PROJECT #:
179 Lake Avenue		ADDRESS:	ا کر: ا		ADDRESS:			20116	~0
Rochester, New Tork 14006 USA Phone: (585) 727- <del>2865-</del> 2825	€.	CITY: PHONE: FAY:	STATE:	ZIP:	CITY:		STATE: ZIP:		REQUESTED TURNAROUND TIME
PROJECT/SITE:		EMAIL:			EMAIL:			1 2	STD SAMEDAY
Montae Elect	Gonics	COMMENTS:						Quotation #	
							REQUESTED ANALYSIS	SJ	
Sample Identification	Sample Date	Sample Time	Sample Type	Matrix 50, /	Number Containers	L1-01/95190		Remarks	VTA Sample Number
(PSV-1)	Stzf11/5/21/11 1440	440/750	NSD	Bir.				1 PID-0.0	1483
(PSV-6)	<u> </u>	1505/241	3544		1			1,0-039	
(PSV-9)		1517/733			1	\		JPID-0,0	1485
(654.3)	1 / 1/sz/c/ 1)	346/55/			1	\		1 PTD-0.0	
(F.8-3)	<i>////</i>	1405			/			>	1487
(BN-8)	S/2/14 / 5/24/11	1514/737			-			1720-0.6	(488
(6511-15)	5/24/11/5/21/11 1135,	35/757			-	\		1 PXD-0.0	1489
(FB-1)	3/11	1385			1			1	1430
(h78d) Lsb951036	5/23/11/5/1/101	1457/744			/			1 PID-0.0	1641
10			i i						
Sample Condition: Per NELAC/ELAP 210/241/242/243/244	10/241/242/243/244			Receiving:	ng:		CO120562	Τ.	
Recei	Receipt Parameter		NELAC Compliance			40 / 0 %	0,0158780	980 Lab Blan 1#2	NF2 1493
Comments:	Temperature:		Z X			Internal III			
	Holding Time:		N X	Sampled By	By Mall	Miller	M.	Date/Time	045 11
Comments:	General Comments:	:3		Relinguished By	$\mathbb{R}^{hed By}$	CA)	Ø	Date/Time	0hb 11
				Receive By	$\mathcal{M}_{i}^{By}$	my	)	5/27/11	1001
				Received	Received At Lab By			Date/Time	







# NEW YORK STATE DEPARTMENT OF HEALTH INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Roser T. Vosree Date/Time Prepared 5/25/11
Preparer's Affiliation OWNER Phone No. (585) 765-2254 X 210
Treparer's Aminiation Dancete Thomas No. (383) 163-2-37
Purpose of Investigation AIR AND SOIL TESTING
1. OCCUPANT:
Interviewed: Y/N
Last Name: HYPOMM First Name: AML
Last Name: HYNDMAN First Name: AME  Address: 152 HOUSER AVE, CYNDONVILLE, NY
County: OFLEAUS
Home Phone: 585 331 6907 Office Phone: 585 765 2254
Number of Occupants/persons at this location Age of Occupants 5 2
2. OWNER OR LANDLORD: (Check if same as occupant)
Interviewed: Y/N
Last Name: Vostee First Name: Robert
Address: 1027 ARCHBALD - RD., WATERFORT, NY
County: ORLCANS
Home Phone (585) 590-0170 Office Phone: (585) 765-2254 x 216
3. BUILDING CHARACTERISTICS
Type of Building: (Circle appropriate response)
Residential School Commercial/Multi-use Industrial Church Other:

If t	he property is resident	ial, type? (Circle appr	ropriate response)	
	Ranch Raised Ranch Cape Cod Duplex Modular	2-Family Split Level Contemporary Apartment House Log Home		
If n	nultiple units, how mar	ıy?		
If t	he property is commer	cial, type?		
	Business Type(s)	ANUFACTURIN F		
	Does it include residence	ces (i.e., multi-use)? (	N If yes, how many?	
Oth	er characteristics:			
	Number of floors	F	Building age VARIES 1940'S TO 1975	
	Is the building insulated	13 <b>(5)</b> / N I	How air tight? Tight Average/ Not Tight	
4.	AIRFLOW			
Use	air current tubes or tr	acer smoke to evalua	ate airflow patterns and qualitatively describe:	
Airi	flow between floors	VA		
Airí	low near source			
		Managara .		
Outo	door air infiltration			
Infil	tration into air ducts			

5.	BASEMENT AND CONSTRUC	TION CHARA	CTERISTICS	(Circle all that ap	oply) No Basement					
	a. Above grade construction:	wood frame	concrete	stone	brick					
	b. Basement type:	full	crawispace.	slab	other					
	c. Basement floor:	concrete	dirt	stone	other					
	d. Basement floor:	uncovered	covered	covered with _						
	e. Concrete floor:	unsealed	sealed	sealed with						
	f. Foundation walls:	poured	block	stone	other					
	g. Foundation walls:	unsealed	sealed	sealed with						
	h. The basement is:	wet	damp	dry	moldy					
	i. The basement is:	finished	unfinished	partially finish	ned					
	j. Sump present?	YN								
	k. Water in sump? Y/N.	/ not applicable								
Ba	Basement/Lowest level depth below grade:(feet)									
	entify potential soil vapor entry po	ints and appro	ximate size (e.g	., cracks, utility	ports, drains)					
	HEATING, VENTING and AIR pe of heating system(s) used in thi		·		<b>y</b> )					
	Hot air circulation Space Heaters Electric baseboard	Heat pump Stream radiation Wood stove	on Ra <b>d</b> ia	vater baseboard ant floor oor wood boiler	Other RADIANT OVERHEAD					
Th	e primary type of fuel used is:									
	Natural Gas Electric Wood	Fuel Oil Propane Coal	Keros Solar							
Do	mestic hot water tank fueled by: _	NATURAL	GAS							
Во	iler/furnace located in: Basem	nent Outdo	ors Main	Floor	Other					
Aiı	r conditioning: Centra	l Air Windo	ow units Open	Windows	None					

j. Has painting/staining been done in the last 6 months?	Y N Where & When?
k. Is there new carpet, drapes or other textiles?	Y/N Where & When?
l. Have air fresheners been used recently?	Y/N When & Type?
m. Is there a kitchen exhaust fan?	Y N If yes, where vented?
n. Is there a bathroom exhaust fan?	Y N If yes, where vented?
o. Is there a clothes dryer?	Y(N) If yes, is it vented outside? Y / N
p. Has there been a pesticide application?	Y N When & Type?
Are there odors in the building?  If yes, please describe:	Y (N)
Do any of the building occupants use solvents at work? (e.g., chemical manufacturing or laboratory, auto mechanic or boiler mechanic, pesticide application, cosmetologist	Y) N auto body shop, painting, fuel oil delivery,
If yes, what types of solvents are used? PRIMARILY 18	OPROPYL ALCOHOL
If yes, are their clothes washed at work?	Y
Do any of the building occupants regularly use or work at a response)	dry-cleaning service? (Circle appropriate
Yes, use dry-cleaning regularly (weekly) Yes, use dry-cleaning infrequently (monthly or less) Yes, work at a dry-cleaning service	No Unknown
Is there a radon mitigation system for the building/structure is the system active or passive?  Active/Passive	re? Y N Date of Installation:
9. WATER AND SEWAGE	
Water Supply: Public Water Drilled Well Drive	n Well Dug Well Other:
Sewage Disposal: Public Sewer Septic Tank Leach	n Field Dry Well Other:
10. RELOCATION INFORMATION (for oil spill residenti	al emergency)
a. Provide reasons why relocation is recommended:	
b. Residents choose to: remain in home relocate to fr	ends/family relocate to hotel/motel
c. Responsibility for costs associated with reimburseme	
	nt explained? Y/N

Are	there	air	distribution	ducts	present?
111	the c	***	MIDGI IN MIGHT	44613	DI COCHE



Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.	
Along ceiling - Galumized stee	el Det work freds occupied
Workareas (Sheet Metal Area) -	Joints appear tight
7. OCCUPANCY	
Is basement/lowest level occupied? Full-time Occ	asionally Seldom Almost Never
Level General Use of Each Floor (e.g., familyro	om, bedroom, laundry, workshop, storage)
Basement NONE	
1 <sup>st</sup> Floor OFFICES / ELECTRONIC MFG.	
2 <sup>nd</sup> Floor N/A	
3 <sup>rd</sup> Floor N/A	
4 <sup>th</sup> Floor N/A	
8. FACTORS THAT MAY INFLUENCE INDOOR AIR	QUALITY
a. Is there an attached garage?	(Y)
b. Does the garage have a separate heating unit?	Y N/NA
c. Are petroleum-powered machines or vehicles	Y/N/NA
stored in the garage (e.g., lawnmower, atv, car)	Please specify DIESEL TRACTOR
d. Has the building ever had a fire?	Y N When?
e. Is a kerosene or unvented gas space heater present?	YN Where?
f. Is there a workshop or hobby/craft area?	Y/N Where & Type?
g. Is there smoking in the building?	YN How frequently?
h. Have cleaning products been used recently?	When & Type? BATHROOM CLEANSELS 2
i. Have cosmetic products been used recently?	Y (N) When & Type?

#### 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

# Basement: ATTACHED: No Basement Crawl Space > PID Lynder production test area)

#### First Floor:

ATTACHED PLD'S

Production Dept. 0.0

SHeet Metal Shop 0.0-0.1

Areq.

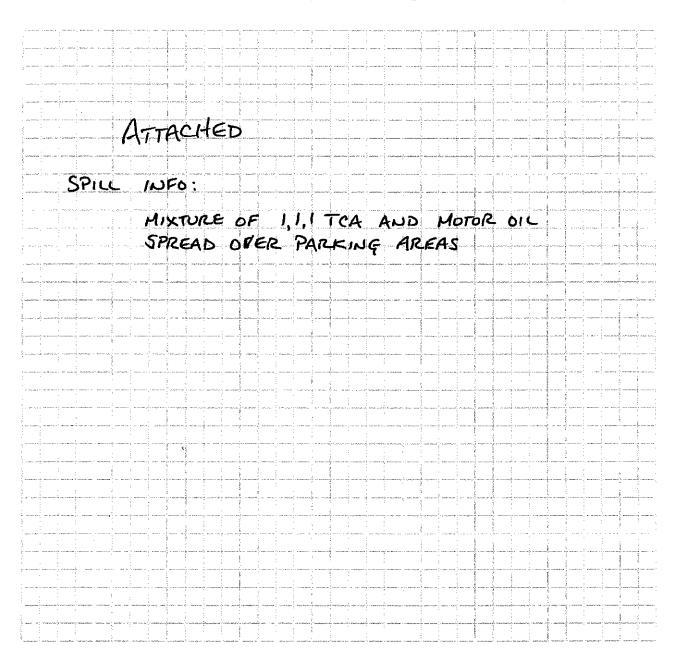
East side of Office 0.1

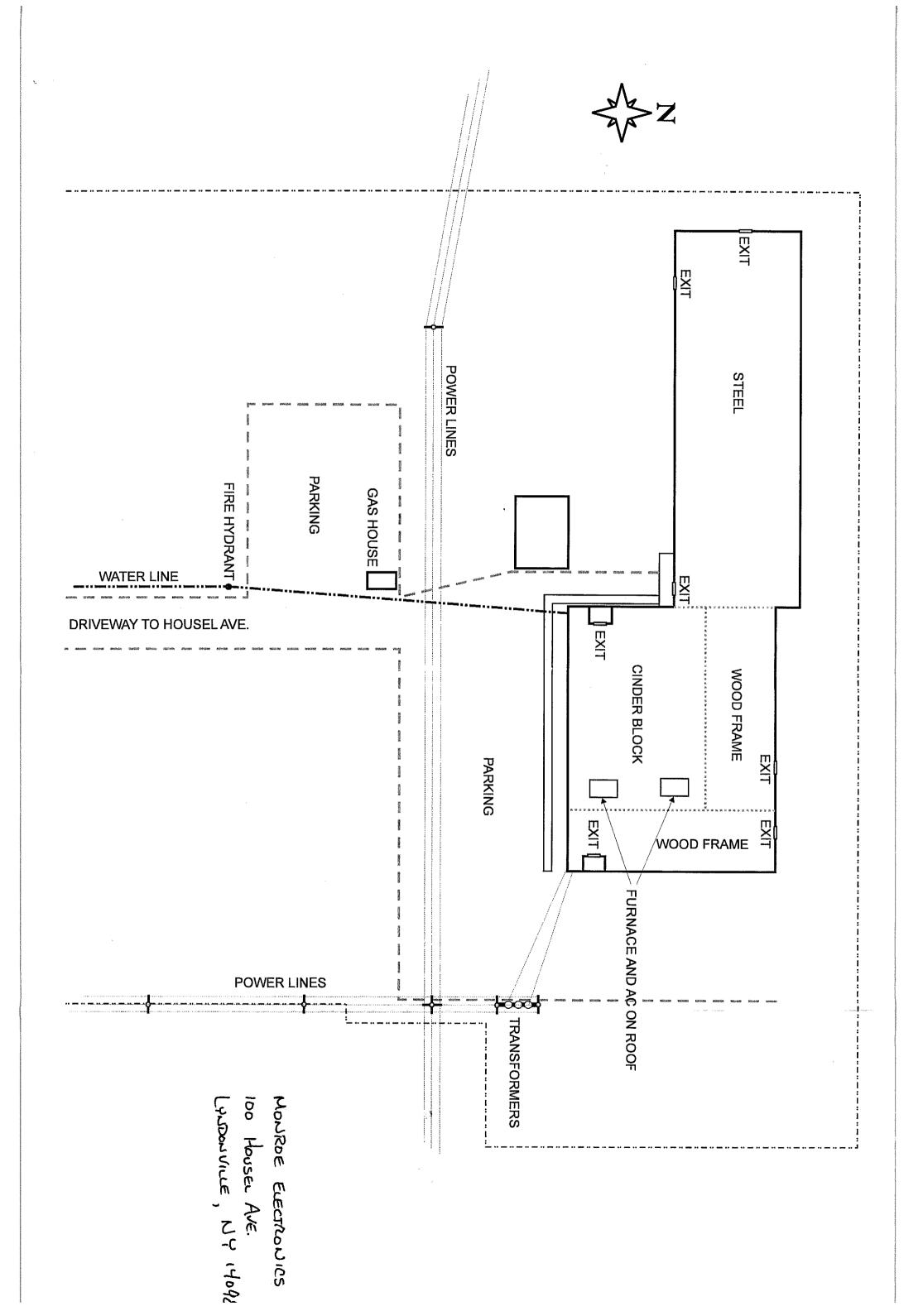
Areq

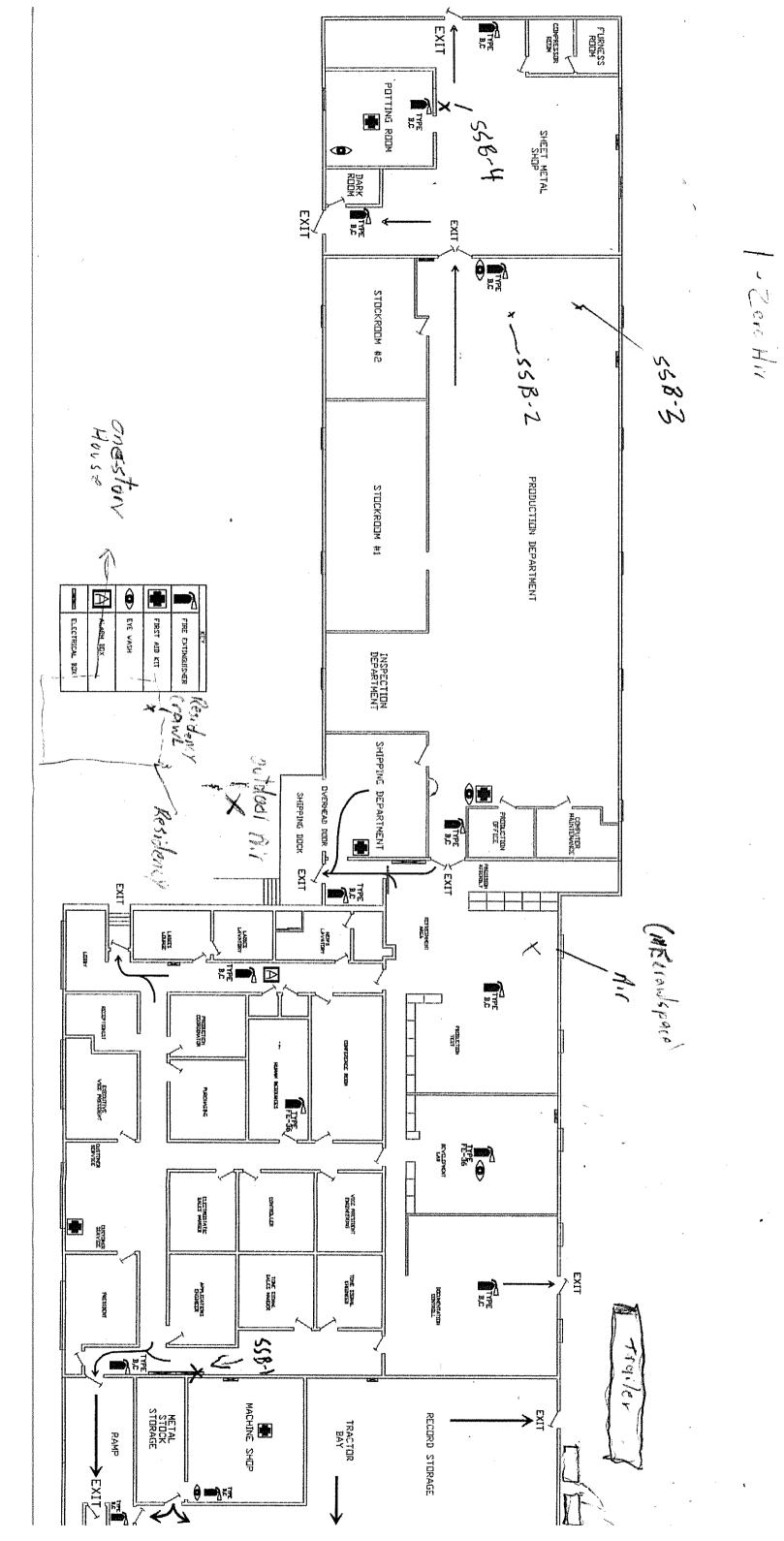
#### 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

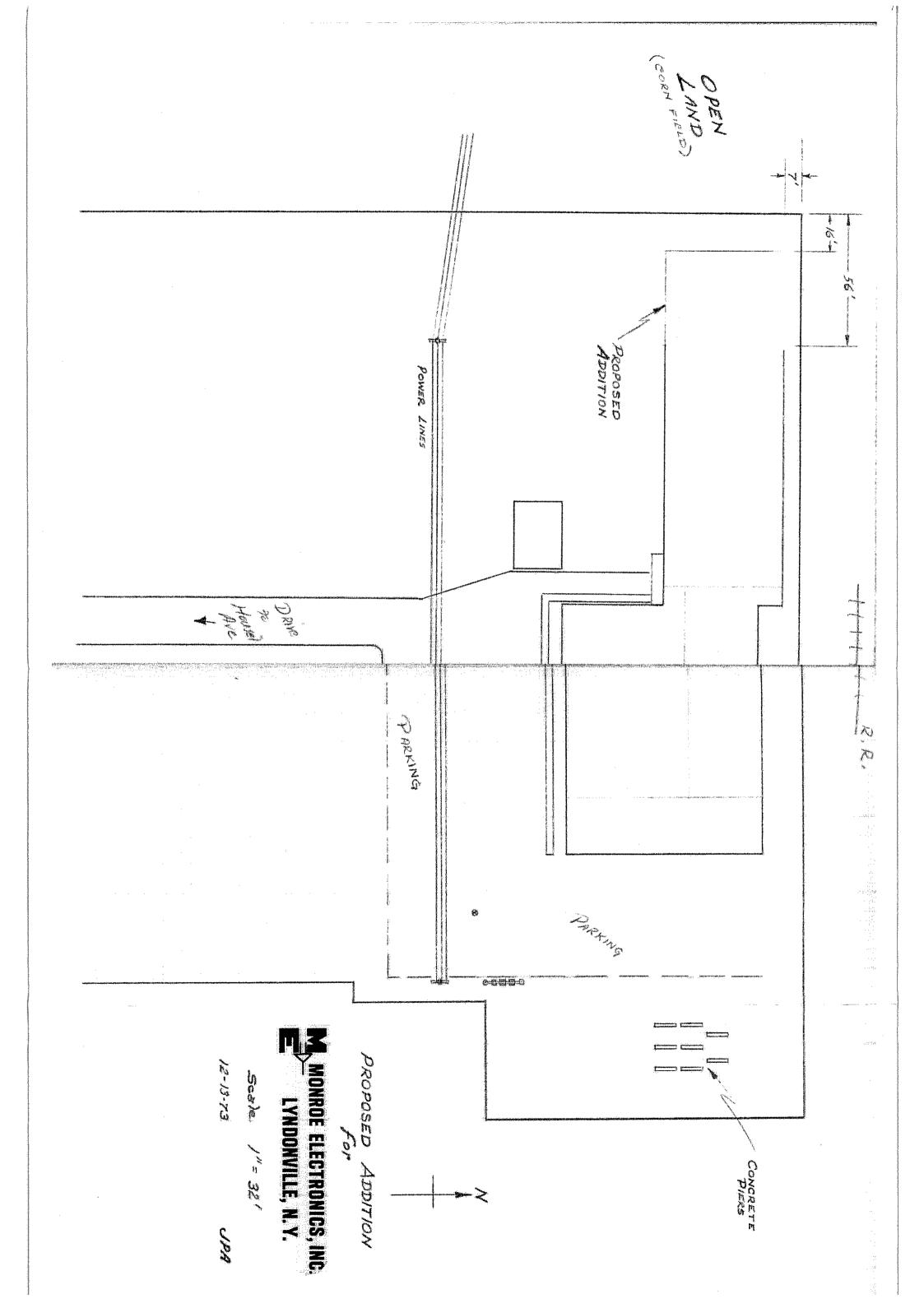
Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.

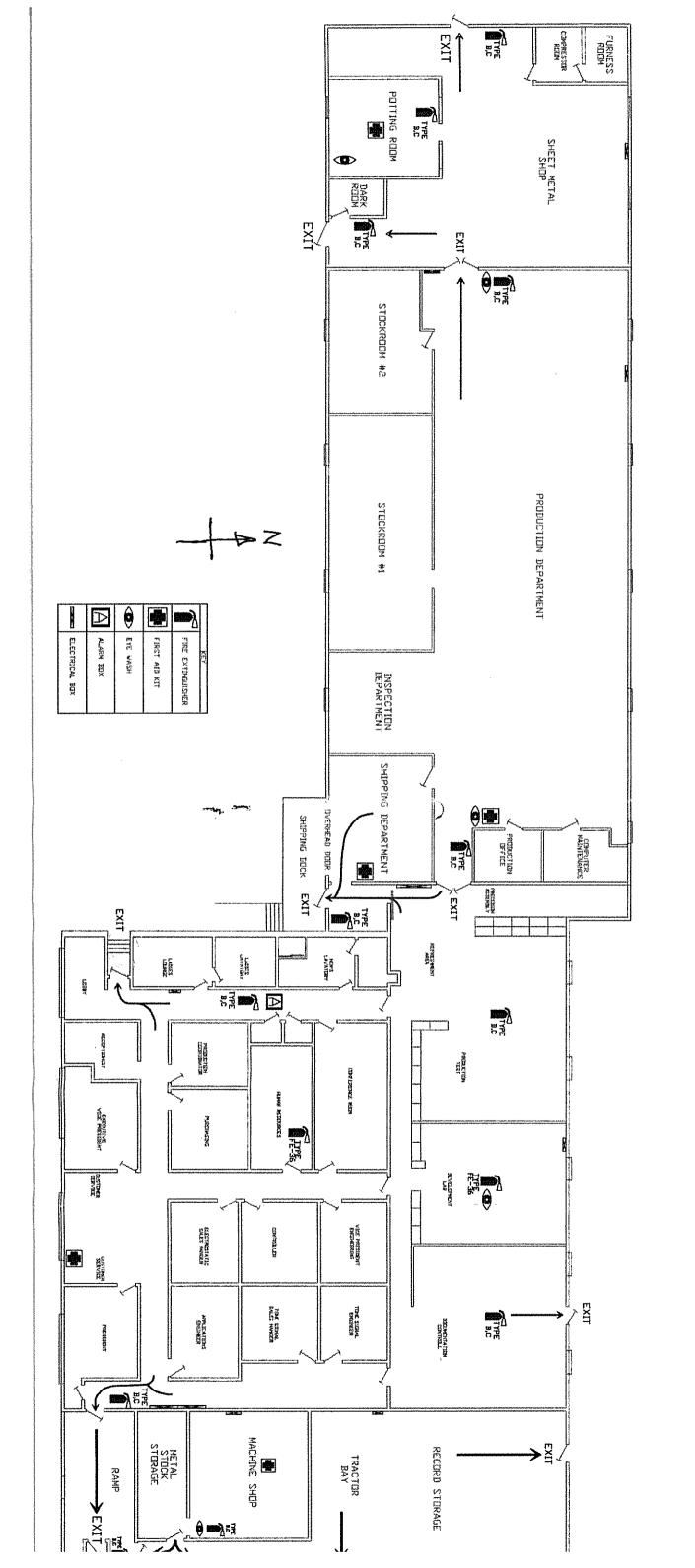




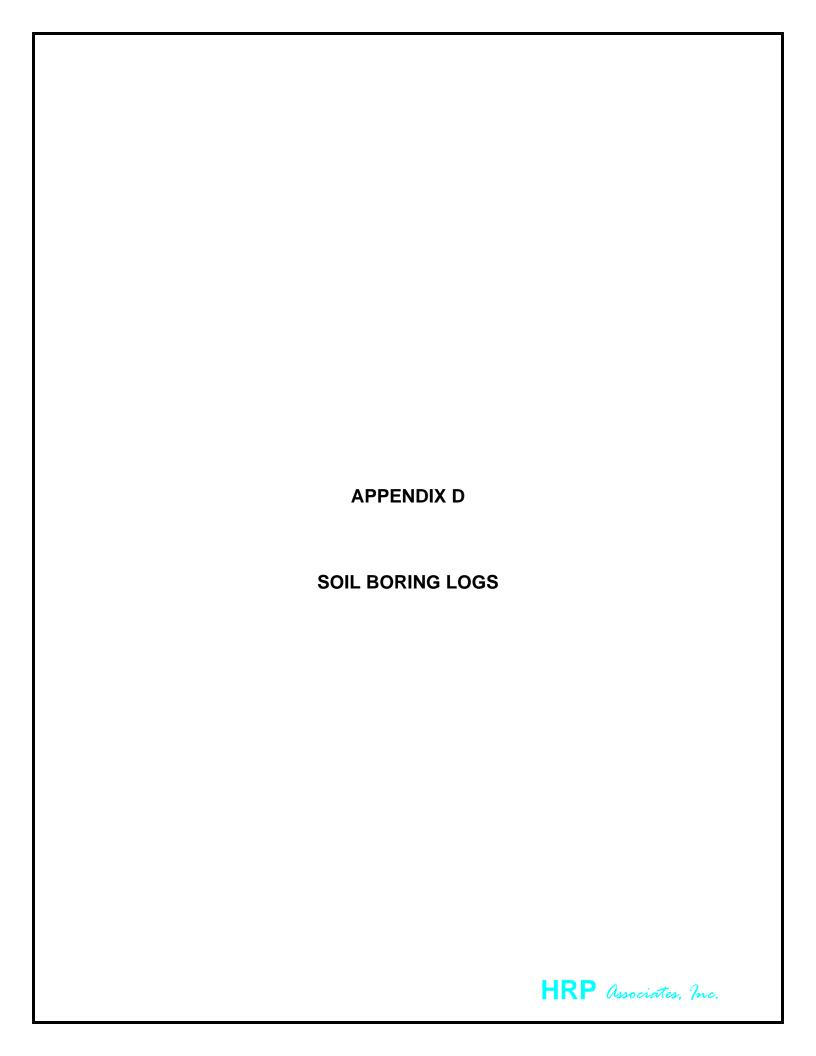


4-Sub Slabs
2-Air (NE crawl/Residency crawl)
1-EB





MONROE ELECTRONICS 100 Houser Ave. Lyndonville, NY 14098





Project: Monroe Electronics	Boring I.D.: SB-1
Job Number: NEW9617.P2	Date: 8/1/11
Drilling Company: SJB	Time: 10:15

Location: West side of driveway

GPS Coordinates N: V	N:
----------------------	----

GPS C	oordinates	N:	: W:		
- (f	e Interval tbg)	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Top	Bottom	(11)		staining, odor)	(1 1 141)
0	4	3.1	Dry	SAND, medium to fine; little silt; red; loose; no odor; no staining.	0.0
4	8	4	Wet at 5'	SAND, medium to fine; little silt; red; loose; no odor; no staining.	0.0
8	12	4	Wet	SAND, medium to fine; little silt; red; loose; no odor; no staining.	0.0
12	16	4	Wet	SAND, medium to fine; little silt; red; loose; no odor; no staining.	0.0
16	20	4	Wet	SAND, medium to fine; little silt; red; loose; no odor; no staining.	0.0
	20			End of boring.	
Well Screen: N/A		T	Soil Samples Collected:	Time	
Water S N/A	Sample ID		Time	SB-1 (4-5)	10:30
	ng Method:	NI/Λ			
Descrip	tion of Wat	er: IN/A			



**Project: Monroe Electronics** Boring I.D.: SB-2 Job Number: NEW9617.P2 Date: 8/1/11 **Drilling Company: SJB** Time: 11:00

Location: West side of driveway in corner by parking lot

GPS Co	oordinates	N:	W:		
	e Interval tbg) Bottom	Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
ТОР	Бошош			SAND, medium; little silt; compact;	
0	4	4.0	Moist	red; moist; no odor; no staining.	0.0
4	8	4.0	Wet	4 to 7: SAND, medium; little silt; compact; red; moist; no odor; no staining.	0.0
			Moist	7 to 8: SILT; little fine sand; compact; grey; moist; no odor; no staining.	0.0
8	12	4.0	Moist	SILT; little fine sand; compact; grey; moist; no odor; no staining.	0.0
12	16	4.0	Moist	Silt and fine sand; some clay; medium compact; grey; no odor; no staining.	0.0
16	20	4.0	Moist	CLAY; medium compact; grey; moist; no odor; no staining.	0.0
	20			End of boring.	
Well Screen: N/A		Soil Samples Collected:	Time		
Water Sample ID Time		SB-2 (3-4)	11:15		
N/A		, , ,			
	Sampling Method: N/A				
•	tion of Wat				



**Project: Monroe Electronics** Boring I.D.: SB-3 Job Number: NEW9617.P2 Date: 8/1/11 **Drilling Company: SJB** Time: 12:30

Location: Lawn west of parking lot GPS Coordinates N:

W.

GPS Co	pordinates	N:	W:		
	e Interval	Recovery	Moisture	Description	PID
Top	tbg) Bottom	(ft)	Woisture	(grain size, color, compaction, staining, odor)	(PPM)
0	4	3.3	Wet at 3'	SAND, medium; little silt; little fine sand; medium compact; red; moist; no odor; no staining.	0.0
4	8	4.0	Wet	4 to 5: SAND, medium; little silt; little fine sand; medium compact; red; moist; no odor; no staining.	0.0
			Moist	7 to 8: Silt and fine sand; red; compact; moist; no odor; no staining.	0.0
8	12	4.0	Moist	Silt and fine sand; red; compact; moist; no odor; no staining.	0.0
12	16	4.0	Moist	Silt and clay; compact; grey; moist; no odor; no staining.	0.0
16	20	4.0	Moist	Sand, clay and gravel; very compact; grey; wet	0.0
	20			End of boring.	
Well Sc	reen: N/A			Soil Samples Collected:	Time
Water S	Sample ID		Time	SB-3 (2-3)	12:45
N/A	•				
Samplir	ng Method:	N/A			
	tion of Wat				



Project: Monroe Electronics	Boring I.D.: SB-4
Job Number: NEW9617.P2	Date: 8/1/11
Drilling Company: SJB	Time: 13:30

Location: South side of building near loading dock

<b>GPS Coordinates</b>	N:	W:
GPS Coordinates	IN.	VV.

GPS Co	ordinates	N:		W:	
·(ft	e Interval	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom			staining, odor)	
0	4	2.7	Wet at 2.5'	SAND, fine; some silt; compact; red; wet; no odor; no staining.	0.0
4	8	4.0	Wet	SILT; red-grey; compact; moist; no odor; no staining.	0.0
8	12	4.0	Moist	Silt and fine sand; grey; compact; moist; no odor; no staining.	0.4
12	16	4.0	Moist	Silt and fine sand; grey; compact; moist; no odor; no staining.	0.5
16	20	4.0	Moist	Silt and fine sand; grey; compact; moist; no odor; no staining.	0.0
	20			End of boring.	
Well Sc	reen: N/A		I	Soil Samples Collected:	Time
Water Sample ID Time		Time	SB-4 (12-16)	14:00	
N/A					
	ng Method:				
Descrip	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-5 Job Number: NEW9617.P2 Date: 8/1/11 **Drilling Company: SJB** Time: 14:00

Location: South side of building

GPS Coordinates No ۱۸/۰

GPS Co	oordinates	N:	W:		
·(ft	e Interval tbg)	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom			staining, odor)	,
0	4	3.3	Wet at 3'	SAND, medium to fine; loose; red; wet; no odor; no staining.	0.0
4	8	4.0	Wet	Silt and fine sand; compact; moist; red-grey; no odor; no staining.	0.0
8	12	4.0	Moist	Silt and fine sand; compact; moist; red-grey; no odor; no staining.	0.4
12	16	4.0	Moist	Silt and fine sand; medium compact; moist; red-grey; no odor; no staining.	0.0
16	20	4.0	Moist	Clay and silt; compact; moist; grey.	0.0
	20			End of boring.	
Well Sc	reen: N/A		<u> </u>	Soil Samples Collected:	Time
	Water Sample ID Time		SB-5 (8-12)	14:00	
N/A				, ,	
Samplin	ng Method:	N/A			
Descrip	tion of Wate	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-6 Job Number: NEW9617.P2 Date: 8/1/11 **Drilling Company: SJB** Time: 15:15

Location: South side of southwest corner of building

GPS Co	oordinates	N:	W:		
	e Interval tbg) Bottom	Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
0	4	2.3	Dry	SAND, medium; some coarse gravel; loose; red; wet; no odor; no staining.	0.0
4	8	4.0	Wet at 6'	Silt and fine sand; compact; moist; brown; no odor; no staining.	0.0
8	12	4.0	Moist	CLAY; grey; medium compact; no odor; no staining.	0.4
12	16	4.0	Moist	CLAY; grey; medium compact; no odor; no staining	0.0
16	20	4.0	Moist	CLAY; grey; medium compact; no odor; no staining. Weathered bedrock in tip of spoon.	0.0
	20			End of boring.	
Wall Sa	reen: NI/A			Soil Samples Collected:	Time
Well Screen: N/A Water Sample ID Time		SB-6 (5-6)	15:30		
N/A	·				
Sampling Method: N/A					
	tion of Wat			1	



**Project: Monroe Electronics** Boring I.D.: SB-7 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 8:10

Location: West side of southwest corner of building

GPS Coordinates

GPS Co	SPS Coordinates N: W:				
· (fi	e Interval tbg)	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom	. ,		staining, odor)	, ,
0	4	3.7	Moist	SAND, fine; some silt; compact; moist no odor; no staining.	0.0
4	8	4.0	Wet at 5'	SAND, fine; some silt; compact; moist no odor; no staining.	0.6
8	12	4.0	Moist	Silt and fine sand; compact; moist; brown-red; no odor; no staining.	0.4
12	16	4.0	Moist	Silt and clay; brown; compact; no odor; no staining	0.4
16	20	4.0	Moist	CLAY; grey; medium compact; no odor; no staining. Weathered bedrock in tip of spoon.	0.0
	20			End of boring.	
Well Sc	reen: N/A			Soil Samples Collected:	Time
Water S			Time	SB-7 (4-5)	8:20
N/A	•				
	ng Method:	N/A	1		
•	tion of Wat			1	
Describ	tion of wat	O1. 14/7			



**Project: Monroe Electronics** Boring I.D.: SB-8 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 8:32

Location: In parking lot south of building

Sample Interval (ftbg)	GPS Co	ordinates	N:	W:		
Cittog   City   City			Recovery			PID
SAND, fine; some silt; ttrace medium sand; compact; moist no odor; no staining.  SAND, fine; some silt; ttrace medium sand; compact; moist no odor; no staining.  SAND, fine; some silt; ttrace medium sand; compact; moist no odor; no staining.  8 to 10: Silt and fine sand; compact; moist; brown-red; no odor; no staining.  10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.  12 16 4.0 Wet SAND, fine; red; loose; no odor; no staining.  16 20 4.0 Wet Medium to fine sand and clay; compact; grey; no odor; no staining.  20 End of boring.  Well Screen: N/A  Water Sample ID  Time SB-8 (4-5)  SAND, fine; some silt; ttrace medium on odor; no staining.  0.0  0.0  0.0  SAND, fine; red; loose; no odor; no staining.  0.0  SAND, fine; red; loose; no odor; no staining.  End of boring.			•	Moisture		
0         4         4.0         Moist staining.         sand; compact; moist no odor; no staining.         0.0           4         8         4.0         Wet staining.         SAND, fine; some silt; ttrace medium sand; compact; moist no odor; no staining.         0.6           8         12         4.0         Moist         10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.         0.0           12         16         4.0         Wet SAND, fine; red; loose; no odor; no staining.         0.0           16         20         4.0         Wet Medium to fine sand and clay; compact; grey; no odor; no staining.         0.0           20         End of boring.         End of boring.         End of boring.           Well Screen: N/A           Water Sample ID         Time         SB-8 (4-5)         9:00	Тор	Bottom	(/			(1 1 11.)
Sand						
SAND, fine; some silt; ttrace medium sand; compact; moist no odor; no staining.  8 to 10: Silt and fine sand; compact; moist; brown-red; no odor; no staining.  10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.  12 16 4.0 Wet SAND, fine; red; loose; no odor; no staining.  16 20 4.0 Wet Medium to fine sand and clay; compact; grey; no odor; no staining.  20 End of boring.  Well Screen: N/A  Water Sample ID  Time  SAND, fine; red; loose; no odor; no staining.  0.0  0.0  0.0  1.0  1.0  1.0  1.0  1	0	4	4.0	Moist	· · · · · · · · · · · · · · · · · · ·	0.0
4         8         4.0         Wet         sand; compact; moist no odor; no staining.         0.6           8         12         4.0         Moist         8 to 10: Silt and fine sand; compact; moist; brown-red; no odor; no staining.         0.0           12         16         4.0         Wet         SAND, fine; red; loose; no odor; no staining.         0.0           16         20         4.0         Wet         Medium to fine sand and clay; compact; grey; no odor; no staining.         0.0           20         End of boring.         End of boring.           Well Screen: N/A           Water Sample ID         Time         SB-8 (4-5)         9:00						
Staining.   Stai	1	0	4.0	\\/ot		0.6
8 to 10: Silt and fine sand; compact; moist; brown-red; no odor; no staining.  10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.  12 16 4.0 Wet SAND, fine; red; loose; no odor; no staining.  16 20 4.0 Wet Medium to fine sand and clay; compact; grey; no odor; no staining.  20 End of boring.  Well Screen: N/A  Water Sample ID Time SB-8 (4-5)  9:00	4	0	4.0	vvei		0.6
moist; brown-red; no odor; no staining.  10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.  12 16 4.0 Wet SAND, fine; red; loose; no odor; no staining.  16 20 4.0 Wet Medium to fine sand and clay; compact; grey; no odor; no staining.  End of boring.  Well Screen: N/A  Well Screen: N/A  Soil Samples Collected: Time  Water Sample ID Time SB-8 (4-5) 9:00						
Staining   Staining						0.0
Noist   10 to 12: SILT; some fine sand compact; moist; brown-red; no odor; no staining.   0.0						
compact; moist; brown-red; no odor; no staining.  12 16 4.0 Wet SAND, fine; red; loose; no odor; no staining.  16 20 4.0 Wet Medium to fine sand and clay; compact; grey; no odor; no staining.  End of boring.  Well Screen: N/A  Water Sample ID Time SB-8 (4-5)  9:00  O.0  SAND, fine; red; loose; no odor; no staining.  0.0  0.0  SAND, fine; red; loose; no odor; no staining.  0.0  SAND, fine; red; loose; no odor; no staining.  0.0  Soil Samples Collected: Time	8	12	4.0	Moist		
12   16   4.0   Wet   SAND, fine; red; loose; no odor; no staining.					· ·	0.0
12         16         4.0         Wet         SAND, fine; red; loose; no odor; no staining.         0.0           16         20         4.0         Wet         Medium to fine sand and clay; compact; grey; no odor; no staining.         0.0           20         End of boring.         End of boring.           Well Screen: N/A         Soil Samples Collected:         Time           Water Sample ID         Time         SB-8 (4-5)         9:00						0.0
12						
Medium to fine sand and clay; compact; grey; no odor; no staining.  End of boring.  Soil Samples Collected: Time  Water Sample ID  N/A  Medium to fine sand and clay; compact; grey; no odor; no staining.  End of boring.  Soil Samples Collected: Time  9:00	12	16	4.0	Wet		0.0
16   20   4.0   Wet						
20	16	20	4.0	Wet	,	0.0
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         9:00		20				
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         9:00						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         ————————————————————————————————————						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         ————————————————————————————————————						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         ————————————————————————————————————						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         ————————————————————————————————————						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A         9:00						
Water Sample ID         Time         SB-8 (4-5)         9:00           N/A	Well Sc	reen: N/A		<u> </u>		Time
N/A				Time	SB-8 (4-5)	9:00
		Sampling Method: N/A				
Description of Water: N/A	<u> </u>	<u> </u>			I	



Project: Monroe Electronics	Boring I.D.: SB-9
Job Number: NEW9617.P2	Date: 8/2/11
Drilling Company: SJB	Time: 9:30

Location: In parking lot south of building

<b>GPS Coordinates</b>	N:	W:

GPS C	GPS Coordinates N: W:				
	e Interval tbg)	Recovery	Moisture	Description (grain size, color, compaction,	PID
Тор	Bottom	(ft)	Woisture	staining, odor)	(PPM)
•				0 to 2: Gravel-fill	0.0
0	4	4.0	Moist	2 to 4: SAND, fine; some silt; compact; red; moist; no odor; no staining.	0.0
4	8	4.0	Wet	SAND, medium to fine; compact; wet; no odor; no staining.	0.0
8	12	4.0	Moist	Fine sand and silt; red; compact; moist; no odor; no staining.	0.8
12	15.5	4.0	Wet	Fine sand and silt; red; compact; moist; no odor; no staining.	0.8
	15.5			Geoprobe refusal. End of boring.	
Well Screen: N/A			Soil Samples Collected:	Time	
Water S	Sample ID		Time	SB-9 (8-12)	9:45
N/A					
	ng Method:				
Descrip	tion of Wat	er: N/A			

#### HRP Engineering, P.C.



Creating the Right Solutions Together

Project: Monroe Electronics Boring I.D.: SB-10

Job Number: NEW9617.P2 Date: 8/2/11

Drilling Company: SJB Time: 10:00

Location: In parking lot south of building, near gas line.

GPS Coordinates N: W:

	ordinates	N:		W:	
	Interval	Recovery		Description	PID
	bg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(/		staining, odor)	, ,
				0 to 2: Gravel-fill	0.0
0	4	4.0	Moist	2 to 4: SAND, medium to fine; compact; red; moist; no odor; no staining.	0.0
4	8	4.0	Wet at 5'	SAND, medium to fine; compact; wet; no odor; no staining.	0.2
8	12	4.0	Moist	Fine sand and silt; red; compact; moist; no odor; no staining.	0.6
12	16	4.0	Wet	Silt and clay; little fine sand; browngrey; medium compact; moist no odor; no staining.	0.1
40	20	4.0	\\/_t	16 to 19.5: CLAY; grey; medium compact; wet; no odor; no staining.	0.0
16	20	4.0	Wet	19.5 to 20: Sand and gravel and silt and clay; very compact; moist; browngrey; no odor; no staining	0.0
	20			End of boring.	
Well Screen: N/A		Soil Samples Collected:	Time		
Water Sample ID Time		SB-10 (10-12)	10:20		
N/A	•				
Samplin	g Method:	N/A	1		
Descript	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-11 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 10:40

Location: In parking lot south of building

GPS Co	pordinates	N:	W:		
Sample	e Interval	Recovery	Description		PID (PPM)
(ftbg)		(ft)	Moisture	(grain size, color, compaction,	
Тор	Bottom	(11)		staining, odor)	(FFIVI)
				0 to 2: Gravel-fill	0.0
0	4	3.3	Moist	2 to 4: SAND, medium; compact; red; moist; no odor; no staining.	0.3
				4 to 5: SAND, medium; compact; red; moist; no odor; no staining.	0.0
4	8	4.0	Wet at 5'	5 to 6: SAND, medium; compact; moist; no odor; stained black.	0.0
				6 to 8: Sand and silt; grey-brow; very compact; moist; no odor; no staining.	0.0
8	12	4.0	Moist	Sand and silt; grey-brow; very compact; moist; no odor; no staining.	0.0
12	16	4.0	Wet	SILT; some fine sand; some clay; compact; moist no odor; no staining.	0.1
16	20	4.0	Wet	CLAY; grey; medium compact; wet; no odor; no staining.	0.0
	20			End of boring.	
Well Sc	reen: N/A		l	Soil Samples Collected:	Time
Water Sample ID Time		Time	SB-11 (5-6)	11:00	
N/A					
Samplin	ng Method:	N/A			
Descrip	tion of Wat	er: N/A			



Boring I.D.: SB-12 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 11:15

Location: Southeast corner of parking lot

GPS Co	ordinates	N:	W:		
	Interval	Recovery	Description		PID
	(ftbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(11)		staining, odor)	(1 1 141)
			Moist	SAND, fine; some silt; little medium	0.0
0	4	3.3	Wet in tip	sand; compact; red; moist; no odor;	
			·	no staining.	
			Wet	4 to 6: SAND, SAND, fine; some silt;	0.0
				little medium sand; compact; red;	
				moist; no odor; no staining.	
4	8	4.0	Moist	6 to 7: Silt and fine sand; compact;	0.0
7	o	4.0	Wolst	brown; moist; no odor; no staining.	
			Moist	7 to 8: Silt and fine sand; compact;	0.2
				moist; no odor; stained dark grey.	0.2
8	12	4.0	Moist	Silt and clay grey-brown; compact;	0.0
	12	1.0	Wiolot	moist; no odor; no staining.	0.0
12	16	4.0	Wet	CLAY; grey; medium compact; moist	0.0
				no odor; no staining.  CLAY; grey; medium compact; wet;	
16	20	4.0	Wet	no odor; no staining.	0.0
	20			End of boring.	
	_			3	
Well Sc	reen: N/A		1	Soil Samples Collected:	Time
Water Sample ID Tim		Time	SB-12 (7-8)	11:30	
N/A	-				
Samplin	g Method:	N/A	ı		
Descrip	tion of Wat	er: N/A		'	



**Project: Monroe Electronics** Boring I.D.: SB-13 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 11:45

Location: Lawn west of building

GPS Co	ordinates	N:	W:		
Sample Interval Recovery		Description		PID	
	bg)	•	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(ft)		staining, odor)	(1 1 141)
			Dry	0 to 3: SAND, fine to coarse; trace	0.0
				gravel; compact; red; dry; no odor; no	
_	4	4		staining.	
0	4	4	Moist	3 to 4: SAND, fine; some silt; little	0.0
			IVIOIS	clay; trace gravel; red; compact;	0.0
				moist; no odor; no staining.	
				SAND, fine; some silt; little clay; trace	
4	8	4.0	Wet	gravel; red; compact; wet; no odor; no	0.0
				staining.	
_				Silt and fine sand; some clay; red-	
8	12	4.0	Moist	grey; compact; moist; no odor; no	0.0
				staining.	
12	16	0.3	Wet	SAND, coarse to medium; red; wet. (likely sluff)	0.0
16	20	0.7	Wet	Weathered bedrock	0.0
'0	20	0.7	*****	End of boring.	0.0
Well Screen: N/A		<u> </u>	Soil Samples Collected:	Time	
Water Sample ID Time		Time	SB-13 (3-4)	12:00	
N/A	·				
Samplin	g Method:	N/A	•		
Descrip	tion of Wat	er: N/A			



Boring I.D.: SB-14 **Project: Monroe Electronics** 

Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 12:50

Location: Northwest corner of lawn

Sample Interval (ftbg)  Recovery Moisture (grain size, color, compaction	
I (III)(I) I ' I WOISTURE I (OTAIN SIZE COIOT COMPACTION	PID
(11)	(PPM)
Top Bottom Staining, odor)	` ,
SAND, medium to coarse; cobble	
0 4 4.0 Dry two feet; loose; red; dry; no odor	no 0.0
staining.	ro di
4 8 4.0 Wet at 6' SAND, medium to fine; some silt; compact; wet; no odor; no staining	
Silt and clay: brown-grey: comp	act.
8 12 4.0 Moist moist; no odor; no staining.	0.0
CLAY: grey: medium compact: m	oist:
12 16 4.0 Wet no odor; no staining.	0.0
CLAY; grey; medium compact; me	oist;
16 20 4.0 Wet no odor; no staining. Weather	ered 0.0
bedrock in tip.	
20 End of boring.	
Well Screen: N/A Soil Samples Collected:	Time
Water Sample ID Time SB-14 (5-6)	13:00
N/A	
Sampling Method: N/A	
Description of Water: N/A	1



Boring I.D.: SB-15 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 13:15

Location: Northwest corner of site in brush

GPS Co	oordinates	N:	W:		
	e Interval tbg)	Recovery	Moisture	Description (grain size, color, compaction,	PID
Тор	Bottom	(ft)	Wioisture	staining, odor)	(PPM)
0	4	4.0	Dry	SAND, medium to fine; trace gravel; red; dry; compact; no odor; no staining.	0.0
4	8	4.0	Wet at 7'	4 to 5: SAND, medium to fine; trace gravel; red; dry; compact; no odor; no staining.  5 to 8: Fine sand and silt; red;	0.0
				compact; wet at 7 feet bg; no odor; no staining.	0.0
8	12	4.0	Moist	8 to 9: Fine sand and silt; red; compact; wet; no odor; no staining.	0.0
	12	4.0	Wiolot	9 to 12: Silt and clay; brown-grey; compact; moist; no odor; no staining.	0.0
12	16	0.4	Wet	Silt and clay; brown-grey; compact; moist; no odor; no staining.	0.0
16	20	4.0	Wet	16 to 19: Silt and clay; brown-grey; compact; moist; no odor; no staining.	0.0
				19 to 20: Weathered bedrock	0.0
	20			End of boring.	
Well Sc	reen: N/A		<u> </u>	Soil Samples Collected:	Time
Water S	Sample ID		Time	SB-15 (5-7)	13:30
N/A					
Samplin	ng Method:	N/A			
Descrip	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-16 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 13:45

Location: Along wood line on northwest side of site GPS Coordinates N: W:

GPS Co	oordinates	N:	W:		
	e Interval	Recovery		Description	PID
(ftbg)		-	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(ft)		staining, odor)	(1 1 141)
0	4	4.0	Dry	0 to 1: Topsoil  1 to 4: SAND, fine; some silt; little gravel; red; dry; compact; no odor; no	0.0
				staining.  Fine sand and silt; trace clay; red;	0.0
4	8	4.0	Wet at 6'	compact; wet at 6 feet bg; no odor; no staining.	
8	12	4.0	Moist	8 to 10: Fine sand and silt; trace clay; red; compact; wet; no odor; no staining.	0.0
				10 to 12: Silt and clay; little fine sand; brown-grey; medium compact; moist; no odor; no staining.	0.0
12	16	1.1	Wet	CLAY; some fine sand; brown; loose; wet; no odor; no staining.	0.0
16	20	4.0	Wet	CLAY; brown-grey; medium compact; moist; no odor; no staining; weathered bedrock in tip.	0.0
	20			End of boring.	
Well Sc	reen: N/A			Soil Samples Collected:	Time
Water S N/A	Sample ID		Time	SB-16 (5-6)	14:00
	ng Method:	NI/A			
	tion of Wat				<u> </u>
	or vvac	······································			



Boring I.D.: SB-18 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 14:50

Location: Northwest corner of building

GPS Co	oordinates	N:	W:		
	e Interval	Recovery		Description	PID
	(ftbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(11)		staining, odor)	(1 1 141)
				SAND, medium to fine; little gravel;	
0	4	3.75	Moist	red; moist; compact; no odor; no	0.0
				staining.	
				SAND, fine; some silt; red; medium	0.0
4	8	2.7	Wet at 6'	compact; wet at 6 feet bg; no odor; no	
				staining.	
8	12	3.1	Wet	Fine sand and silt; some clay; red;	0.0
				compact; wet; no odor; no staining.  CLAY; little fine sand; little silt; red-	
12	16	4.0	Wet	brown; compact; wet; no odor; no	0.0
12	10	4.0	VVGt	staining.	0.0
				CLAY; grey; medium compact; moist;	
16	20	4.0	Wet	no odor; no staining.	0.0
	20			End of boring.	
					_
Well Screen: N/A			Soil Samples Collected:	Time	
Water S	Water Sample ID Tim		Time	SB-18 (5-6)	15:00
N/A					
Samplin	ng Method:	N/A			
Descrip	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-17 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 14:15

Location: Lawn west of the building

GPS Coordinates No ۱۸/۰

GPS C	oordinates	N:	W:		
	e Interval	Recovery		Description	PID
	tbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)
Тор	Bottom	(11)		staining, odor)	(1 1 111)
0	4	3.3	Dry	SAND, medium to fine; some silt; little gravel; red; dry; compact; no odor; no staining.	0.0
4	8	3.4	Wet at 6'	Fine sand and silt; red-brown; compact; wet at 6 feet bg; no odor; no staining.	0.0
8	12	4.0	Moist	8 to 10.5: Fine sand and silt; redbrown; compact; wet; no odor; no staining.  10.5 to 12: CLAY grey; medium compact; moist; no odor; no staining.	0.0
12	16	0.3	Wet	Clay and fine sand; brown; loose; wet; no odor; no staining.	0.0
16	20	4.0	Wet	CLAY; brown-grey; medium compact; moist; no odor; no staining; weathered bedrock in tip.	0.0
	20			End of boring.	
Well Screen: N/A		Soil Samples Collected:	Time		
Water Sample ID Time		Time	SB-17 (5-6)	14:30	
N/A					
•	ng Method:				
Descrip	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-19 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 15:15

Location: North of building

GPS Coordinates No W/-

GPS Coordinates		N:	W:			
	e Interval	Popovory		PID		
	tbg)	_	Recovery (ft) Moisture	(grain size, color, compaction,	(PPM)	
Тор	Bottom	(11)		staining, odor)	(1 1 141)	
				SAND, medium to fine; trace gravel;		
0	4	1.9	Moist	red; moist; medium compact; no odor;	0.0	
				no staining.		
				4 to 4.75: SAND, medium to fine;		
				trace gravel; red; moist; medium		
		0 7	144 4 4 61	compact; no odor; no staining.	0.0	
4	8	2.7	Wet at 6'	4.75 to 0. 5's a said and all made		
				4.75 to 8: Fine sand and silt; red;		
				compact; wet at 6 feet bg; no odor; no		
				staining.  Fine sand and silt; red; compact; wet		
8	12	3.1	Wet	no odor; no staining.	0.0	
				CLAY; some fine sand; some silt;		
12	16	4.0	Wet	grey; compact; wet; no odor; no	0.0	
				staining.	0.0	
40	00	4.0	10/-4	CLAY; grey; medium compact; moist;	0.0	
16	20	4.0	Wet	no odor; no staining.	0.0	
	20			End of boring.		
Well Screen: N/A		Soil Samples Collected:	Time			
Water Sample ID Time		Time	SB-19 (5-6)	15:30		
N/A						
Samplin	ng Method:	N/A	•			
Descrip	tion of Wat	er: N/A				



**Project: Monroe Electronics** Boring I.D.: SB-20 Job Number: NEW9617.P2 Date: 8/2/11 **Drilling Company: SJB** Time: 15:30

Location: North of building

<b>GPS Coordinates</b>		N:	W:			
Sample Interval (ftbg)		Recovery	Description		PID	
		(ft)	Moisture	(grain size, color, compaction,	(PPM)	
Тор	Bottom	(,		staining, odor)	` ′	
			Moist	0 to 1: Topsoil	0.0	
0	4	2.3	Dry	1 to 2: SAND, medium to coarse, coal, some silt, black, loose, dry; no odor; no staining.	0.1	
			Wet	2 to 4: SAND, fine; some silt; wet; medium compact; red; no odor; no staining.	0.0	
4 8	8	4.0	Wet at 6'	4 to 5: SAND, fine; some silt; wet; medium compact; red; no odor; no staining.	0.0	
	0			5 to 8: SAND, fine; some silt; wet; medium compact; dark grey; slight chemical odor	0.4	
8	12	4.0	Wet	SAND, fine; wet; loose; grey no odor; no staining.	0.0	
12	16	0.4	Wet	CLAY; grey; medium compact; moist; no odor; no staining.	0.0	
16	20	4.0	Wet	CLAY; grey; medium compact; moist; no odor; no staining.	0.0	
	20			End of boring.		
Well Screen: N/A				Soil Samples Collected:	Time	
Water Sample ID Time			Time	SB-20 (5-6)	15:45	
N/A						
Samplin	ng Method:	N/A				
Descrip	tion of Wat	er: N/A				



Boring I.D.: SB-21 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/3/11

**Drilling Company: SJB** Time: 8:21

Location: North of building

GPS Coordinates N:		N:	W:		
Sample	Interval	Posovory		Description	PID (PPM)
(ft	bg)	Recovery	Moisture	(grain size, color, compaction,	
Тор	Bottom	(ft)		staining, odor)	(PPIVI)
-				0 to 2: SAND, medium to coarse,	0.0
				coal, some silt, black, loose, dry; no	
0	4	2.3	Moist	odor; no staining.	
U	7	2.5	IVIOIS		
				2 to 4: Fine sand and silt; compact;	0.0
				grey; no odor; no staining.	
4	8	4.0	Wet at 5'	SAND, coarse to fine; some silt;	0.0
•	ŭ		oraro	stained black; wet; loose; no odor.	
				8 to 10: SAND, coarse to fine; some	0.0
				silt; stained black; wet; loose; no	
8	12	4.0	Wet	odor.	
				10 to 12: Fine good and silt; compact:	0.0
				10 to 12: Fine sand and silt; compact; moist; grey; no odor; no staining.	0.0
				CLAY; grey; medium compact; moist;	
12	16	0.4	Wet	no odor; no staining.	0.0
16	20	0.0	Wet	No recovery.	0.0
	20	0.0	7700	End of boring.	0.0
				Lita of Solling.	
Well Sc	reen: N/A			Soil Samples Collected:	Time
		Time	SB-21 (4-5)	8:40	
N/A	ample ID		TITIC		3. 10
	g Method:	N/A	I		
•	tion of Wat			<u> </u>	



Boring I.D.: SB-22 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/3/11

**Drilling Company: SJB** Time: 8:57

Location: North side of northeast corner of building

GPS Coordinates

GPS Coordinates N:		W:			
·(ft	e Interval bg)	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom	(1.1)		staining, odor)	(1 1 111)
0	4	2.0	Moist	<ul><li>0 to 2: SAND, medium to coarse, red, loose, dry; no odor; no staining.</li><li>2 to 4: Fine sand and silt; trace gravel; compact; stained black, with white spots; strong chemical odor.</li></ul>	0.0
4	8	4.0	Wet	4 to 5: Fine sand and silt; trace gravel; compact; stained black, with white spots; strong chemical odor.  5 to 8: Fine sand and silt; compact; wet; slight grey staining; sight odor.	0.0
8	12	4.0	Wet	Fine sand and silt; compact; wet; slight grey staining; slight odor.	0.0
12	16	0.4	Wet	Fine sand and clay; wet; medium compact; black; slight odor.	0.0
16	20	1.2	Moist	CLAY; grey; medium compact; moist; no odor; no staining.	0.0
	20			End of boring.	
	<b></b>			Cail Camples Calleges	T!
Well Screen: N/A		Soil Samples Collected:	Time		
Water Sample ID Time N/A		Time	SB-22 (2-4)	9:15	
	g Method:	N/A	1		
•	tion of Wat				



Project: Monroe Electronics	Boring I.D.: SB-23
Job Number: NEW9617.P2	Date: 8/3/11
Drilling Company: S.IB	Time: 9:25

Location: East side of northeast corner of building

<b>GPS Coordinates</b>	N:	W:
GPS Coordinates	IN.	VV.

GPS Coordinates N:		W:			
· (ft	e Interval	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom	(/		staining, odor)	()
0	4	2.0	Dry	GRAVEL, coarse; white, light brown and black, some slag; slight chemical odor; dry.	0.0
4	8	4.0	Wet	Fine sand and silt; compact; brown; wet; no odor; no staining.	0.0
8	12	4.0	Wet	Clay and silt; compact; brown; wet; no odor; no staining.	0.0
12	16	0.0		No recovery.	
16	20	0.0		No recovery.	
	20			End of boring.	
Well Screen: N/A		<u> </u>	Soil Samples Collected:	Time	
Water Sample ID Tim		Time	SB-23 (0-4)	9:45	
N/A	•				
Samplin	ng Method:	N/A	L		
•	tion of Wat			'	
<u> </u>					



Boring I.D.: SB-24 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/3/11

**Drilling Company: SJB** Time: 10:10

Location: North east parking lot

GPS Coordinates N:		W:			
Sample Interval (ftbg)		Recovery	,	Description	PID
Top	Bottom	(ft)	Moisture	(grain size, color, compaction, staining, odor)	(PPM)
0	4	3.3	Moist	SAND, medium to fine; some gravel; moist; compact; slight black staining; no odor	0.0
4	8	4.0	Wet	4 to 6: Fine sand and silt; medium compact; brown; wet; no odor; slight black staining.  6 to 8: Fine sand and silt; medium compact; brown; wet; no odor; no staining.	0.0
8	12	4.0	Wet	Fine sand and silt; medium compact; brown; wet; no odor; no staining.	0.0
12	16	2.0	Moist	Fine sand and clay; grey; medium compact; moist; no odor; no staining.	0.0
16	20	0.3	Moist	Fine sand and clay; grey; medium compact; moist; no odor; no staining.	0.0
	20			End of boring.	
Well Screen: N/A		Soil Samples Collected:	Time		
Water Sample ID Time		Time	SB-24 (3-4)	10:30	
N/A				SB-24 (3-4) MS	10:30
Samplin	g Method:	N/A		SB-24 (3-4) MSD	10:30
Descrip	tion of Wat	er: N/A			



**Project: Monroe Electronics** Boring I.D.: SB-25 Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 10:35

Location: North east parking lot GPS Coordinates N:

W.

GPS Coordinates		N:	W:				
	e Interval	Recovery		Description	PID		
(ftbg) Top Bottom		(ft)	Moisture	(grain size, color, compaction,	(PPM)		
тор	Bottom			staining, odor)  0 to 1: SAND, medium to coarse;	0.0		
				some gravel; moist; compact; no	0.0		
				staining; no odor			
	4	0.0	<b>5.4</b> · .	4. 00 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.0		
0	4	3.3	Moist	1 to 2: Sand and silt; stained white; strong chemical odor.	0.0		
				Strong chemical caor.			
				2 to 4: Sand and silt; stained grey;	0.0		
			Moiot	medium chemical odor.	0.0		
			Moist	4 to 6: Sand and silt; stained grey; slight chemical odor.	0.0		
4	8	4.0					
			Wet	6 to 8: Fine sand and silt; red;	0.0		
				compact; wet; no odor; no staining.  8 to 10: Fine sand and silt; red;	0.0		
				compact; wet; no odor; no staining.			
8	12	4.0	Wet		0.0		
				10 to 12: Fine sand and clay; dark grey; wet; loose; no staining; no odor.			
40	40	4.4	<b>N4</b> : 4	Fine sand and clay; grey; medium	0.0		
12	16	1.1	Moist	compact; moist; no odor; no staining.	0.0		
16	20	4.0	Moist	CLAY; grey; wet; medium compact;	0.0		
	20			no odor; no staining  End of boring.			
Well Screen: N/A		Soil Samples Collected:	Time				
Water Sample ID Time		Time	SB-25 (1-2)	10:45			
N/A	N/A			SB-25 (3-4)	10:50		
Samplin	ng Method:	N/A					
Descrip	tion of Wat	er: N/A					



**Project: Monroe Electronics** Boring I.D.: SB-26 Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 11:00

Location: North east parking lot GPS Coordinates N:

W/-

GPS Coordinates		N:					
	e Interval	Recovery		Description	PID		
	tbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)		
Тор	Bottom	()		staining, odor)	` ,		
0	4	3.3	Moist	0 to 2: SAND, medium to coarse; some gravel; moist; compact; no staining; no odor	0.0		
				2 to 4: Sand and silt; stained grey; medium chemical odor.	0.0		
4	8	4.0	Moist	Sand and silt; stained grey; slight chemical odor.	0.0		
8	12	4.0	Wet	Sand and silt; stained grey; slight chemical odor.	0.0		
12	16	1.1	Moist	Fine sand and clay; grey; medium compact; moist; no odor; no staining.	0.0		
16	20	4.0	Moist	CLAY; grey; wet; medium compact; no odor; no staining	0.0		
	20			End of boring.			
Wall Sa	roop. NI/A			Soil Samples Collected:	Time		
Well Screen: N/A Water Sample ID Time		Time	SB-26 (2-4)	11:15			
	sample ID		Time	SB-26 (2-4)MS	11:15		
N/A	Nother di	NI/A		SB-26 (2-4)MSD	11:15		
· ·	ng Method:			3D-20 (Z-4)IVI3D	11.15		
Descrip	Description of Water: N/A						



**Project: Monroe Electronics** Boring I.D.: SB-27 Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 11:30

Location: North east parking lot

GPS Coordinates N:		W:			
(f	e Interval tbg)	Recovery (ft)	Moisture	Description (grain size, color, compaction,	PID (PPM)
Тор	Bottom	(/		staining, odor)	(* * ***)
0	4	4.0	Moist	<ul><li>0 to 1: Sand and gravel; fill.</li><li>1 to 4: Fine sand and silt; compact; moist; red-grey; no odor; no staining.</li></ul>	0.0
4	8	4.0	Wet	Fine sand and silt; compact; moist; red-grey; no odor; no staining.	0.0
8	12	3.3	Wet	CLAY; some fine sand; loose; wet; dark grey; no odor; no staining.	0.0
12	16	0.7	Moist	CLAY; some fine sand; loose; wet; dark grey; no odor; no staining.	0.0
16	20	4.0	Moist	CLAY; some fine sand; loose; wet; dark grey; no odor; no staining.	0.0
	20			End of boring.	
Well Screen: N/A			Soil Samples Collected:	Time	
Water S	Sample ID		Time	SB-27 (2-4)	11:45
N/A			Duplicate 1		
Samplin	ng Method:	N/A			
Descrip	tion of Wat	er: N/A			



Boring I.D.: SB-28 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 12:46

Location: Southeast corner of building.

GPS Coordinates N:		W:					
Sample Interval		Recovery		Description	PID		
	tbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)		
Тор	Bottom	(11)		staining, odor)	(1 1 141)		
				0 to 1: Sand and gravel; fill.			
0	4	4.0	Moist	1 to 4: Gravel; coarse; some medium sand; black with white spots; slight yellow stain in one spot; strong odor.	0.0		
4	8	4.0	Wet	4 to 5: Gravel; coarse; some medium sand; black with white spots; wet; strong odor.	0.0		
				5 to 8: Fine sand and silt; red-brown; compact; wet; slight odor.	0.0		
8	12	4.0	Wet	Fine sand and silt; red-brown; compact; wet; slight odor.	0.0		
12	16	4.0	Moist	CLAY; some fine sand; loose; wet; dark grey; no odor; no staining.	0.0		
16	20	4.0	Moist	CLAY; medium compact; wet; dark grey; no odor; no staining.	0.0		
	20			End of boring.			
Well Screen: N/A			<u> </u>	Soil Samples Collected:	Time		
Water Sample ID Time			Time	SB-28 (2-4)	13:10		
N/A							
	ng Method:						
Describ	Description of Water: N/A						



Boring I.D.: SB-29 **Project: Monroe Electronics** Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 13:15

Location: East of parking lot

<b>GPS Coordinates</b>		N:	W:		
Sample Interval (ftbg) Top Bottom		Recovery (ft)	Moisture	Description (grain size, color, compaction, staining, odor)	PID (PPM)
0	4	4.0	Moist	SAND, medium to fine; red; loose; moist; no odor; no staining.	0.0
4	8	4.0	Wet	4 to 5: SAND, medium to fine; red; loose; wet; no odor; no staining.  5 to 8: Fine sand and silt; red-brown;	0.0
8	12	4.0	Wet	compact; wet; no odor; no staining.  Fine sand and silt; red-brown; compact; wet; no odor; no staining.	0.0
12	16	0.7	Wet	SAND, medium to fine; grey; loose wet; no odor; no staining.	0.0
16	20	4.0	Moist	CLAY; medium compact; wet; grey; no odor; no staining.	0.0
	20			End of boring.	
)4/-:: C				Soil Samples Collected	Time
Well Screen: N/A				Soil Samples Collected:	Time
Water Sample ID N/A			Time	SB-29 (2-4) Duplicate 2	13:30
Sampling Method: N/A					
Description of Water: N/A					

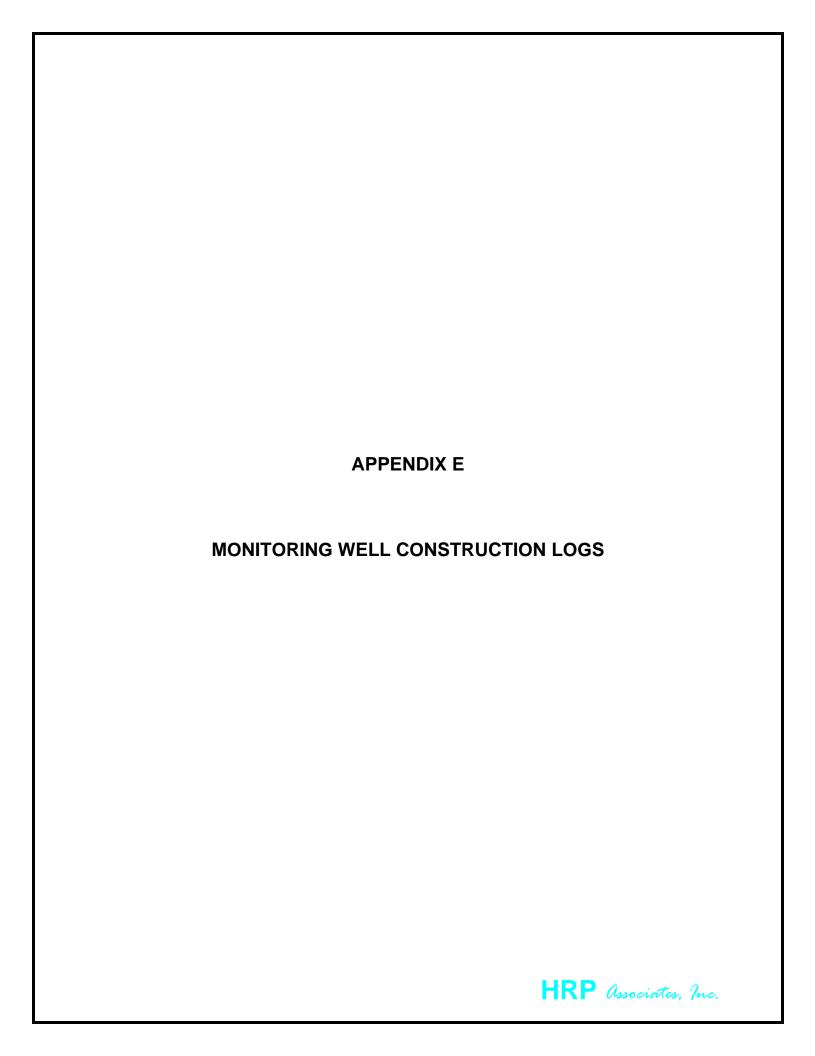
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**Project: Monroe Electronics** Boring I.D.: SB-30 Job Number: NEW9617.P2 Date: 8/3/11 **Drilling Company: SJB** Time: 13:45

Location: Northeast of parking lot

GPS Co	oordinates	N:		W:					
	e Interval	Recovery		Description	PID				
	tbg)	(ft)	Moisture	(grain size, color, compaction,	(PPM)				
Тор	Bottom	(11)		staining, odor)	(1 1 141)				
			Dry	0 to 1: Rock pieces; coal and slag; dry; black; compact;	0.0				
0	4	4.0	Dry	1 to 2: SAND, medium to fine; and rock chips; red; compact; dry; no odor; no staining.	0.0				
			Moist	2 to 4: SAND, medium; brown-grey; medium compact; moist; no odor; no staining.	0.0				
4	8	4.0	Wet	4 to 5: SAND, medium; brown-grey; medium compact; moist; no odor; no staining.	0.0				
				5 to 8: Fine sand and silt; grey-brown; compact; wet; no odor; no staining.	0.0				
8	12	4.0	Wet	8 to 11: Fine sand and silt; grey-brown; compact; wet; no odor; no staining.  11 to 12: Silt and clay; red-brown;	0.0				
				loose; wet; no odor; no staining.					
12	16	0.0		No recovery.					
16	20	4.0	Moist	CLAY; medium compact; wet; grey; no odor; no staining.	0.0				
	20			End of boring.					
Well Sc	reen: N/A			Soil Samples Collected:	Time				
Water S	Sample ID		Time	SB-30 (2-4)	14:00				
N/A									
Samplin	ng Method:	N/A							
Descrip	tion of Wat	er: N/A							





WELL NO: MW-1

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 12.8 to 2.8

DATE COMPLETED: 8/4/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY SETTING: 12.8 to 1.8

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 2.8 to 0.5

**HAMMER WEIGHT/DROP:** Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 1.8-0.8

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	2-1-2-2	2.0	Wet	SAND, medium to fine; little silt; loose; red; wet; no odor; no staining.	0.0
10	12	SS	9-16-10-6	2.0	Wet	Fine sand and silt; compact; moist; red.	0.0
	13					End of boring	



WELL NO: MW-3

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 15 to 5

DATE COMPLETED: 8/5/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY SETTING: 15 to 3

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 1

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

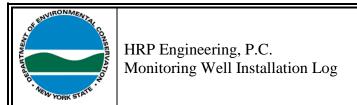
STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPI =

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	WOISTURE	2200111 2101	(PPM)
5	7	SS	3-3-5-6	2.0	Wet	SAND, medium to fine; some silt; medium compact; moist; red; no odro; no staining.	0.0
10	12	SS	2-2-3-2	2.0	Wet	Clay and silt; medium compact; moist; grey; no odor; no staining.	0.0
	15					End of boring	



WELL NO: MW-2

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 15 to 5

DATE COMPLETED: 8/4/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY

SETTING: 15 to 3

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 1

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPI =

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTUDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	2-5-6-5	2.0	Wet	Fine sand and silt; compact; moist; red.	0.0
10	12	SS	1-1-1-1	2.0	Wet	Clay and silt; medium compact; moist; grey; no odor; no staining.	0.0
	15					End of boring	



**WELL NO:** MW-3B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: Open borehole

**JOB NUMBER: 837013** | **SLOT NO.:** N/A **SETTING:** 40 to 30

DATE COMPLETED: 8/15/11 SAND PACK SIZE & TYPE: None

DRILLING COMPANY: SJB, Hamburg, NY SETTING: N/A

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** Hollow Stem Auger SETTING: 30 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 30 to 0.5

OBSERVER: Mark Wright BACKFILL TYPE: N/A

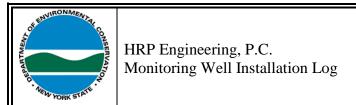
REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTUDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	3-3-5-6	2.0	Wet	SAND, medium to fine; some silt; medium compact; moist; red; no odor; no staining.	0.0
10	12	SS	2-2-3-2	2.0	Wet	Clay and silt; medium compact; moist; grey; no odor; no staining.	0.0
15	17	SS	Weight of hammer	2.0	Wet	Clay; grey; medium compact; wet.	0.0
20	22	SS	20-25-18-25	1.5	Moist	Sand and silt and gravel and clay; very compact; moist; red.	0.0
25	27	SS	50/2"	tip	Dry	Weathered shale	
30	32	SS	50/2"	tip	Dry	Weathered shale	
30	40	Core	N/A		Wet	Shale/sandstone	



WELL NO: MW-4

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 15 to 5

DATE COMPLETED: 8/5/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY SETTING: 15 to 4

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 4 to 2

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

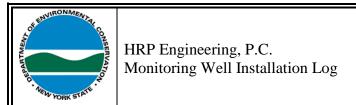
STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPI =

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOIGHIDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	COUNT (FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	9-6-10-10	2.0	Wet in tip	Fine sand and silt; medium compact; moist; red; no odor; black in tip.	0.0
10	12	SS	6-10-15-15	2.0	Wet	Fine sand and silt; medium compact; wet; grey; no odor; no staining.	0.0
	15					End of boring	



WELL NO: MW-5

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 15 to 5

DATE COMPLETED: 8/10/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY SETTING: 15 to 4

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 4 to 2

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPI =

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT (FEET)	WOISTURE	DESCRIPTION	(PPM)	
5	7	SS	3-3-4-3	2.0	Wet	Fine sand and silt; loose; moist; red with black; no odor.	0.0
10	12	SS	0-1-2-2	2.0	Moist	CLAY; some silt; medium compact; grey; moist; no odor; no staining	0.0
	15					End of boring	



WELL NO: MW-5B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: Open borehole

JOB NUMBER: 837013 SLOT NO.: N/A SETTING: 38.5 to 28.5

DATE COMPLETED: 8/15/11 SAND PACK SIZE & TYPE: None

DRILLING COMPANY: SJB, Hamburg, NY SETTING: N/A

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** Hollow Stem Auger SETTING: 28.5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 28.5 to 0.5

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPIIIS = SPIIII

DEPTH (	(FEET)	SAMPLE TYPE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	TIFE	COUNT	(FEET)	MOISTERL		(PPM)
5	7	SS	3-3-4-3	2.0	Wet	Fine sand and silt; loose; moist; red with black; no odor.	0.0
10	12	SS	0-1-2-2	2.0	Moist	CLAY; some silt; medium compact; grey; moist; no odor; no staining	0.0
15	17	SS	0-0-0-1	2.0	Moist	Clay; grey; medium compact; moist.	0.0
20	22	SS	9-15-19-15	1.5	Moist	Clay and weathered shale; compact; moist; red/grey.	0.0
23	25	SS	40-50/2"	tip	Dry	Weathered shale	
28.5	38.5	Core	N/A		Wet	Shale/sandstone	
	38.5					End of boring	



WELL NO:	ΜW	-6
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PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 15.3 to 5.3

DATE COMPLETED: 8/15/11 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** SJB, Hamburg, NY

SETTING: 15.3 to 3

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 5.3 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 1

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPI =

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	TYPE	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	4-3-6-8	2.0	Wet	Fine sand and silt; medium compact; wet; red with black staining; slight chemical odor.	0.0
10	12	SS	2-3-3-3	1.0	Wet	CLAY; some silt; medium compact; grey; moist; no odor; no staining	0.0
15	17	SS	1-1-1-1	2.0	Wet	CLAY; brown-grey; medium compact; moist.	0.0
	17					End of boring	



WELL NO: MW-6B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: Open borehole

JOB NUMBER: 837013 SLOT NO.: N/A SETTING: 39.5 to 29.5

DATE COMPLETED: 8/15/11 SAND PACK SIZE & TYPE: None

DRILLING COMPANY: SJB, Hamburg, NY SETTING: N/A

RIG TYPE: Track Mounted Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** Hollow Stem Auger SETTING: 29.5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 29.5 to 0.5

OBSERVER: Mark Wright BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

**ABBREVIATIONS:** SS = SPIIIS = SPIIII

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOIGHINE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	4-3-6-8	2.0	Wet	Fine sand and silt; medium compact; wet; red with black staining; slight chemical odor.	0.0
10	12	SS	2-3-3-3	1.0	Wet	CLAY; some silt; medium compact; grey; moist; no odor; no staining	0.0
15	17	SS	1-1-1-1	2.0	Wet	CLAY; brown-grey; medium compact; moist.	0.0
20	22	SS	10-12-9-17	1.5	Moist	Clay and weathered shale; compact; moist; red/grey.	0.0
24	26	SS	50/0"	tip	Dry	Weathered shale	
29.5	39.5	Core	N/A		Wet	Shale/sandstone	
	39.5					End of boring	



**WELL NO:** MW-1B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE:

JOB NUMBER: 837013 SLOT NO.: SETTING:

DATE COMPLETED: 7/20/12 SAND PACK SIZE & TYPE:

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** HX Core **SETTING:** 30 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 30 to 2

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH	(FEET)	SAMPLE	BLOW	REC.		DEG CONTOURS I	PID
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	READING (PPM)
5	7	С			Wet	Fine sand and silt; medium compact; dry; brown/red.	0.0
10	12	С			Moist	SAND; trace silt; medium compact; grey; moist;	0.0
15	17	С			Moist	CLAY; trace silt; soft; grey; moist;	0.0
20	22	С			Moist	CLAY and SILT, soft, red/grey, moist	0.0
23	25	SS	10-15-14-14	2	Wet	CLAY and SILT, compact, some gravel, weathered shale	0.0
28	30	SS	50/.1	.5	Dry	weathered shale	0.0
30	40	Core		9.2		Shale	



WELL NO: MW-2B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE:

JOB NUMBER: 837013 SLOT NO.: SETTING:

DATE COMPLETED: 7/19/12 SAND PACK SIZE & TYPE:

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** Hollow Stem Auger **SETTING:** 27 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 27 to 2

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 9.95

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)		DESCRIPTION	(PPM)
0	8	С			Moist	Fine sand and silt; medium compact; moist; red.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
14	23	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
23	24	SS	14-20-50/.4	1	Wet	CLAY and SILT, some gravel – till and weathered shale	0.0
25	27				Dry	CLAY and SILT, some gravel – till and weathered shale	0.0
27	37						



WELL NO: MW-2D

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 24 to 19

DATE COMPLETED: 7/12/12 SAND PACK SIZE & TYPE: 00

DRILLING COMPANY: Geologic NY, Homer, NY SETTING: 24 to 18

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 19 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 18 to 17; grouted to 2'

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

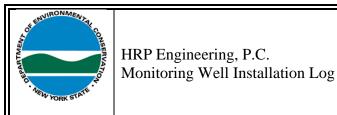
REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 9.31

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)		DESCRIPTION	(PPM)
0	8	С			Moist	Fine sand and silt; medium compact; moist; red.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
14	23	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
23	24	SS	14-20-50/.4	1	Wet	CLAY and SILT, some gravel – till and weathered shale	0.0
	27					End of Boring	0.0



WELL	NU:	IVI VV - /

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 14 to 4

DATE COMPLETED: 7/10/12 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** Geologic NY, Homer, NY

SETTING: 14 to 3

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 4 to 0.5

**HAMMER WEIGHT/DROP:** Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 1

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
0	8	С			Moist	Fine sand and silt; medium compact; moist; red.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
	14					End of boring	0.0



**WELL NO:** MW-7B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: NA

JOB NUMBER: 837013 SLOT NO.: SETTING:

DATE COMPLETED: 7/19/12 SAND PACK SIZE & TYPE: NA

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** HX Core **SETTING:** 28.2 to 0

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 28.2 to 1

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 14.5

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** fracture observed while coring at 29'

**ABBREVIATIONS:** SS = SPIIIS SPOON W = WaSH C = CUTTINGS G = SPIIIS ST = SPIIS ST = SPIIIS ST = SPIIS ST = SPIIIS ST = SPIIS ST = SPIIIS ST = SPIIIS

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID
FROM	то	TYPE	COUNT	(FEET)		DESCRIPTION	READING (PPM)
0	8	С			Moist	Fine sand and silt; medium compact; moist; red.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
14	26	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
26	28	SS	50/.5	1	moist	CLAY and SILT, some gravel – till and weathered shale	0.0
28	38			8.3		Red shale	



**WELL NO:** MW-7D

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 25.5 to 20.5

DATE COMPLETED: 7/11/12 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 25.5 to 19.5

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 20.5 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

**SAMPLING METHOD:** Split Spoon **SETTING:** 19.5 to 18.5; grouted to 2'

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 9.81

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	(FEET)	SAMPLE TYPE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	TYPE	COUNT	(FEET)			(PPM)
0	8	С			Moist	Fine sand and silt; medium compact; moist; red.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
14	26	С			Wet	CLAY; some silt; medium compact; red/brown; wet;	0.0
26	28	SS	50/.5	1	moist	CLAY and SILT, some gravel – till and weathered shale	0.0
	28.2					End of Boring – refusal on shale bedrock	



**WELL NO:** MW-8B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE:

JOB NUMBER: 837013 SLOT NO.: SETTING:

DATE COMPLETED: 7/20/12 SAND PACK SIZE & TYPE:

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** HX Core **SETTING:** 30 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 30 to 2

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTUDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
5	7	SS	3-6-24-27	2	Wet	Fine sand and silt; medium compact; dry; brown/red.	0.0
10	12	SS	5-19-21-21	2	Moist	SAND; trace silt; medium compact; grey; moist;	0.0
15	17	SS	2-1-2-2	2	Moist	CLAY; trace silt; soft; grey; moist;	0.0
20	22	SS	2-3-3-3	1	Moist	CLAY and SILT, soft, red/grey, moist	0.0
25	27	SS	12-16-18-18	1	Moist	CLAY and SILT, compact, some gravel, weathered shale	0.0
28	30	SS	16-50/.1	.5	Dry	weathered shale	0.0
30	40	Core				Shale	



WELL NO: MW-9

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 | SLOT NO.: 10 SETTING: 14 to 4

DATE COMPLETED: 7/17/12 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** Geologic NY, Homer, NY

SETTING: 14 to 3

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 4 to 0.5

**HAMMER WEIGHT/DROP:** Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 1

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** Discolored water observed during development

**ABBREVIATIONS:** SS = Split Spoon W = WaSh C = Cuttings G = grab ST = Shelby tube REC = recovery PPM = parts per million

DEPTH (	FEET)	SAMPLE	BLOW	REC.	MOISTIDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	(PPM)
0	8	С			Moist	Fine silt, some clay; medium compact; moist; black.	0.0
8	14	С			Wet	CLAY; some silt; medium compact; grey/brown; wet;	0.0
	14					End of boring	0.0



WELL NO: MW-9B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: Open borehole

**JOB NUMBER: 837013 SLOT NO.: SETTING:** 25 to 35

DATE COMPLETED: 7/23/12 SAND PACK SIZE & TYPE: None

DRILLING COMPANY: Geologic NY, Homer, NY SETTING: NA

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** HX Core **SETTING:** 25 to 0.5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 25 to 2

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 12'

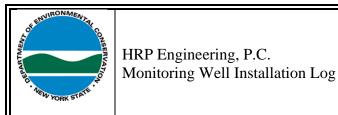
**STICK-UP:** N/A **GPS COORDINATES:** N: 43.325323093

SURFACE COMPLETION: Flush-Mounted Curb Box W: 78.395102911

**REMARKS:** cored from 25' to 35' using HX core/ drillers indicated losing water at 29' b.g.

**ABBREVIATIONS:** SS = SPIIIS = SPIIII

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOJOTUDE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)	(FEET) MOISTURE	DESCRIPTION	(PPM)
5	7	С	16-34-40-39	2	Dry	Fine sand and silt; medium compact; dry; brown.	0.0
10	12	С	2-2-1-2	2	Moist	CLAY; trace silt; soft; brown; wet;	0.0
15	17	С	2-1-2-2	2	Moist	CLAY; trace silt; soft; brown; wet;	0.0
20	21	SS	6-10-15-50	1	Moist	CLAY and SILT, some gravel – till and weathered shale	0.0
21	22			1	Wet	SAND, medium to mc, some gravel, weathered shale	
23	25		50/.3		Dry	SILT, some sand and gravel –weathered shale	0.0
25	35	Core				Shale	



WELL NO: MW-10

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: 2 inch Schedule 40 PVC

JOB NUMBER: 837013 SLOT NO.: 10 SETTING: 14-4

DATE COMPLETED: 7/18/12 SAND PACK SIZE & TYPE: 00

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 14-3

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 2 inch Schedule 40 PVC

**DRILLING METHOD:** Hollow Stem Auger SETTING: 4 to .5

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Bentonite Chips

SAMPLING METHOD: Split Spoon SETTING: 3 to 2

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

REFERENCE POINT (RP): Grade STATIC WATER LEVEL:

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH	(FEET)	SAMPLE	BLOW	REC.	MONGTAIDE	DESCRIPTION	PID
FROM	то	ТҮРЕ	COUNT	(FEET)	MOISTURE	DESCRIPTION	READING (PPM)
5	7	SS	4-3-2-4	1.5	Wet at 6'	Fine sand, some silt; medium compact; moist; grey to black.	0.0
10	12	SS	2-2-3-3	2	Wet	CLAY; some silt; soft; grey; wet;	0.0
	14					End of Boring	



**WELL NO:** MW-10B

PAGE 1 OF 1 PAGES

PROJECT: Monroe Electronics SCREEN SIZE & TYPE: NA

JOB NUMBER: 837013 SLOT NO.: SETTING:

DATE COMPLETED: 7/23/12 SAND PACK SIZE & TYPE: NA

**DRILLING COMPANY:** Geologic NY, Homer, NY **SETTING:** 

RIG TYPE: Hollow Stem Auger CASING SIZE & TYPE: 4 inch steel

**DRILLING METHOD:** HX Core SETTING: 22 to 0

HAMMER WEIGHT/DROP: Safety Hammer SEAL TYPE: Grout

SAMPLING METHOD: Split Spoon SETTING: 22 to 1

OBSERVER: Pat Rodman BACKFILL TYPE: N/A

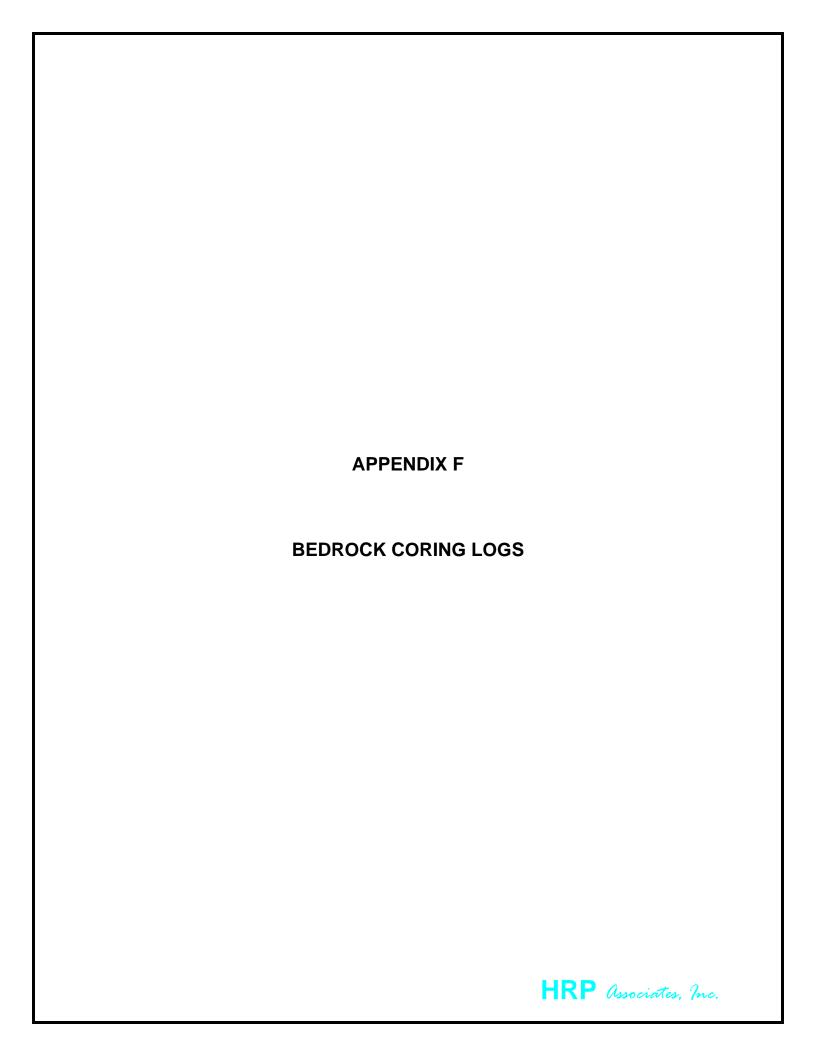
REFERENCE POINT (RP): Grade STATIC WATER LEVEL: 14.5

STICK-UP: N/A GPS COORDINATES: N:

SURFACE COMPLETION: Flush-Mounted Curb Box W:

**REMARKS:** 

DEPTH (	(FEET)	SAMPLE	BLOW	REC.	MOISTURE	DESCRIPTION	PID READING
FROM	то	ТҮРЕ	COUNT	(FEET)		DESCRIPTION	(PPM)
5	7	SS	4-3-2-4	1.5	Wet at 6'	Fine sand, some silt; medium compact; moist; grey to black.	0.0
10	12	SS	2-2-3-3	2	Wet	CLAY; some silt; soft; grey; wet;	0.0
14.5	16.5	SS	18-22-23-18	1.5	Dry	CLAY; some silt and sand; compact; red/brown till; wet; weathered shale fragment at 16.5'	0.0
20	22	SS	9-20-30-50/.4	1	Moist/wet	CLAY and SILT, some gravel – till and weathered shale	0.0
22	32	Core		8.3		Red shale	





#### MONITOR WELL CONSTRUCTION $\ L \ O \ G$ / BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: Geologic NY

DRILLED BY: INSPECTED BY: PR

BORING NO. MW-1B

PAGE 1 OF \_\_ 1

**DATE STARTED:** 7/19/2012 **DATE FINISHED:** 7/20/2012

M. Stiff

Stiff

Hard

V. Stiff

4-8

8-15

15-30

>50

**GROUNDWATER REFERENCE ELEVATION:** 338.316

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
12.43	

 CASING
 SAMPLER

 TYPE:
 steel

**SIZE I.D.:** 4"

	12.43						SIZE I.D.: 4"		
SAMPLING SAMPLE DATA					1				
DEPTH (FT.)	SAMPLING DEPTH (FT.)	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	STRATA CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	FIELD TEST DATA PID - 10.2 eV	
(F1.)	FROM - TO	10	INCHES	6 INCHES	DATA	(F1.)	(DESCRIPTION OF MATERIALS)	(ppm)	
								ur /	
					TH A				
					- 111 111			0.0	
					- 14 - 14		SAND, Medium to fine; little silt; loose; red; no odor; no staining	0.0	
5'	5'-7'		24		- 11 11				
<u> </u>	3-7	+	24		-				
					111 111				
0'	10/ 12/		24					0.0	
U	10'-12'		24		- 11 11			0.0	
					- 11		Fine soud and silts comments maints and		
					- 11		Fine sand and silt; compact; moist; red.		
		-			- 11 11				
					- 11				
2'					- 11 1				
		-			- 11 11				
	15'-17'	-			- 11				
					-		CLAY; trace silt; soft; grey; moist	0.0	
:0'									
							CLAY and SILT; soft, red/grey, moist		
	221.251		24	10.15.14.14			CLAY and SILT; compact, some gravel, weathered shale, wet	0.0	
	23'-25'		24	10-15-14-14	-		CERT and SIET, compact, some graves, weathered share, we	0.0	
25'					- 11				
	28'-30'		6	50/.1				0.0	
30'									
-	core		110.4		- 'I I'		Shale/siltstone; red; no areas of significant fractures;		
	corc		110.4				63% RQD		
					-		03 // RQD		
		1							
0'									
	STRUCTION DATA	A:							
	set at40' bgs						KEY:	Indication of where	
en Borehol	neter8" le Interval _30	' to 4	0 'høs				Well Bentonite	groundwater begins	
	Slot Size N/A				er 2 "		Grout	Roadbox	
nd Filter Pa	ack Intervalto						Soil		
nd Size	Quantity		ags, lbs, ga				Bedrock	Well Riser	
ell Riser Int			_'bgs (_	riser length)					
	ameter4Mat		_Steel	Uhoo				Wall Canaan	
ntonite Sea	al Above Fitler Pack val to	8 'bgs	_to _1.8	bgs				Well Screen	
ckfill Mate		_ ugs					KEY TO BLOWS PER 6-INCHES:	PROPORTIONS OF SOIL	
	p/Ground Surface Se	al8_	to _1.8	' bgs			Granular Soils Cohesive Soils		
ishing/Wel	l Protector: Flush-M						(Gravel & Sand) (Silt & Clay)	And = $35$ to $50\%$	
face Finish	ning notes:					_	Blows/ft Density Blows/ft Density	Some = 20 to 35%	
0.0000	INIATEG. N. 42.21	2454400	7				0-4 V. Loose <2 V. Soft	Little = 10 to 20%	
'S COORD	OINATES: N: 43.32	2454403 : 396168					4-10 Loose 2-4 Soft 10-30 M. Dense 4-8 M. Stiff	Trace = $0$ to $10\%$	
	W: -1/8	SOLOKE	Z94				1 10-50 M. Dense 4-8 M. Stiff		

10-30 M. Dense

V. Dense

30-50 Dense

>50

with by geoprobe

W: -78.396168294

1) ~ \_ 20 \_\_ gallons of water was purged from following installation on \_\_7/20/2012 2) SAA = Same as Above / NA = Not Available

was logged & sampled at this location on

GENERAL REMARKS:

4)Soil Boring\_

3) bgs = Below Ground Surface



#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: Geologic NY

DRILLED BY: INSPECTED BY: PR BORING NO.  $\underline{\mathrm{MW-2B}}$ 

PAGE 1 OF \_\_ 1

DATE STARTED: 7/18/2012 **DATE FINISHED:** 7/19/2012

SAMPLER

SURFACE ELEVATION: N/ABOTTOM OF BORING ELEVATION:

M. Stiff

V. Stiff

Stiff

Hard

4-8

8-15

15-30

>50

**GROUNDWATER REFERENCE ELEVATION:** 336.647

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
11.14	

CASING TYPE: steel

-	11.14		r ost-Det	elopillelli			SIZE I.D.: 4"	
L								
DEPTH (FT.)	SAMPLING DEPTH (FT.) FROM - TO	ID	SAMPLE RECOV. INCHES	DATA BLOWS PER 6 INCHES	WELL DATA	STRATA CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	FIELD TEST DATA PID - 10.2 eV (ppm)
5'	5'-7'		24	2-5-6-5			Fine sand and silt; compact; moist; red	0.0
-	5-1		24	2-3-0-3			Clay and Silt; medium compact; moist; grey; no odor; no staining	
0'	10'-12'		24	1-1-1-1				0.0
12'					-			
-	15'-17'						CLAY; trace silt; soft; grey; moist	0.0
20'					.		CLAY and SILT; soft, red/grey, moist	
25'	23'-25'		24	10-15-14-14			CLAY and SILT; compact, some gravel, weathered shale, wet	0.0
-	28'-30'		6	50/.1				0.0
30"	core		110.4		-		Shale/siltstone; red; no areas of significant fractures; 59% RQD	
37' FLL CONS	TRUCTION DATA	1.						
Tell bottom se perehole diamopen Borehole Tell Screen Sland Filter Pacand Size Tell Riser Inte	et at37' bgs eter 8' e Interval27' ot SizeN/At    t	to _3	7' bgs Mateiral bgs ags, lbs, ga _' bgs ( Steel	Diameter llons) riser length)			Well Bentonite Grout Strata Soil Bedrock	Indication of where groundwater begins Roadbox Well Riser
entonite Seal ackfill Interva ackfill Materi entonite Top/ nishing/Well urface Finishi	Above Fitler Pack alto alN/A_ //Ground Surface Sea Protector: Flush-Mo	.8'bgs al8 ounted	to _1.8 to _1.8	' bgs ' bgs				Well Screen  PROPORTIONS OF SOLA  And = 35 to 50% Some = 20 to 35% Little = 10 to 20% Trace = 0 to 10%

10-30 M. Dense

V. Dense

30-50 Dense

>50

with by geoprobe

C:\Users\pcr.HRP\Desktop\New Well Construction Logs.xlsx

W: -78.396168294

1) ~ 20 \_\_gallons of water was purged from following installation on \_\_7/19/2012
2) SAA = Same as Above / NA = Not Available
3) bgs = Below Ground Surface

was logged & sampled at this location on

GENERAL REMARKS:

4)Soil Boring\_

# AND VORK STATE

#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: SJB
DRILLED BY:
INSPECTED BY: PR

BORING NO.  $\underline{\text{MW-3B}}$ 

PAGE 1 OF \_\_ 1
DATE STARTED: 8/14/2011

**DATE FINISHED:** 8/15/2011

GROUNDWATER REFERENCE ELEVATION: 336.844

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
10	

 CASING
 SAMPLER

 TYPE:
 steel

SIZE I.D.: 4"

	SAMPLING		SAMPLE			STRATA		FIELD TEST
DEPTH (FT.)	DEPTH (FT.) FROM - TO	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	DATA PID - 10.2 eV (ppm)
					<b>N</b> 7			
							Soul modium to fines come cilts modium compacts moists and an	0.0
							Sand, medium to fine; some silt; medium compact; moist; red; no odor; no staining	0.0
5'	5'-7'		24	3-3-5-6				
							Clay and Silt; medium compact; moist; grey; no odor; no staining	
10'	10'-12'		24	2-2-3-2				0.0
10	10-12		24	2-2-3-2				0.0
12'								
	15'-17'		24	i-b+ -6b			CLAY; grey; medium compact; wet	
	13-17		24	weight of hammer			ELIT, grey, medium compact, wet	0.0
20'	20'-22'		24	20-25-18-25			Sand and silt and gravel and clay; very compact; moist; red	0.0
							CLAY and SILT; soft, red/grey, moist	
								0.0
25'								
	25'-27'		24	50/"2			weathered shale	
	28'-30'		6	50/.1				0.0
30'								
	30'-32'		108				weathered shale	
							Shale/siltstone; red; areas of significant fractures from 31 to 34' bg;	
10'	core STRUCTION DATA	۸.					36% RQD	
	et at40' bgs	٦.					KEY:	Indication of where
rehole dian	neter8"		0 11				Filter Sand	groundwater begins
	lot Size N/A			Diameter	"		Well Bentonite Grout	Roadbox
nd Filter Pa	ck Intervalto	)	bgs		_		Strata	
	Quantity eraval 0'to						Bedrock	Well Riser
	ameter4Mat		ogs ( _Steel	riser length)				
	l Above Fitler Pack		_to _1.8	' bgs				Well Screen
ckfill Interv ckfill Mater		' bgs					KEY TO BLOWS PER 6-INCHES:	PROPORTIONS OF SOI
ntonite Top	/Ground Surface Se		to _1.8	B' bgs			Granular Soils Cohesive Soils	
ishing/Well rface Finish	l Protector: Flush-M	ounted					(Gravel & Sand) (Silt & Clay)  Blows/ft Dansity Blows/ft Dansity	And = $35 \text{ to } 50\%$ Some = $20 \text{ to } 35\%$
I IACC FIIIISII	mig Hotes					_	Blows/ft         Density         Blows/ft         Density           0-4         V. Loose         <2	Little = 10 to 20%
S COORD	INATES: N: 43.32						4-10 Loose 2-4 Soft	Trace = 0 to 10%
ENERAL E	W: -78 REMARKS:	.396168	294				10-30 M. Dense 4-8 M. Stiff 30-50 Dense 8-15 Stiff	
~20 g	gallons of water was			ving installation on _	_7/19/2012		>50 V. Dense 15-30 V. Stiff	
	ne as Above / NA = 1	Not Ava	ilable				>50 Hard	
ogs = Belo	w Ground Surface was logged		1.1.41	location on	with by geor			

#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: SJB DRILLED BY: INSPECTED BY: PR

BORING NO. MW-5B PAGE 1 OF \_\_ 1

**DATE STARTED:** <u>8/14/2011</u>

**DATE FINISHED:** 8/15/2011

SURFACE ELEVATION: N/ABOTTOM OF BORING ELEVATION:

**GROUNDWATER REFERENCE ELEVATION:** 336.124

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
9	

CASING SAMPLER TYPE: steel

SIZE I.D.: 4"

	SAMPLING	L	SAMPLE		STRATA			FIELD TEST	
DEPTH (FT.)	DEPTH (FT.) FROM - TO	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	DATA PID - 10.2 eV (ppm)	
					- 11 111				
							Fine sand and silt; loose; moist; red with black; no odor	0.0	
5'	5'-7'		24	3-3-4-3	-				
					- 11 11				
		-							
					- 11 11		Clay, some silt; medium compact; grey; moist; no odor; no staining		
10'	10/ 12/		24	0122	-			0.0	
10	10'-12'	1	24	0-1-2-2	- 11 11			0.0	
					- 11 11				
12'									
-					-				
	15'-17'		24	0-0-0-1			CLAY; grey; medium compact; moist		
								0.0	
20'	20'-22'		18	9-15-19-15			Clay and weathered shale; compact; moist; red/grey	0.0	
20	20-22	+	10	9-13-19-13	-		Compared sinate, compared, moist, rearging	0.0	
					- 11 11				
					-				
					- 11 11				
	23'-25'		tip	40-50/2"			weathered shale	0.0	
25'					-				
	28'-30'		6	50/.1				0.0	
30'									
	core		110.4				Shale/siltstone; red; no areas of significant fractures;		
	6016		110.1				41% RQD		
		1							
		1	1		-				
38.5'	OTPUIOTION S	1							
	struction DAT set at38.5' bg						KEY:	Indication of where	
orehole dian	neter 8 "							groundwater begins	
pen Borehol	le Interval _28.5	_' to _	38.5'	bgs			Well Bentonite		
Vell Screen S	lot Size N/A	1	Mateiral	Diameter	"			Roadbox	

Well Screen Slot Size \_\_N/A\_\_\_ Sand Filter Pack Interval \_\_\_\_\_to \_\_\_\_bgs 
 Sand Size
 Quantity
 (bags, lbs, gallons)

 Well Riser Interaval
 0
 'to \_30
 'bgs (\_\_\_\_\_riser length)

 Well Riser Diameter
 4
 Material
 Steel
 Bentonite Seal Above Fitler Pack \_\_.8 \_\_ to \_1.8 \_\_ 'bgs
Backfill Meterial \_\_\_ to \_\_\_ 'bgs Finishing/Well Protector: Flush-Mounted Surface Finishing notes:\_ GPS COORDINATES: N: 43.325282965

W: -78.396006445

GENERAL REMARKS:

1)  $\sim$  \_20 \_ gallons of water was purged from following installation on \_8/15/2011

2) SAA = Same as Above / NA = Not Available 3) bgs = Below Ground Surface

4)Soil Boring \_was logged & sampled at this location on \_ with by geoprobe

Soil Strata Bedrock Roadbox

Well Riser Well Screen

KEY TO BLOWS PER 6-INCHES: Granular Soils Cohesive Soils (Gravel & Sand) (Silt & Clay) Blows/ft Density Density Blows/ft V. Loose V. Soft 4-10 Loose 2-4 Soft 10-30 M. Dense 4-8 M. Stiff Stiff 30-50 Dense 8-15 V. Stiff >50 V. Dense 15-30

>50

Hard

And = 35 to 50% Some = 20 to 35% Little = 10 to 20% Trace = 0 to 10%

PROPORTIONS OF SOIL:

# AN TORK STATE

#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: SJB
DRILLED BY:
INSPECTED BY: PR

BORING NO.  $\underline{\mathrm{MW-6B}}$ 

PAGE 1 OF \_\_ 1
DATE STARTED: 8/14/2011

DATE FINISHED: 8/15/2011

SURFACE ELEVATION:  $\underline{\mathrm{N/A}}$  BOTTOM OF BORING ELEVATION:

GROUNDWATER REFERENCE ELEVATION: 336.509

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
9	

 CASING
 SAMPLER

 TYPE:
 steel

SIZE I.D.: 4"

	SAMPLING		SAMPLE			STRATA		FIELD TEST
DEPTH (FT.)	DEPTH (FT.) FROM - TO	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	DATA PID - 10.2 eV (ppm)
5'	5'-7'		24	3-3-4-3			Fine sand and silt; medium compact; wet; red with black staining; slight chemical odor	0.0
							Clay, some silt; medium compact; grey; moist; no odor; no staining	
10'	10'-12'		24	2-3-3-3				0.0
12'					<u>-</u>			
	15'-17'		24	1-1-1-1			CLAY; brown-grey; medium compact; moist	0.0
20'	20'-22'		24	10-12-9-17			Clay and weathered shale; compact; moist; red/grey	0.0
25'	24'-26'		tip	50/0"			weathered shale	0.0
								0.0
30'	29.5-39.5		99.6				Shale/siltstone; red; no areas of significant fractures; 32% RQD	
39.5'	STRUCTION DATA							
Vell bottom so corehole diamonal open Borehole Vell Screen S and Filter Parand Size Vell Riser Inte Vell Riser Dia	et at39.5 ' bg neter 8 ' bg neter 8 ' e Interval29.5 lot SizeN/A ck Interval to	b	Mateiral bgs ags, lbs, gal	Diameter	"		Well Filter Sand Bentonite Grout Soil Bedrock	Indication of where groundwater begins Roadbox Well Riser
Bentonite Seal Backfill Interv Backfill Mater		8 ' bgs	_to _1.8	' bgs			KEY TO BLOWS PER 6-INCHES:	Well Screen  PROPORTIONS OF SOIL.
sentonite Top inishing/Well urface Finish GPS COORD: GENERAL F () ~20 §	o/Ground Surface Set I Protector: Flush-Mo ing notes: INATES: N: 43.32 W: -78.	516792 395540 purged	387 from follow		_8/15/2011	_	Granular Soils   Cohesive Soils	And = 35 to 50% Some = 20 to 35% Little = 10 to 20% Trace = 0 to 10%

#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG HRP Engineering, P.C. 1 Fairchild Square, Suite 110 Clifton Park, NY 12065 PROJECT: Monroe Electronics RI/FS BORING NO. MW-7B (518) 877-7101 WA #: D006130-18 PAGE 1 OF \_\_ 1 **DATE STARTED:** <u>7/18/2012</u> LOCATION: 100 Housel Avenue Lyndonville, NY **DATE FINISHED:** 7/19/2012 DRILLING CO.: Geologic NY SURFACE ELEVATION: N/A DRILLED BY: **BOTTOM OF BORING ELEVATION:** INSPECTED BY: PR **GROUNDWATER REFERENCE ELEVATION:** 337.032 **GROUNDWATER OBSERVATIONS** CASING SAMPLER TYPE: steel DEPTH Post-Development SIZE I.D.: 4" 14.5 SAMPLING STRATA SAMPLE DATA FIELD TEST BLOWS PER DEPTH DEPTH RECOV. CHANGE LITHOLOGY DATA ID PID - 10.2 eV (FT.) INCHES 6 INCHES DATA (FT.) (DESCRIPTION OF MATERIALS) FROM - TO (ppm) 0.0 Fine sand and silt: medium compact: moist: red 5' 10' • 12' Clay, some silt; medium compact; red/brown; wet 20' 12 50/0.5" 25' 26'-28' CLAY and SILT; some gravel- till and weathered shale Shale/siltstone; red; areas of significant fractures located at 28-30 feet 30' 99.6 core bg; 28-38 53% ROD WELL CONSTRUCTION DATA: Well bottom set at \_\_38\_\_\_\_' bgs KEY: Borehole diameter\_\_\_8\_ Filter Sand Open Borehole Interval \_28\_\_\_\_\_'to \_\_38\_\_\_\_'bgs Well Screen Slot Size \_ N/A\_\_\_\_\_\_ Mateiral\_\_\_\_ Well Bentonite \_Diameter \_ Grout Roadbox Sand Filter Pack Interval \_\_\_\_\_to \_\_\_\_ \_ bgs Soil Strata Well Riser Sand Size\_\_\_\_\_Quantity\_\_\_\_(bags, lbs, gallons) Bedrock Well Riser Interaval 0 'to 28 'bgs ( riser length) Well Riser Diameter 4 Material Steel Bentonite Seal Above Fitler Pack \_\_.8\_\_\_to \_1.8\_\_\_'bgs Backfill Interval \_\_\_\_to \_\_\_'bgs Well Screen KEY TO BLOWS PER 6-INCHES:

0.0 0.0 0.0 Indication of where groundwater begins Backfill Material N/A to \_1.8 to \_1.8 \_\_\_ ' bgs PROPORTIONS OF SOIL: Granular Soils Cohesive Soils Finishing/Well Protector: Flush-Mounted (Gravel & Sand) (Silt & Clay) And = 35 to 50% Surface Finishing notes:\_ Some = 20 to 35% Blows/ft Density Blows/ft Density V. Loose V. Soft Little = 10 to 20% 4-10 Loose GPS COORDINATES: N: 43.325167927 2-4 Soft Trace = 0 to 10%W: -78.395540387 10-30 M. Dense 4-8 M. Stiff GENERAL REMARKS: 30-50 Dense 8-15 Stiff V. Stiff 1)  $\sim$  \_20 \_ gallons of water was purged from following installation on \_7/19/2012 >50 V. Dense 15-30 2) SAA = Same as Above / NA = Not Available >50 Hard 3) bgs = Below Ground Surface 4)Soil Boring \_was logged & sampled at this location on \_\_ with by geoprobe C:\Users\pcr.HRP\Desktop\New Well Construction Logs.xlsx

#### MONITOR WELL CONSTRUCTION $\;L$ O G / BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: Geologic NY

DRILLED BY: INSPECTED BY: PR BORING NO.  $\underline{\mathrm{MW-8B}}$ 

PAGE 1 OF \_\_ 1

**DATE STARTED:** 7/19/2012 **DATE FINISHED:** 7/23/2012

SURFACE ELEVATION: N/A BOTTOM OF BORING ELEVATION:

GROUNDWATER REFERENCE ELEVATION: 337. 933

#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
9	

CASING SAMPLER TYPE: steel

**SIZE I.D.:** 4"

	SAMPLING		SAMPLE		_	STRATA		FIELD TEST	
DEPTH (FT.)	DEPTH (FT.) FROM - TO	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	DATA PID - 10.2 eV (ppm)	
- -									
5'	5'-7'		24	16-34-40-39	-		Fine sand and silt; medium compact; dry; brown/red	0.0	
  -  -					-				
10'	10-12'		24	2-2-1-2	-		CLAY; trace silt; medium compact; grey; moist	0.0	
12'					- - -				
12					- - -				
	15'-17'		24	2-1-2-2			CLAY; trace silt; soft; grey; wet	0.0	
20'	20'-22'		12	2-3-3-3	<b>-</b> - -		CLAY and SILT; compact, some gravel and weathered shale	0.0	
25'					- - -			0.0	
- -	25'-27'		12	12-16-18-18	- - -		CLAY and SILT; compact, some gravel and weathered shale		
30	28'-30'			0.5	-       -       -		weathered shale	0.0	
-					-		Shale/siltstone; red; no areas of significant fractures	0.0	
	TRUCTION DAT	A:					45% RQD  KEY: ▼	Indication of where	
orehole diam oen Borehole ell Screen Sl	et at40' bgs eter8" et Interval _30 lot SizeN/A	N	Mateiral	Diameter			Well Filter Sand Bentonite Grout	groundwater begins Roadbox	
nd Size ell Riser Inte	ck IntervaltoQuantity eraval 0'to meter4Mat	(b		llons)riser length)			Strata Soil Bedrock	Well Riser	
	Above Fitler Pack		_to _1.8	' bgs			KEY TO BLOWS PER 6-INCHES:	Well Screen  PROPORTIONS OF SOIL	
ntonite Top	/Ground Surface Se Protector: Flush-M		to _1.8	' bgs		_	Granular Soils         Cohesive Soils           (Gravel & Sand)         (Silt & Clay)           Blows/ft         Density         Blows/ft         Density           0-4         V. Loose         <2	And = 35 to 50% Some = 20 to 35% Little = 10 to 20%	
PS COORDI		2444489 .394720					4-10 Loose 2-4 Soft 10-30 M. Dense 4-8 M. Stiff 30-50 Dense 8-15 Stiff	Trace = 0 to 10%	
~20 g SAA = Sam	gallons of water was the as Above / NA = 1 or Ground Surface			ring installation on	7/23/2012		>50 V. Dense 15-30 V. Stiff >50 Hard		



#### MONITOR WELL CONSTRUCTION LOG/BEDROCK CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: Geologic NY

DRILLED BY: INSPECTED BY: PR

BORING NO. MW-9B

PAGE 1 OF \_\_ 1

**DATE STARTED:** 7/19/2012 **DATE FINISHED:** 7/23/2012

SAMPLER

GROUNDWATER REFERENCE ELEVATION: 335.013

GROUNDWATER OBSERVATIONS

DEPTH Post-Development

CASING
TYPE: steel

**SIZE I.D.:** 4"

	·				1		SIZE I.D.: 4"	
1	SAMPLING		CAMPLE	DATA	1	CTDATA		FIELD TEST
DEPTH (FT.)	DEPTH (FT.) FROM - TO	ID	RECOV. INCHES	BLOWS PER 6 INCHES	WELL DATA	STRATA CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	FIELD TEST DATA PID - 10.2 eV (ppm)
- -								
5'	5'-7'		24	16-34-40-39	-		Fine sand and silt; medium compact; dry; brown	0.0
-					-			
10'	10-12'		24	2-2-1-2	<u> </u>		CLAY; trace silt; soft; brown; wet	0.0
- - -					-			
12'					-			
- -	15'-17'		24	2-1-2-2			CLAY; trace silt; soft; grey; wet	0.0
20'	20'-21'		12	6-10-15-50	-		CLAY and SILT; some gravel, till and weathered shale	0.0
=	21'-22'		12		-		SAND, medium to mc, some gravel, weathered shale	
25'	23'-25'			50/.3			SILT, some sand and gravel, weathered shale	0.0
=	core 25'-35'		88.8		-			
								0.0
-					-		Shale/siltstone; red; areas of significant fractures from 25 to 26 feet bg, 30-31 feetand 34-35 feet;	0.0
35					-		58% RQD	
ell bottom se orehole diam	et at35' bgs eter8" e Interval _25'		5				Filter Sand	Indication of where groundwater begins
ell Screen Sl and Filter Pac	ot SizeN/A ck Intervalto	N	Mateiral _bgs	Diameter	"		Well Bentonite Grout Strata	Roadbox
/ell Riser Inte /ell Riser Dia	Quantity	25 rial	_Steel	riser length)			Bedrock	Well Riser Well Screen
ackfill Interva ackfill Materi	alto ialN/A	' bgs	_to _1.8				KEY TO BLOWS PER 6-INCHES:	PROPORTIONS OF SOIL
	/Ground Surface Sea Protector: Flush-Moing notes:		to _1.8	' bgs		_	Granular Soils         Cohesive Soils           (Gravel & Sand)         (Silt & Clay)           Blows/ft         Density           0-4         V. Loose         <2	And = 35 to 50% Some = 20 to 35% Little = 10 to 20%
ENERAL R		395102	911	sing ingtallation	7/22/2012		4-10 Loose 2-4 Soft 10-30 M. Dense 4-8 M. Stiff 30-50 Dense 8-15 Stiff 5-50 V. Dense 15-30 V. Sciff	Trace = 0 to 10%
SAA = Sam	allons of water was j e as Above / NA = N v Ground Surface was logged	Not Ava	ilable			rohe	>50 V. Dense 15-30 V. Stiff >50 Hard	

#### MONITOR WELL CONSTRUCTION $\ L\ O\ G\ /\ BEDROCK$ CORING LOG

PROJECT: Monroe Electronics RI/FS WA #: D006130-18

LOCATION: 100 Housel Avenue Lyndonville, NY

DRILLING CO.: Geologic NY

DRILLED BY: INSPECTED BY: PR BORING NO.  $\underline{\mathrm{MW-10B}}$ 

PAGE 1 OF \_\_ 1

DATE STARTED: 7/19/2012 **DATE FINISHED:** 7/23/2012

SAMPLER

SURFACE ELEVATION:  $\overline{N/A}$ BOTTOM OF BORING ELEVATION:

GROUNDWATER REFERENCE ELEVATION: 333.847

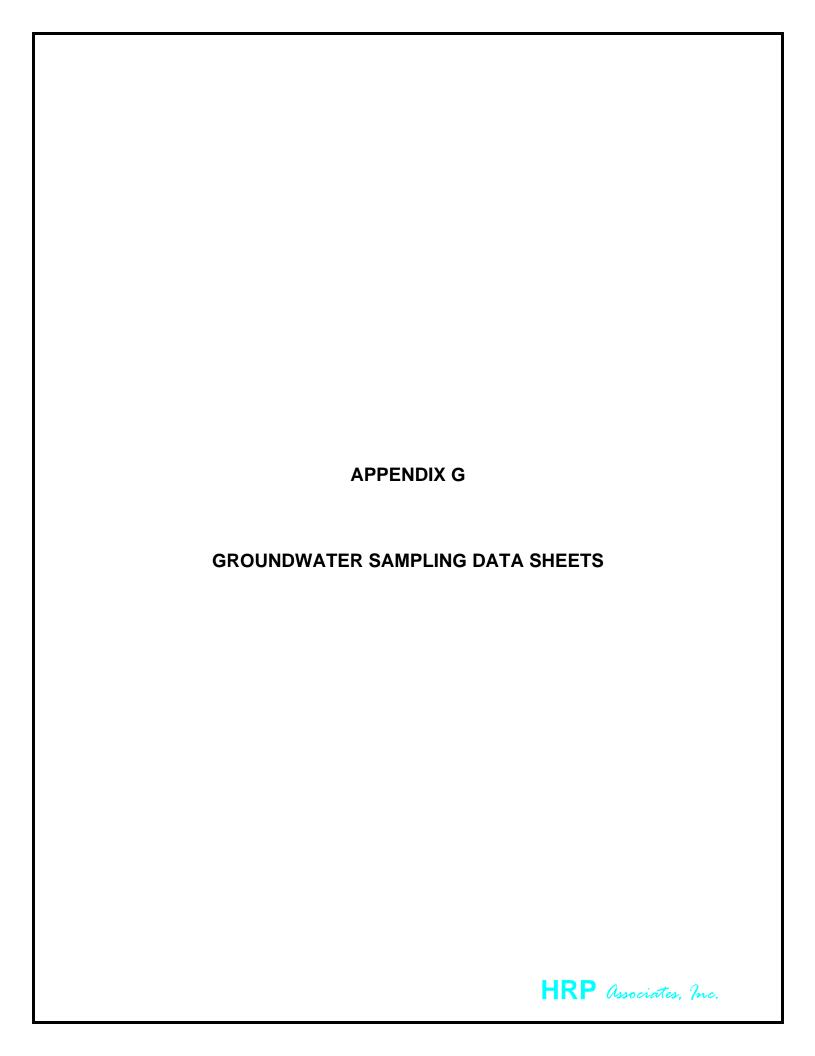
#### GROUNDWATER OBSERVATIONS

DEPTH	Post-Development
7	

CASING TYPE: steel

**SIZE I.D.:** 4"

L	,				J		SIZE I.D.: 4"	
DEPTH (FT.)	SAMPLING DEPTH (FT.) FROM - TO	ID	SAMPLE RECOV. INCHES	DATA BLOWS PER 6 INCHES	WELL DATA	STRATA CHANGE (FT.)	LITHOLOGY (DESCRIPTION OF MATERIALS)	FIELD TEST DATA PID - 10.2 eV (ppm)
								(ppin)
5'	5'-7'		18	4-3-2-4	-		Fine sand, some silt; medium compact; moist, grey to black	0.0
10'	10-12'		24	2-2-1-2	-   -  -		CLAY; some silt; soft; grey wet	0.0
12'					- - -			
12					- - -			
-	14.5'-16.5'		18	18-22-23-18	- - -		CLAY; some sand and silt; compact; red/brown till; wet; weathered shale fragment at 16.5'	0.0
20'	20'-22'		12	9-20-30-50/.4	<b>-</b> -		CLAY and SILT; some gravel, till and weathered shale	0.0
					-			
22'	23'-25'			50/.3			SILT, some sand and gravel, weathered shale	0.0
	core 22'-32'		97.2		- -			
					-			0.0
					-		Shale/siltstone; red; areas of significant fractures throughout core	0.0
32					-		27% RQD	
Vell bottom so orehole diam open Borehole Vell Screen St and Filter Pag	et at32' bgs et et8 " e Interval22' lot SizeN/A ck Interval to 	to3.	Mateiral bgs	Diameter			Well Filter Sand Bentonite Grout Strata Soil Bedrock	Indication of where groundwater begins Roadbox Well Riser
	meter4Mate Above Fitler Pack	rial 8	_' bgs ( _Steel _to _1.8	riser length)				Well Screen
ackfill Mater entonite Top inishing/Well urface Finish	ialN/A	unted	to _1.8	' bgs		_		PROPORTIONS OF SOIL  And = 35 to 50% Some = 20 to 35% Little = 10 to 20%
GENERAL R ) ~20 g ) SAA = Sam	gallons of water was p ne as Above / NA = N w Ground Surface	ourged lot Ava	911 from follow iilable		7/23/2012 with by geop	orobe	4-10   Loose   2-4   Soft	Trace = 0 to 10%



TTTTT	<b>)</b>
$\Pi\Pi$	Associates, Inc.
Environmental/C	ivil Engineering & Hydrogeology

## **GROUNDWATER SAMPLING**



Environmental	Civil Engineering 8	k Hydrogeology		PURGE F					YOUR STATE PO		
Project: MoNR	de elec	TROVICS	MEW 9	617.p	2	HRP P	rsoni A	K (50)	=)		
Location:	wille	NY	Well ID.: M W - 1				Weather:				
Sounding Me	thod: PROBE	:	Gauge Date: 9-13-/1				Measurement Ref: 5.37				
Stick Up Dov	vn)(ft): 0.2	_	Gauge Time	Gauge Time: Well Diameter (In): 2.0							
Purge Date:	<i>O</i> 15	<i></i>			Purge Time:						
	9-/3-				Field Technic		00	) 			
Low Flo	ow-Pei		·····	ic RAK							
1) Well Depti	h (ft): /2	2.4	4) Well Volu	ıme (ft): <b>().</b> /	6	Depth/l	leight	of Top of PV	C: -0.2	5	
2) Depth to V	5.	.37	5) Well Volu	ıme (gal) (3*4):	7.1	Pump Type: Peristaltic					
3) Liquid Dep	oth (1-2) (ft):	7.0	6) Five Well Volumes (gal) (5*5):				Pump Designation: 15CO - ACCUWELL 150				
				Water Quality	y Paramete	rs					
Time (hrs)	DTW (ft btoc)	Volume (III)	Rate (Lpm)	pH (pH units)	QRP (mV)	Temper (OC		Gonductivit: (uS/cm)	DO (ug/L)	Turbidily (ntu)	
1000 1015		ব	6.2	6.89	91	20.	34 79	2350 2320	7.92	8.9 8.8	
1030	6.06	6	11	6.95	6 <b>5</b>		2	2370	3.32	5.1,	
1050	6.25	/0	//	6.98 7.00	62	20.9	3 <u>5</u>	2360 2330	3.[2 3.6]	0.7	
1/00	6.38	12	11	7.01	68	20,	95	2330	2.82	0.7	
· ·											
Total Quantit	y of Water Re	moved (gal):		12l		Samp	ling T	ime:	1115	5	
Samplers:		RAK:	1.6×	36 Pdy	/ Bailer	Split S	Sampl	e With:	NA		
Sampling Date: 9 -			13-11				Sample Type: V6C,8RCRA				
									Pes-	<b>F.</b>	
COMMENTS	AND OBSER	RVATIONS:									

## GROUNDWATER SAMPLING



Environmental/Civil Engineering & Hydrogeology	PURGE F		To the YORK OF THE PARTY.						
Project: MONROE ELECTRONICS	Mew 9617. PZ	2.	HRP Personnel:						
Location: Lundonville, MY	Well ID.: MW-2	· v	Weather: 75, Sunny, Windy 20-3amph						
Sounding Method: WLD/I-PROBE	Gauge Date: 9-13-//		Measurement Ref:						
Stick Up rown (ft):	Gauge Time: 0715	V	Well Diameter (In):						
Purge Date:		Purge Time:							
9-13-11			1200						
Purge Method: Low Flow		Fleid Technicia	ani RAK						
1) Well Depth (ft): /4.2	4) Well Volume (ft):	16	epth Heigh	t of Top of PV	c: 0,2				
2) Depth to Water (ft): 9.47	5) Well Volume (gal) (3*4)	0.75	Pump Type: Peristaltic						
3) Liquid Depth (1-2) (ft): 4.7	6) Five Well Volumes (gal	9.00 07.	Pump Designation: 4ccv well 150						
	Water Quali	y Parameters	<u></u>						
Time DTW volume (firs) (fit btoc) (filers)	Rate pH (Lpm) (pH units)	ORP (mV)	remperatur (OC)	Gonductivit: (uS/cm)	DQ (ug/L)	Turbidity (ntu)			
1200 9.47 0.2	0.2 7.03	-17	16.9	946	7.76	8.0			
1210 12.31 7	11 7.10	-24 -27	17.08	925	6,84	5.7			
1730 13.58 6 1240 13.58 8	1 7.10	-53	13.26	1005	5.34	6.9			
1250 13.59 10	11 6.98	-54	17.62	1001	5.23	7.9			
					-				
	1	<u> </u>							
Total Quantity of Water Removed (gai):	102		Sampling T	ime:	1300				
Samplers: 1.6×36 1	Poly Bailer		Split Samp	le With:	NA				
Sampling Date: 9-	13-11		Sample Type: VOC, 8 RCRA						
			1 - 1		DOL	-f o			
COMMENTS AND OBSERVATIONS:	Well bailed	! avy w 2×1-l +	nile Gorpt	sampii esticio	ig , 9-	14-11			
	at 0800	OMMENTS AND OBSERVATIONS: Well bailed dry while sampling, collected 2x1l for pesticides 9-14-11 at 0800							

## HRP

## GROUNDWATER SAMPLING



Environmental/	L ASSOCIA	RES, INC. R Hydrogeology	PURGE FORM				R. T. TOTAL STATE LEGISLATION					
Project: Mc	ONROE CTRON	1105	NAS#: 9	1617. p:	2	HRP Personnel: RAK (SCE)						
Location: Lyndon	4	NY	Well ID.:	1W-3		Weather: FHYCldy, 20-30 mp						
Sounding Me	thod:	· · · · · · · · · · · · · · · · · · ·	Gauge Dat	9-13-	-11	Measurement Ref:						
Stick Up Dov	)(ft): O.	2	Gauge Tim				Well Diameter (in): 2 //					
Purge Date:		······································	1		Purge Time			······································				
Purge Metho	9-13	-11			_	1330	<u> </u>	······································				
Low F	low				Field Techn	RA	<u>K</u>					
1) Well Depti	1 (ft): 14.	87	4) Well Vol	ume (ff):	16	Depth/Height	of Top of PV	o.2				
2) Depth to V	Johns (ft)	. <u></u> 3	-	ume (gal) (3*4):	1.17	Pump Type:	Peris-	taltic				
3) Liquid Dep	th (1-2) (ft):	2,34	6) Five We	ll Volumes (gal)	85	Pump Designation: 150						
				Water Quality	y Paramet	ers						
Tlme (hrs)	DTW (ft btoc)	Volume (lilers)	Rate (Lpm)	pH (pH units)	ORP (mV)	remperatur (oC)	Gonductivit: (uS/cm)	DO (ug/L)	Turbidily (ntu)			
/330	7,53	0,2	0,2	7.16	- 70	20,22	726	5.68	170			
1350	8.49	4	11	1 2:17	-68	21.10	688	3.38	20			
1400	9,04	5	//	7.18	- 74	21.84	705	3.64	12			
1410	9.49	8	10	7.18	-66	20.93	684	4,64	1.7/			
19.20		/0	11	7,16	765	70.61	680	3,02.	11.4			
			<u> </u>	1				1				
Total Quantit	y of Water Re	emoved (gai):		161		Sampling T	ime:	1430	)			
Samplers:	1	6×36	Poly	Baile	<u>r</u>	Split Sampl	e With:	NA				
Sampling Da	te:	9	<u>,</u> 1–13 -	7/		Sample Ty	oe:	8260	B, Pest			
								81	RZRA.			
COMMENTS	AND OBSEF	RVATIONS:										

LIDD	
HRP Associates, In	C.
Environmental/Civil Engineering & Hydrogeol	ogy



Environmental/	Civil Engineering	& Hydrogeology	PURGE FORM				THE WORK STAFF				
Project: M	DNKOE ECTRON	IIC5	WAS#:	617. p:	2.	HRP P	HRP Personnel:  RAK (5CE)  Weather:  80°F, PHyCly, 20-30mph W.				
Location:	والنب		Well ID.:	MW.	- 4	Weathe	F. P	rthicle	. 20-30	ndh W.	
WLD/I -	Probe		9-/3-//				emen	t Ref:		7	
Stick Up Dov	m)ft): つ. Z	7-,	Gauge Time	5745	·		amete	Z'(In): //	,		
Purge Date:	9,12	-1/			Purge Time	· ,		?^			
Purge Metho	9-13 d: m		7,4	Field Technician: RAK							
101	w Flow						KA				
1) Well Depth	15	1.75	4) Well Volu	0.	16	_		of Top of PV	- A - /		
2) Depth to V		1.74	5) Well Volume (gal) (3*4): /. 6				Гуре:	<sup>O</sup> erista	ltic		
3) Liquid Dep	th (1-2) (ft):	.01	6) Five Well Volumes (gal) (5*5):				Pump Type: Peristaltic Pump Designation: Accumel 150				
			,	Water Quality	y Paramet	ers					
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	rempe	Turbidity (ntu)					
1530	4.74 5.03	0.2	0.2	6.97	-//	191	53	2490 2440	0.83	42 88	
15.50	5.17	4	10	6.87	-17	207	8	Z340	0.47	74	
1600	4.04	<del>-</del> 5	11	7,04	-3+	20.1	2	2120	2.31	2,5	
1610	8.45	<del>- 2</del>	11	13/17	-50	19.5		2380	1.93	4,1	
16.30	9.02	12	11	7.15	-47	19.7	5	2410	0.78	2,0	
						1///	<del>(.,</del>	1.2.5			
							<del></del>				
!											
Total Quantity	y of Water Re	emoved (gal):		122		Samp	ling T	ime:	1630	<u> </u>	
Samplers:	/.	6 × 36	Poly	bailer		Split 9	Sampl	e With:	NA		
Sampling Dat	e:	9-	13-11			Samp	Іе Тур	e:	VOC,	Pest	
	·		1						<u>€R</u>	CRA.	
COMMENTS	AND OBSEF	RVATIONS:							, ~	, , , ,	

HRP	Associates,	inc.
Environmental/Clvl	l Engineering & Hydrog	reology



Environmental/	Civil Engineering	& Hydrogeology	PURGE FORM				a do . New York of a fair			
ELL	ONROE ECTRONI	t.C.5'	WAS#: New	7617.p2				K (5CE	=)	
Location:	ville, 1	UY	Well ID.:	W-5		Weather: FOF, Cloudy, Windy 30-20mp				
	- Probe		Gauge Da	9-13-	//	TOC)				
Stick Up Dow	D(ft): 0.2	2	Gauge Tir	Well Dlameter (in): 2 //						
Purge Date:	9	'-13-11			Purge Time	;	17	00		
Purge Method	d: Low 1				Field Techni	ician: /	RAK	,		
1) Well Depth	- 1	4.45	4) Well Vo	0	·16			of Top of PV	0,2	
2) Depth to W	. ,	2.84	1,86				Type:	Peris	taltio	
3) Liquid Dep	th (1-2) (ft):	11.61	6) Five Well Volumes (gal) (5*5):				Pump Designation: 150			
				Water Quality	y Paramete	ers				
Time (hra)	ft bloc)	Volume (lilers)	Rate (Lpm)	pH (pH units)	ORP (mV)	(0	Bratur C)	Gonductivit: (uS/cm)	DO (ug/L) 2,35	Turbidily (ntu)
1710	3.49	3	0.2	6,53	-54 -61	18.	56 44	4600	1.7	72
1730	3.61		11	6.57	-69 -80		99 90	2800 2800	0.55	3 <u>5</u> [2
1750	3.95	70	11	6.60	-97 -107	17.	<u>୫୮</u> ୪3	2690 2720	1.18	9.5
						' ' '				
Total Quantity	y of Water Re	emoved (gal):		102	-	Sam	pling T	lme:	180	0
Samplers:	1.6	5×36	Poly	bailer		Split	Sampl	e With:	NA	
Sampling Dat	le:	9-	/3-	1/		Sam	Sample Type: Vo			RCRA E.
	<del></del>	<del></del>	T		.1		0.1	<b>4</b> ()		t
COMMENTS	AND OBSEF	RVATIONS:		(3 to s	sheen	ON	ρυι	ge wa	<del>(e</del> )	



Environmental/Civil Engineering &	Hydrogeology	PURGE FORM				POHK STAFF					
Project: Monroe ELECTRON.		was#: ncw 9	617.p	2	HRP P	ersonn <i>Q</i> 4 k	eli (SCE	)			
Location:	NY	Well ID.:	1W-C		Weather: 75, Cloudy, Jomph W.,						
Lyndonvile, Sounding Method: WLI / I-Probe		Gauge Date	9-13	-11	Measurement Ref:						
Stick Up Down (ft):	2	Gauge Time	auge Time: 0830 Well Diameter (In): 21/								
Purge Date: 0 12	· . 1/			Purge Time:		G 2					
Purge Method:	······································		Field Technician:								
Low Fla	rw					74K					
1) Well Depth (ft):	14.77	4) Well Volu	me (ft): O.	16	Depthyl	Height	of Top of PV	0.2			
2) Depth to Water (ft):	3.68	5) Well Volu	me (gal) (3*4)	1.76	Pump 7	Гуре:	Perist	altic			
3) Liquid Depth (1-2) (ft): /	1.09	6) Five Well	Volumes (gal)	8,8	5): Pump Designation: /						
	Water Quality Parameters										
Time DTW (ft bloc)	Volume (Ilters)	Rate (Lpm)	pH (pH units)	ORP (mV)	rempa		Gonductivit: (uS/cm)	DO (ug/L)	Turbidily (ntu)		
1830 3.68 1840 4.98	0·2 2	0.2	7.22	-96 -61	16.	56 35	3730 3770	3.46	7900		
1850 5.85 1900 7.28	4	11	6.92	-54 -63	18.	30	3880	1.94	367		
1910 9.13	8	ii	6.96	- 74	13.8	7 <u>5</u>	36,20	7./5	16		
				<u> </u>							
Total Quantity of Water Re	moved (gal):		8	-	Samp	ling Ti	me:	1915	>		
Samplers: /.	6 × 36	Poly	Baile	r	Split 8	Sample	э With:	NA	*		
Sampling Date:	9-	13-11			Samp	Іе Тур	ė:	8260B	, Pest		
COMMENTS AND OBSER	VATIONS:	Wel	well very turbid at first								

HRP Associates, Inc.

#### **GROUNDWATER SAMPLING**



Environmental/Clvli Engineering & Hydrogeology	PURGE F			REAL PORK STAFE.						
Project: MONROE ELECTRONICS	was #: new 9617. p2 Well ID.:	<u>'</u>	HRP Personn	el: (5C.	E)					
Location: Lyndowille, NY	Well ID.: MW-3	B	Weather: 60°F, Clear, Calm							
Sounding Method: WLD / I - 1 10 be	Gauge Date: 9-13-									
Stick UnDown (it): 0.15	Gauge Time: 0745		Well Diamete	r (in): 4ca	using Z.	5 open				
Purge Date:		Purge Time:			<del></del>	nole				
9-14-11		0830								
Purge Method: Low Flow (ca	icelled)	Field Technician: PAK								
1) Well Depth (ft): 241-20	4) Well Volume (ft): 0.26 G	-46		of Top of PV	0.13					
2) Depth to Water (ft): 9,99	5) Well Volume (gal) (3*4)	3.6			rsible	-				
3) Liquid Depth (1-2) (ft): 3 1, 9 + 4 - 2 +	6) Five Well Volumes (gal	) (5*5); - <del>/</del> 8	Pump Design	ation: Wha	e 921					
	Water Qualit	y Parameter	s							
Time DTW Volume (hrs) (ft bloc) (files)	Rate pH (pH units)	ORP (mV)	remperatur (oC)	Gonductivit: (uS/cm)	DO (ug/L)	Turbidity (ntu)				
0915 12.09 0.2	0.2 8.48	-1/3	13.53	3270	2.49	7800				
0925 /2:29 2	10 9.40	-233	13.08	<i>3320</i> 7300	3,26	237				
6945 17.52 72	1,0 10,76	-3/	13.08	3410	3.58	342				
1000 19.45 37	1.0 10.27	-76	12.99	3500	0.91	377				
1030 27,95	40 936	-214	13.00	7130	0.43	7800				
HOO 32.21 45991	5.0 8.73	-267	12.64	7130	0,73	1000				
1115 12:21 73977	6.71	-51	13.21	8960	3.77	7800				
Total Quantity of Water Removed (gal):	45ga		Sampling Ti	me:	/1/5	-				
Samplers: 1,6 × 36	Poly Baile	r	Split Sample	e With:	W	7				
			<u></u>							
Sampling Date: 9	-14-11	W	Sample Typ		VOC					
		1/251/	A. 1.44 - A	+ 1 1	· · · · · · · · · · · · · · · · · · ·					
COMMENTS AND OBSERVATIONS:	comments and observations: O.z lpm too slow, pump at I lpm High phreadings - double check calibration = OK.									

Sample 1115

1020 Increase flow to 5 lpm - well
not clearing up at low flow,
1030 Turbidity not clearing up, call
HRP-abandon low flow sampling,
go with standard 3-5 vol. Sampling.



Environmental/	Civil Engineering 8	k Hydrogeology	PURGE FORM  WAS #: IHRP				THE TORK STATE				
Project: M. ELE	ONKOE CTRON.	たくろ	new '	7617.	P2	HRP Per	412 (	5c &	€)		
Location:	wille,	NY	Well ID.:	W-51	B	Weather 70	Pof, Sunny, Clear Calm				
Sounding Me	PROBE		Gauge Date:	9-13-	11 (	Measure TOC	Measurement Ref:				
Stick Up/Dow			I factor Time	0815		Well Dia	meter (In):	2.5	5		
Purge Date:	0		***************************************		Purge Time:		7 -				
		14-11		··-		/	<u> 230</u>	<b>)</b>			
ruige ivietilot	Purge Method: 5, bmersible Pump Field Technician: PAIL										
1) Well Depth	37	1,37	4) Well Volui	me (ft):	26	Cepth/Height of Top of PVC:					
2) Depth to W	/ater (ft): 9	1.22	5) Well Volume (gal) (3*4): 7,8 Pun				rpe: Juli	mer:	sible		
3) Liquid Dep	th (1-2) (ft):	0.15	6) Five Well Volumes (gal) (5*5): Pu				Pump Designation: Pump Designation: Pump 921				
	Water Quality Parameters										
Time (hrs)	DTW (ft btoc)	Volume (Illero)	Rate (Lpm)	pH (pH units)	ORP (mV)	remperat			DO (ug/L)	Turbidity (ntu)	
/230 /250	14.72	5		7,32	-/58	15.0	5 433		5,16	109	
1300	32.34	20		7.37	-105 -123	14.1	8 60.	6	5,33 /1/0	109	
1320	38.15 32.64	30		7.36	-70	14.0	1 50	6	2,44 3,06	1/55	
7.29.	52.64	707		7.31	- 83	14,0	0 57	2	3,00	.2 T	
				······································							
						ļ				ļ	
					<u> </u>	<u> </u>		L			
Total Quantity	of Water Re	moved (gal):		30 g	ia l	Sampli	ng Time:		134	5	
Samplers:	1.0	x 36 /	Oh, E	Bailer	-	Split Sa	ımple With:		NA		
Sampling Dat	e:	9-	-14-11	/		Sample	Type:		VIC	$\overline{\mathcal{L}}$	
COMMENTS	AND OBSER	EVATIONS:	309a	d purgetalle a	t 37 fe	ump i -109 L.	ntake <del>at</del> San	iple	T vero	ver	

Sample



TIRE Associates, Inc Environmental/Civil Engineering & Hydrogeolog	PURGE	E FORM		S. THE VOICE STATE.					
Project: MONRO E SLECTRONICS	was #: new 9617. p	0Z	HRP Person	nel: (SCE	\		1		
Location: Location: Ly	Well ID.:  WW-6  Gauge Date:	(B	11.0 2	,	Dunch l	arecze A	<b>,</b> , , ,		
Location: Lyndonville, MY Sounding Method; WLI) Probe	Gauge Date: 9-/:	3-11	Measuremer	nt Ref:/	o mpri	brecze			
Stick Up Oown (tt): 0.15	Gauge Time:	45	Well Diamet	er (in): 2.5	5		1		
		-							
Purge Date: 9-14- Purge Method: Submersik	//	Purge Time:		00	·				
Purge Method: Submersil	le pump	Field Techni	cian:	414					
1) Well Depth (ft): RC 74	4) Well Volume (ft):	0,26	Depth/Neigh	t of Top of PV	0.15	7	1		
1) Well Depth (it): 36.74 2) Depth to Water (ft): 9.62	5) Well Volume (gal) (3	3*4): 7	Pump Type:	Submer			1		
3) Liquid Depth (1-2) (ft): 27, /2		(gal) (5°5);	Pump Type: Submers, ble  Pump Designation: Whate 195						
211				naie i	<u>()</u>		_		
Time DTW Volume	Water Qua	ality Paramete	1	Conductivity	DO	Turbldity	-		
(hrs) (ft btoc) (Hers)	(Lpm) (pH unit	ts) (mV)	remperatur (oC)	Gonductivit: (uS/cm)	(ug/L) 2.59	(ntu)	1		
1420 22.94 15	9,9		13.35	2930	3.58	230	<b>-</b>		
1945 28,05 35	9,93	3 -/4/	13:43	792	1.97 2.81	5/3	_		
			,				-		
		<b>u</b>				-	-		
							7		
			1				1		
Total Quantity of Water Removed (ga	$\frac{1}{2}$	al	Sampling 1	Time:	. ,		_		
Samplers: <b>1.6</b> X 3.6	Poly Baile	er	Split Samp	le With:	107	ŧ			
Sampling Date: 9	-14-11		Sample Ty	pe:	Vo	<i>C</i>			
COMMENTS AND OBSERVATIONS	27gal- 33	furged (fe - 1	to pet rec	over a	ntale nd sam	at			

Sample

#### HRP Engineering, P.C. PAGE \_\_\_1\_\_ OF SAMPLE DATE: \_\_\_\_\_ LOW-FLOW SAMPLING LOG TOTAL # WELLS: **NYSDEC** Sample Pump: Perisaltic Client Name: Tubing Type: LDPE/Silicon Project Location: Monroe Electronics

•						5 71					
Sampler	(s):		M. Wright			Monitoring Equi	ipment: _	Horiba			
Vell I.D.		MW-5				Screen Setting	(ft btoc):	<u>15</u> to	5		
Vell Dia	meter (	inches): _	2			Tubing Intake (ft btoc):					
Total De	pth (ft b	otoc):	15			Comments:					
Depth to	Water	(ft btoc):	4.29								
Vell Cor	ndition:										
Tim	ie	Depth to	Evacuation		Wa	ater Quality Mon	itoring Para	meters			
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP		
(hou	rs)	(ft btoc)	(ml/min)		ms/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
9:0	0	4.35	~250	6.32	4.970	34.0	0.68	24.46	-123		
9:0	3		~250	6.38	5.070	20.3	0.42	23.49	-126		
9:0	6		~250	6.35	5.130	19.2	0.37	23.24	-127		
9:0	9	4.40	~250	6.31	5.120	20.3	0.22	23.21	-128		
				,		d for three cons					
Tim	ie	Depth to Water	Evacuation Rate	рН	Conductivity	Turbidity	Dissolved oxygen	Temperature	ORP		
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
9:03	9:06			0.03	-1.17	5.73	<1	1.1	1.00		
9:06	9:09			0.04	0.19	-5.73	<1	0.1	1.00		
9:03	9:09			0.07	-0.98	0.00	<1	1.2	2.00		
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabiliza (Yes/l	ation:	Υ	Y	Υ	Y	Υ	Υ	Υ	Υ		
Sample 7	Гime: —	9:10				Reviewed by: —	M.Wright				

NTU Nephelometric Turbidity Units

mg/l milligrams per liter

ft btoc

ml/min

μs/cm

feet below top of casing

microseimons per centimeter

milliliters per minute

٥С

degrees Celsius

millivolts

8/8/12

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PAGE _	1	OF	1
_	_		

SAMPLE DATE: \_\_\_\_\_ 8/8/12

A VORK	STATE . NO	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	18_				
Client Na		_	NYSDEC		_	Sample Pump:	Perisaltic		_			
Project L	ocation	n: <u>Mo</u>	nroe Electron	ics		Tubing Type:	LDPE/Silico	on				
Sampler	(s):		M. Wright			Monitoring Equipment: <u>Horiba</u>						
Well I.D.		NAVA / C				Screen Setting (ft btoc): 15.3 to 5.3						
Well Dia	meter (	inches): _	2			Tubing Intake (f	t btoc): _	7.5				
			15.3			Comments:						
Depth to	Water	(ft btoc):	5.00									
Well Condition:												
Tim	ne	Depth to	Evacuation		Wa	ater Quality Moni	itoring Para	meters				
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP			
(hou	re)	(ft btoc)	(ml/min)			(NTU)	oxygen (mg/l)	(°C)	(mv)			
13:0		5.00	~250	7.17	ms/cm 3.760	153.0	1.16	32.16	-124			
13:0		0.00	~250	6.93	3.760	163.0	0.56	31.94	-119			
13:			~250	6.86	3.750	154.0	0.61	32.27	-120			
13:		5.11	~250	6.78	3.810	144.0	0.45	31.99	-120			
13:1		0.11	~250	6.75	3.840	129.0	0.45	30.05	-120			
13:2			~250	6.73	3.870	121.0	0.41	29.88	-120			
13:2		5.15	~250	6.71	3.890	116.0	0.44	29.77	-118			
	(				ation achieve	d for three cons	ecutive mea	surements)				
Tim	ne		Evacuation	рН	Conductivity	Turbidity		Temperature	ORP			
FROM	TO	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)			
13:18	13:21	, ,	,	0.02	-0.78	6.20	8.89	0.6	0.00			
13:21	13:24			0.02	-0.52	4.13	-7.32	0.4	-2.00			
13:18	13:24			0.04	-1.29	11.21	2.27	0.9	-2.00			
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10			
Stabiliza (Yes/l		Y	Υ	Y	Y	Y	Y	Y	Υ			
Sample 7	Time: —	13:25				Reviewed by: —	M.Wright					
ft btoc ml/min us/cm		feet below top milliliters per m microseimons	ninute		Nephelometric Tur milligrams per liter	•	°C mv	degrees Celsius millivolts				

PAGE \_\_\_1\_\_ OF \_\_\_1\_

SAMPLE DATE: <u>8/8/12</u>

#### LOW-FLOW SAMPLING LOG

TOTAL # WELLS: \_\_\_ 18

NEW YORK	STATE . W	20111			200			-			
Client Na	ame:		NYSDEC			Sample Pump: Perisaltic					
Project L	ocation	n: <u>Mo</u>	nroe Electron	ics		Tubing Type:	LDPE/Silico	on			
Sampler	(s):		P. Rodman			Monitoring Equipment: Horiba					
Well I.D.		MW-6B				Screen Setting	(ft btoc):	39.5 to	30		
Well Dia	meter (	inches): _	2 inch casing,	4 inch bo	<u>orehole</u>	Tubing Intake (1	t btoc): _	35			
Total De	pth (ft b	otoc):	39.5			Comments:					
Depth to	Water	(ft btoc):	11.30								
Well Cor	ndition:										
Time Depth to Evacuation					Wa	ater Quality Mon	itoring Parai	meters			
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP		
(hou	rs)	(ft btoc)	(ml/min)		ms/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
13:0	06	11.30	~250	9.14	0.884	303.0	2.32	32.16	-247		
13:0	09		~250	9.21	0.809	194.0	2.58	29.19	-286		
13:	12		~250	9.37	0.850	63.5	0.00	20.53	-340		
13:	15	11.35	~250	9.35	0.855	67.4	0.00	20.02	-344		
13:			~250	9.34	0.855	69.5	0.00	19.85	-346		
13:21			~250	9.31	0.857	72.6	0.00	19.45	-352		
13:24		11.35	~250	9.31	0.857	71.6	0.00	19.40	-352		
Tim			of Parameter  Evacuation	rs (stabiliz pH	ation achieve Conductivity	d for three cons Turbidity		surements) Temperature	ORP		
		Water	Rate	рп	Conductivity	Turblaity	oxygen	remperature	OKF		
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
13:18	13:21			0.03	-0.23	-4.46	0.00	2.0	6.00		
13:21	13:24			0.00	0.00	1.38	0.00	0.3	0.00		
13:18	13:24			0.03	-0.23	-2.93	0.00	2.3	6.00		
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabiliz (Yes/		Υ	Υ	Υ	Y	Υ	Υ	Υ	Υ		
Sample -	Time: —	13:26				Reviewed by: —	M.Wright				
ft btoc		feet below top	of casing		Nephelometric Turk	bidity Units	°C	degrees Celsius			
ml/min μs/cm		milliliters per m microseimons		mg/l	milligrams per liter		mv	millivolts			

#### HRP Engineering, P.C.

PAGE 1 OF 1

SAMPLE DATE: 8/8/12

#### LOW-FLOW SAMPLING LOG

NEW YORK	STATE . NU	LOVVI	LOW SAIVI	ГЦПО			712 # VV 2220.			
Client Na	ame:		NYSDEC			Sample Pump: Perisaltic				
Project L	_ocatior	n: <u>Mo</u>	onroe Electron	ics		Tubing Type: <u>LDPE/Silicon</u>				
Sampler	(s):		P. Rodman			Monitoring Equipment: <u>Horiba</u>				
Well I.D.		MW-8B				Screen Setting				
Well Dia	meter (	inches): _	4			Tubing Intake (1	ft btoc): _			
Total De	pth (ft b	otoc):				Comments:				
Depth to	Water	(ft btoc):	12.40							
Well Cor	ndition:									
Tim	ne	Depth to	Evacuation		Wa	ater Quality Mon				
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hou	ırs)	(ft btoc)	(ml/min)		ms/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
14:4	42	12.45	~250	10.92	0.803	44.0	3.30	14.74	-228	
14:4	45		~250	12.67	0.768	1.3	0.00	14.71	-188	
14:4	48	12.46	~250	12.64	1.200	2.1	0.00	14.45	-190	
14:5	51		~250	12.60	1.140	2.6	0.00	14.15	-189	
14:5	54	12.48	~250	12.57	1.100	3.1	0.00	13.99	-188	
		Diale III and an	f D t-	/-t- -: :-	-ti	-  £ 4	4:			
Tim			Evacuation			d for three cons Turbidity		Temperature	ORP	
FROM	ТО	Water	Rate	<b>,</b>		<b>,</b>	oxygen			
FROIVI	10	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
14:48	14:51			0.04	5.00	<10	0.00	2.1	-1.00	
14:51	14:54			0.03	3.51	<10	0.00	1.1	-1.00	
14:48	14:54			0.07	9.09	<10	0.00	3.3	-2.00	
Recomm	ondod			-						
Stabiliz	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliza (Yes/l		Y	Y	Υ	N	Υ	Y	N	Υ	
Sample 7	Time: _	15:00				Reviewed by: —	M.Wright			
ft btoc		feet below top	of casing	NTU	Nephelometric Turk	bidity Units	°C	degrees Celsius		
ml/min μs/cm		milliliters per m microseimons		mg/l	milligrams per liter		mv	millivolts		
r, -, -, -, -, -, -, -, -, -, -, -, -,										

#### HRP ENGINEERING, P.C. PAGE \_\_\_1 OF \_\_\_ SAMPLE DATE: <u>8/7/12</u> LOW-FLOW SAMPLING LOG TOTAL # WELLS: **NYSDEC** Sample Pump: Perisaltic Client Name: Project Location: Monroe Electronics Tubing Type: <u>LDPE/Silicon</u> P. Rodman Sampler(s): Monitoring Equipment: Horiba MW-9B Screen Setting (ft btoc): \_\_\_\_\_ to \_\_\_\_ Well I.D. Well Diameter (inches): <u>4</u> Tubing Intake (ft btoc): Total Depth (ft btoc): \_\_ Comments: \_ Depth to Water (ft btoc): 9.70 Well Condition: Time Depth to Evacuation Water Quality Monitoring Parameters Water Rate Conductivity Turbidity Dissolved Temperature рН

			'		<b>,</b>	oxygen	'	
(hours)	(ft btoc)	(ml/min)		ms/cm	(NTU)	(mg/l)	(°C)	(mv)
15:33	9.70	~250	10.61	0.000	415.0	12.20	17.18	-53
15:36		~250	10.50	0.000	429.0	12.70	16.40	-54
15:39	9.70	~250	10.49	0.000	413.0	12.80	17.40	-44
15:42		~250	10.25	0.000	408.0	12.51	18.60	-43
15:45	9.70	~250	9.88	0.000	412.0	12.35	17.90	-41
	Stabilization	n of Paramete	rs (stabiliz	ation achieve	d for three cons	ecutive mea	surements)	

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	Stabilization of Parameters (stabilization achieved for three consecutive measurements)											
Tin	ne	Depth to	Evacuation	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP			
FDOM	I TO	Water	Rate				oxygen					
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)			
15:39	15:42			0.24	0.00	1.21	2.27	-6.9	-1.00			
15:42	15:45			0.37	0.00	-0.98	1.28	3.8	-2.00			
15:39	15:45			0.61	0.00	0.24	3.64	-2.8	-3.00			
Recomn Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10			
Stabiliz (Yes/		Y	Υ	Υ	Y	Υ	Υ	N	Υ			

Sample Time: -+dup and MS/MSD Reviewed by: - M.Wright ٥С degrees Celsius NTU Nephelometric Turbidity Units ft btoc feet below top of casing

mg/l milligrams per liter

millivolts

mν

μs/cm microseimons per centimeter

milliliters per minute

ml/min

# HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LOG

PAGE	11	OF	21
SAMPLE DATE:		12/20/	12

NEW YORK	STATE . HO	LOW-F	LOW SAM	PLING	LOG	101	AL# WELLS:	21	
Client Na			Monroe Electi	ronics		Sample Pump:	Perestaltic	Pump	
Project L	ocation	n:	Housel Ave. L	Lyndonville, NY		Tubing Type: Polyethylene			
Sampler(	(s):		Jamey Charte	er		Monitoring Equi	pment:	Horiba, Interfac	e Probe
Well I.D.		MW-1				Screen Setting	(ft btoc):	to	
Well Dia	meter (	inches): _	2"PVC			Tubing Intake (ft btoc): 10ft.			
Total De <sub>l</sub>	pth (ft b	otoc):	12.8			Comments:			
Depth to	Water	(ft btoc):	3.36						
Well Con	ndition:								
Tim	e	Depth to	Evacuation		Wa	ter Quality Mon	itoring Parar	neters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
6:4	0	3.33		7.05	1.980	25.8	5.23	10.66	158
6:4	3	3.71		7.09	1.980	21.9	4.46	10.64	159
6:4	6	3.86		7.11	1.970	19.7	3.71	10.59	164
6:4	9	3.90	1.8 gal	6.81	1.990	16.2	3.63	10.37	181
		Nahili-atia	a of Doromata	ra (atabili-	ation cobine	-l for three core			
Tim			Evacuation	pH	Conductivity	d for three cons		Temperature	ORP
		Water	Rate	μ	Conadonvily	randianty	oxygen	romporataro	J
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm	andad								
Stabiliza	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/N									
Sample T	Time: _	6:53				Reviewed by: —			7
ft btoc ml/min μs/cm		feet below top milliliters per m microseimons	ninute		Nephelometric Turk milligrams per liter	oidity Units	_	degrees Celsius millivolts	

## HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LO

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

- NEW YORK S	STATE , NO	LOWF	LOW SAM	PLING	LOG	101	AL# WELLS.		
Client Nar	me:		Monroe Electr	onics		Sample Pump:	Perestaltic	Pump	
Project Lo	ocation:	:	Housel Ave. L	yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(s	s):		Jamey Charte	r		Monitoring Equi	pment: _	Horiba, Interfac	e Probe
Well I.D.		MW-1B				Screen Setting	(ft btoc):	to	
Well Diam	neter (ir	nches): _	4"Steel			Tubing Intake (1	ft btoc):	35'	
Total Dep	th (ft bt	toc):	40ft.			Comments:			
Depth to \	Water (	ft btoc):	9			_			
Well Cond									
Time Depth to Evacuation					Wa	ter Quality Mon	itoring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hours	s)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
7:26		9.00		12.13	0.528	16.2	0.38	10.25	52
7:29	)	9.00		12.23	0.531	16.3	0.00	10.32	43
7:32	2	9.00		12.38	0.535	15.8	0.00	10.49	5
7:35	5	9.00		12.47	0.536	15.0	0.00	10.59	0
7:38 9.00		9.00	2 gal	12.49	0.537	15.6	0.00	10.59	-3
Time			n of Parameter  Evacuation		cation achieve Conductivity	d for three cons Turbidity		asurements) Temperature	ORP
		Water	Rate	рп	Conductivity	ruibluity	oxygen	remperature	OKF
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomme Stabiliza		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilizat (Yes/N	tion:								
Sample Ti		7:4 <u>2</u>				Reviewed by: —			
ft btoc ml/min us/cm	r	eet below top milliliters per m	=		Nephelometric Turl milligrams per liter	bidity Units	°C mv	degrees Celsius millivolts	

### HRP Engineering, P.C.

PAGE _	1	OF	21
PLE DATE:		12/20/	12

SAMPLE DATE: \_

AND YORK STATE	& LOW-F	LOW SAM	PLING	LOG	ТОТ	TAL # WELLS:	21	
Client Name:		Monroe Elect	ronics		Sample Pump:	Perestaltic	Pump	
Project Locat	ion:	Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene		ne	
Sampler(s):		Jamey Charte	er		Monitoring Equipment: Horiba, Interface F			e Probe
Well I.D.	MW-2				Screen Setting (ft btoc): to			
Well Diamete	er (inches): _	2"PVC			Tubing Intake (	ft btoc):	12'	
Total Depth (	ft btoc):	15			Comments:			
Depth to Wat	er (ft btoc):	7.7						
Well Conditio	n:							
Time Depth to Evacuatio				Wa	iter Quality Mon	itoring Para	meters	
	Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
9:32	7.65		7.09	1.000	17.6	4.66	7.77	128
9:35	9.05		6.84	0.971	14.2	2.11	10.68	120
9:38	9.61		6.79	0.959	10.1	0.00	11.00	112
9:41	10.25		6.74	0.955	6.1	0.00	11.11	98
9:44	10.32		6.72	0.953	2.3	0.00	11.14	96
9:47 10.35 2 gal		6.71	0.952	2.1	0.00	11.15	96	
Time			•		d for three cons			ORP
	Water	Evacuation Rate	рп	Conductivity	ruibidity	oxygen	Temperature	UKP
FROM TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recommended Stabilization	d +/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilization: (Yes/No)								
Sample Time:	9:51				Reviewed by: —			
ft btoc	feet below top	<del>-</del>		Nephelometric Turk	oidity Units	°C	degrees Celsius	
ml/min μs/cm	milliliters per n microseimons		mg/l	milligrams per liter		mv	millivolts	

## HRP Engineering, P.C.

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

ARW YORK STATE . NO	LOW-F	LOW SAM	PLING	LOG	тот	TAL # WELLS:	21		
Client Name:		Monroe Electr	ronics		Sample Pump:	Perestaltic	Pump		
Project Location	on:	Housel Ave. L	_yndonville	e, NY	Tubing Type: Polyethylene		1 <b>e</b>		
Sampler(s):		Jamey Charte	er :		Monitoring Equipment: Horiba, Interface			e Probe	
Well I.D.	MW-2D				Screen Setting (ft btoc): to				
Well Diameter	(inches): _	2"PVC			Tubing Intake (	ft btoc): _	20'		
Total Depth (ft	btoc):	24			Comments:				
Depth to Wate	r (ft btoc):	6.85							
Well Condition	1:								
Time Depth to Evacuation					ater Quality Mon	itoring Parar	meters		
	Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hours)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
8:12	7.00		9.20	0.888	14.9	3.51	6.51	-98	
8:15	7.00		8.41	0.901	13.3	2.61	7.46	-84	
8:18	7.00		7.91	0.910	12.2	0.00	7.80	-79	
8:21	7.00		7.89	0.913	11.9	0.00	7.88	-75	
8:24	7.00	2 gal	7.82	0.915	11.9	0.00	7.96	-73	
			<u> </u>						
			<u> </u>						
			<u> </u>						
	<u> </u>		( ) 1 !!!	<u> </u>		<u> </u>			
Time			_		d for three cons Turbidity			ORP	
	- Water	Rate	ριι	Conductivity	Turblaity	oxygen	Temperature	OIXI	
FROM TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
			<u> </u>						
			<u> </u>						
Dasammandad			<u></u>	<u> </u>		<u> </u>			
Recommended Stabilization	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabilization: (Yes/No)									
, ,	8:28				Reviewed by:				
ft btoc ml/min μs/cm	feet below top milliliters per m microseimons	=		Nephelometric Turk milligrams per liter	•	_	degrees Celsius millivolts		

# HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LO

	PAGE _	1	OF	21
AMPLE	DATE:		12/20/	12

NEW YORK	STATE NO	LOW-F	LOW SAM	PLING	LOG	101	AL # WELLS:		
Client Na			Monroe Electi	ronics	_	Sample Pump:	Perestaltic	Pump	_
Project L	ocation	n:	Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene		_	
Sampler	(s):		Jamey Charte	er		Monitoring Equi	pment: _	Horiba, Interfac	e Probe
Well I.D.		MW-2B				Screen Setting	(ft btoc):	to	
Well Dia	meter (	inches): _	4"Steel			Tubing Intake (1	ft btoc):	30'	
Total De	pth (ft b	otoc):	37			Comments:			
Depth to	Water	(ft btoc):	7.04						
Well Cor									
Tim	ne	Depth to	Evacuation		Wa	ter Quality Mon	itoring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
8:4	-8	7.20		8.00	0.595	37.4	0.00	7.23	-84
8:5	51	7.44		8.00	0.684	31.1	0.00	8.22	-82
8:5	4	7.56		8.00	0.701	26.3	0.00	8.41	-80
8:5	57	7.58		8.00	0.708	28.4	0.00	8.48	-78
9:0	0	7.60	2 gal	8.00	0.709	27.2	0.00	8.54	-76
		Diahili-atia		/-t- -: :-	ation a deino	-l f 4l			
Tim			Evacuation		Conductivity	d for three cons Turbidity		Temperature	ORP
FROM	TO	Water	Rate	μ			oxygen		<b>.</b>
FROIVI	10	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm	ondod								
Stabiliz	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/l									
Sample 7	Time:	9:04				Reviewed by: —			
ft btoc ml/min		feet below top milliliters per m	=		Nephelometric Turk milligrams per liter	pidity Units	°C mv	degrees Celsius millivolts	

### HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LOG

PAGE	1	OF	<u>21</u>
SAMPLE DATE:		12/20/	12

SAMPLE DATE:	12/20/12
TOTAL # WELLS:	21

NEW YORK	STATE								
Client Na	ıme:		Monroe Electronics			Sample Pump: Perestaltic Pump			
Project L	ocation	n:	Housel Ave. L	_yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(	(s):		Jamey Charte	er		Monitoring Equi	ipment: _	Horiba, Interfac	<u>ce Probe</u>
Well I.D.		MW-3B				Screen Setting	(ft btoc):	to	
Well Diar	meter (	(inches): _	4"Steel			Tubing Intake (	ft btoc):	35'	
Total Dep	oth (ft k	otoc):	40			Comments:			
Depth to	Water	(ft btoc):	7.6						
Well Con	dition:								
Tim	е	Depth to	Trater Quanty members grandmeters						
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
10:5	8	7.90		7.14	0.851	64.2	1.87	11.13	-121
11:0	)1	7.90		7.30	0.881	51.1	0.00	11.55	-134
11:0	)4	7.90		7.41	0.902	49.2	0.00	11.76	-144
11:0	)7	7.90		7.50	0.925	46.5	0.00	11.85	-152
11:1	0	7.90		7.54	0.934	44.7	0.00	11.91	-154
11:1	3	7.90	2 gal	7.57	0.942	43.7	0.00	11.93	-156
						1			
		2(-1-1)	( D ( .	/ . ( . 1. 11	-C1'	I for the control of			
Tim		Depth to		rs (stabiliz	Conductivity	d for three cons Turbidity		Temperature	ORP
_		Water	Rate	ρ	Conadoning	rangianty	oxygen	romporataro	
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm	ended	1					<u> </u>		
Stabiliza	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/N									
Sample T	ime: _	11:17				Reviewed by: —			
ft btoc ml/min		feet below top milliliters per m	=		Nephelometric Turi milligrams per liter	bidity Units	°C mv	degrees Celsius millivolts	

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

New YORK S	TATE NOT	LOW-FI	LOW SAMI	PLING	LOG	тот	TAL # WELLS:	21	
Client Nar			Monroe Electr	onics		Sample Pump:	Perestaltic	Pump	
Project Lo	ocation:	:	Housel Ave. L	<u>yndonville</u>	<u>ə, NY</u>	Tubing Type:	Polyethyler	<u>16</u>	
Sampler(s	s):		Jamey Charte	<del>;</del> r		Monitoring Equi	pment: _	Horiba, Interfac	<u>ce Probe</u>
Well I.D.		MW-3				Screen Setting	(ft btoc):	to	
Well Diam	neter (ir	nches): _	2"PVC			Tubing Intake (f	it btoc):	12'	
Total Dep	oth (ft bf	toc):	15			Comments:			
Depth to V	Water (	(ft btoc): _	4.55		<u> </u>	<u> </u>			
Well Cond	dition:								
Time	Э	Depth to	Evacuation		Wa	ater Quality Moni	itoring Parar	meters	
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours	s)	(ft btoc)	(ml/min)	l	us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
11:36	6	4.95		7.03	0.781	120.0	0.05	11.20	83
11:39	9	5.15		6.91	0.784	75.5	0.00	11.38	71
11:42	2	5.30		6.85	0.786	68.8	0.00	11.45	65
11:45	5	5.47		6.78	0.788	45.7	0.00	11.52	59
11:48	8	5.50		6.74	0.790	44.3	0.00	11.56	56
11:51	1	5.55	2 gal	6.72	0.792	42.5	0.00	11.59	53
	$\longrightarrow$			J					
	$\longrightarrow$			<del> </del>					
	$\longrightarrow$			<del> </del>					
	$\longrightarrow$						<b></b>		
	$\longrightarrow$			<u> </u>			<b> </b>		
	<u></u>	u alaitia ation		· · /-4abilia	- San achieve	I for the new come			
Time				`		d for three conso			ORP
		Water	Rate	, Pri	Ooridada,	i di bidity	oxygen	Tomporatare	J
FROM	ТО	(ft btoc)	(ml/min)	<u> </u>	(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
									<u> </u>
				·			<u> </u>		<u> </u>
	$\longrightarrow$				<u> </u>		<b></b>		
Recomme	ndod I			 	<u> </u>				
Stabilizat	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilizat (Yes/No									
Sample Tir	me:	11:55				Reviewed by: —			
ft btoc ml/min μs/cm	n	feet below top of milliliters per microseimons processing microseimon microseimons processing microseimons procession microseimon microseimon microseimon microseimon microsei	=		Nephelometric Turk milligrams per liter	•	_	degrees Celsius millivolts	

## HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LO

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12
OAMI LE DATE.		12/20/	14

New YORK	STATE NO	LOW-F	LOW SAM	PLING	LOG	тот	TAL # WELLS:	21	
			Monroe Electronics			Sample Pump:	Sample Pump: Perestaltic Pump		
Project L	ocation	n:	Housel Ave. L	yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler	(s):		Jamey Charte	er		Monitoring Equ	ipment: _	Horiba, Interfac	e Probe
Well I.D.		MW-4				Screen Setting	(ft btoc):	to	
Well Dia	meter (	(inches): _	2"PVC			Tubing Intake (	ft btoc):	10'	
Total De	pth (ft b	otoc):	15			Comments: _			
Depth to	Water	(ft btoc):	2.07						
Well Cor									
Tim	ne	Depth to	Evacuation		Wa	ater Quality Mon	itoring Para	meters	
		Water	Rate	pH Conductivity				Temperature	ORP
41	,	/ft  -t>	(1/:-)			(NITLI)	oxygen	(00)	
(hou		(ft btoc)	(ml/min)	7.00	μs/cm	(NTU)	(mg/l)	(°C)	(mv)
12:2		2.38		7.09	0.889	28.7	2.32	9.99	128
12:2		4.66		7.17	0.887	13.6	1.10	9.97	129
12:3		5.02		7.20	0.884	8.9	0.00	9.95	130
12:3		5.25		7.23	0.882	6.1	0.00	9.93	133
12:3		5.30		7.26	0.880	4.6	0.00	9.92	133
12:4	40	5.33	2 gal	7.28	0.880	5.2	0.00	9.92	134
				,					
Tim						d for three cons		Temperature	ORP
		Water	Rate	рп	Conductivity	Turblaity	oxygen	remperature	OKF
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/l									
Sample 1	Time: _	12:44				Reviewed by: —			
ft btoc ml/min		feet below top milliliters per m	· ·		Nephelometric Tur milligrams per liter	•	°C mv	degrees Celsius millivolts	

PAGE _	11	OF	21
SAMPLE DATE:		12/20/1	2

New YORK	STATE NO	LOW-F	LOW SAM	PLING	LOG	101	AL#WELLS:		
Client Na	ame:		Monroe Electi	ronics		Sample Pump:	Perestaltic	Pump	
Project L	ocation	n:	Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene			
Sampler	(s):		Jamey Charte	er		Monitoring Equi	pment: _	Horiba, Interfac	e Probe
Well I.D.		MW-5				Screen Setting	(ft btoc):	to	
Well Dia	meter (	(inches): _	2"PVC			Tubing Intake (f	t btoc):	10'	
Total De	pth (ft k	otoc):	15			Comments:			
Depth to	Water	(ft btoc):	1.72						
Well Cor	ndition:	-							
Tim	ne	Depth to	Evacuation		Wa	ter Quality Moni	toring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
14:	11	1.85		7.38	2.020	259.0	0.00	10.92	-34
14:	14	2.02		6.71	2.450	61.5	0.00	10.98	-34
14:	17	2.06		6.61	2.500	20.6	0.00	11.08	-35
14:2	20	2.10		6.55	2.530	10.9	0.00	11.09	-36
14:2	23	2.13		6.51	2.540	10.1	0.00	11.12	-37
14:2	26	2.15	2 gal	6.50	2.540	8.3	0.00	11.14	-37
-		Distribution (in	( D ( .	/ . ( . 1. 11.	- C L	I for the constant			
Tim			Evacuation	rs (stabiliz pH	Conductivity	d for three cons Turbidity		Temperature	ORP
		Water	Rate	рп	Conductivity	Tarbiaity	oxygen	remperature	Orti
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliz (Yes/									
Sample 7	Time: _	14:30				Reviewed by: —			
ft btoc		feet below top	· ·		Nephelometric Turk	oidity Units	-	degrees Celsius	
ml/min		milliliters per m	ninute	mg/l	milligrams per liter		mv	millivolts	

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

A NEW YORK	STATE . NO.	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	21	
Client Name: Monroe Electronics					Sample Pump: Perestaltic Pump				
Project L	ocation	n:	Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene			
Sampler	(s):		Jamey Charte	er		Monitoring Equi	pment: _	Horiba, Interfac	e Probe
Well I.D.		MW-5B				Screen Setting	(ft btoc):	to	
Well Dia	meter (	inches): _	4"Steel			Tubing Intake (1	t btoc):	32'	
Total De	pth (ft b	otoc):	38.5			Comments:			
Depth to	Water	(ft btoc):	6.68						
Well Cor	ndition:								_
Tim	ie	Depth to	Evacuation		Wa	ter Quality Mon	toring Parar	neters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
13:3	35	6.86		7.80	0.445	65.9	3.69	11.85	-153
13:3	38	7.02		8.15	0.444	50.6	1.23	12.00	-186
13:4	41	7.15		8.27	0.443	41.8	0.00	12.12	-200
13:4	14	7.19		8.30	0.443	32.3	0.00	12.28	-213
13:4	47	7.19		8.32	0.442	30.2	0.00	12.40	-217
13:5	50	7.20	2 gal	8.35	0.442	29.1	0.00	12.47	-221
Tim				•		d for three cons			ORP
		Water	Rate	рп	Conductivity	Turbidity	oxygen	remperature	OKP
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/l									
Sample 1	 Гіте:	13:54				Reviewed by: —			
ft btoc		feet below top	of casing	NTU	Nephelometric Turl	oidity Units	°C	degrees Celsius	
ml/min		milliliters per m		mg/l	milligrams per liter			millivolts	
μs/cm		microseimons	per centimeter						

## HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LOG

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

TOTAL # WELLS: 21

Monroe Electronics Sample Pump: Perestaltic Pump

Tubing Type: Polyethylene

Sampler(s): Jamey Charter Monitoring Equipment: <u>Horiba, Interface Probe</u>

Well I.D. \_\_\_\_\_to \_\_\_\_to \_\_\_\_to

Housel Ave. Lyndonville, NY

Well Diameter (inches): <u>2"PVC</u> Tubing Intake (ft btoc): <u>10'</u>

Well	Condition:
------	------------

μs/cm

microseimons per centimeter

Client Name:

Project Location: \_\_\_

Time	Depth to	Evacuation	Water Quality Monitoring Parameters					
	Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
	((, ), )				(A ITTLE)	oxygen	(0.5)	
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	(mg/l)	(°C)	(mv)
16:04	1.90		7.75	3.760	18.5	0.00	10.65	11
16:07	2.88		7.32	3.830	15.6	0.00	10.65	11
16:10	3.81		7.09	3.880	16.0	0.00	10.66	12
16:13	3.89		7.05	3.900	16.4	0.00	10.66	12
16:16	4.00	2	7.00	3.920	15.2	0.00	10.66	13
						ı		
	Stabilization	of Daramota	rc (ctabili-	ration achieve	d for three cone	ocutivo mos	ocuromonto)	

#### Stabilization of Parameters (stabilization achieved for three consecutive measurements)

	Stabilization of Farameters (stabilization achieved for timee consecutive measurements)									
Time Depth to Evacuation pH Conductivity Turbidity Dissolved Temperature ORP								ORP		
FROM	TO	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)	
					,			( - /	(****)	
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliz (Yes/										

Sample Time: \_\_\_\_\_\_ Reviewed by: \_\_\_\_\_

ft btoc feet below top of casing NTU Nephelometric Turbidity Units °C degrees Celsius ml/min milliliters per minute mg/l milligrams per liter mv millivolts

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

· NEW YORK	STATE NO	LOW-F	LOW SAM	PLING	LOG	10	IAL# WELLS.		
Client Na	me:	1	Monroe Electr	ronics		Sample Pump: Perestaltic Pump			
Project Location: Housel Ave. Lyndonville, N			e, NY	Tubing Type: Polyethylene					
Sampler(	s):		Jamey Charte	er		Monitoring Equipment: <u>Horiba, Interface Probe</u>			
Well I.D.		MW-6B				Screen Setting (ft btoc):to			
Well Dian	neter (	inches): _	4"Steel			Tubing Intake (	ft btoc):	32	
Total Dep	oth (ft b	otoc):	38			Comments: _			
Depth to	Water	(ft btoc):	7.35						
Well Con	dition:	-							
Time	е	Depth to	Evacuation		Wa	iter Quality Mon	itoring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hour	s)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
15:2	3	7.17		7.65	1.010	21.2	0.00	10.24	-243
15:2	6	7.69		8.41	0.998	20.1	0.00	10.76	-211
15:2	9	8.12		9.47	0.996	22.5	0.00	11.31	-198
15:3	2	8.49		10.36	0.994	20.4	0.00	11.57	-188
15:3	5	8.58		10.56	0.992	19.8	0.00	11.64	-167
15:3	8	8.65		10.64	0.988	21.1	0.00	11.69	-159
15:4	.1	8.70	2.2 gal	10.69	0.988	21.1	0.00	11.76	-154
Time			n of Parameter Evacuation	`		d for three cons		asurements) Temperature	ORP
Time		Water	Rate	рп	Conductivity	Turbidity	oxygen	remperature	UKP
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomme Stabiliza		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/N									
Sample Ti	ime: _	15:45				Reviewed by: —			_
ft btoc ml/min us/cm		feet below top milliliters per m microseimons	ninute		Nephelometric Turi milligrams per liter	oidity Units	°C mv	degrees Celsius millivolts	

PAGE	1	OF	21
SAMPLE DATE:		12/20/	12

NEW YORK	STATE . HO	LOW-F	LOW SAM	PLING	LOG	101	AL# WELLS:		
Client Na	ame:		Monroe Elect	ronics		Sample Pump:	Perestaltic	Pump	
Project L	.ocatior	າ:	Housel Ave. Lyndonville, NY			Tubing Type:	Polyethyler	ne	
Sampler(	(s):		Jamey Charte	er		Monitoring Equipment: <u>Horiba, Interface Probe</u>			e Probe
Well I.D.		MW-7D				Screen Setting	(ft btoc):	to	
Well Dia	meter (	inches): _	2"PVC			Tubing Intake (1	t btoc):	20'	
Total De <sub>l</sub>	pth (ft b	otoc):	25.5			Comments:			
Depth to	Water	(ft btoc):	7.51						
Well Con	ndition:								
Tim	e	Depth to	Evacuation		Wa	ter Quality Mon	toring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
16:5	51	7.65		7.20	0.598	53.4	7.73	10.81	-36
16:5	54	7.64		7.22	0.595	42.5	4.11	11.01	-47
16:5	57	7.64		7.24	0.593	35.6	1.20	11.15	-59
17:0	00	7.63		7.26	0.591	32.6	0.00	11.20	-70
17:0	)3	7.63		7.27	0.589	32.1	0.00	11.26	-79
17:0	)6	7.62	2 gal	7.28	0.588	31.0	0.00	11.33	-88
		Ptobili-otio	a of Doromata	/atabili	ation cabiava	d for three core	a a	aramanta\	
Tim			Evacuation	pH	Conductivity	d for three cons		Temperature	ORP
		Water	Rate	ρ	Conadonvily	raibiaity	oxygen	romporatoro	0111
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm	andad								
Stabiliza	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/N									
Sample T	Time: _	17:10				Reviewed by: —			
ft btoc ml/min μs/cm		feet below top milliliters per m microseimons	· ·		Nephelometric Turk milligrams per liter	pidity Units	_	degrees Celsius millivolts	

PAGE _	11	OF	21
SAMPLE DATE:		12/20/1	2

NEW YORK STATE . NO	LOW-F	LOW SAIVI	PLING	LOG	10	TAL # WELLS.			
Client Name:	_	Monroe Elect	ronics	_	Sample Pump:	Sample Pump: Perestaltic Pump			
Project Location	on:	Housel Ave. Lyndonville, NY			Tubing Type:	Polyethyler	ne		
Sampler(s):		Jamey Charte	er		Monitoring Equ	ıipment: _	Horiba, Interfac	e Probe	
Well I.D.	MW-7B			_	Screen Setting	(ft btoc):	to	_	
Well Diameter	(inches): _	4"Steel			Tubing Intake	(ft btoc):	32'		
Total Depth (ft	t btoc):	7.76			Comments: _				
Depth to Wate	er (ft btoc):	38							
Well Condition									
Time	Depth to	Evacuation		Wa	ater Quality Mor	nitoring Para	meters		
	Water	Rate	рН	Conductivity	Turbidity	Dissolved oxygen	Temperature	ORP	
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	(mg/l)	(°C)	(mv)	
17:20	8.02		12.29	0.960	28.6	0.00	9.03	-144	
17:23	8.06		12.61		26.7	0.00	9.44	-147	
17:26	8.33		12.87	1.580	23.1	0.00	9.73	-150	
17:29	8.61		12.95	2.650	20.4	0.00	9.99	-151	
17:32	9.08		13.04	3.010	21.7	0.00	10.10	-152	
17:35	9.15		13.10	3.140	20.4	0.00	10.16	-152	
17:38	9.20	2.2 gal	13.16	3.340	20.1	0.00	10.24	-152	
	Stobilizatio	n of Doromoto	ra (atabili-	zation achieve	d for three cons	nooutive mee	ouromonto)		
Time		Evacuation	pH	Conductivity			Temperature	ORP	
	- Water	Rate	P**			oxygen			
FROM TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
Dagamanandad									
Recommended Stabilization	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabilization: (Yes/No)									
Sample Time:	17:42				Reviewed by:	<u> </u>	<u> </u>		
ft btoc ml/min us/cm	feet below top milliliters per n	=		Nephelometric Tur milligrams per liter	-	°C mv	degrees Celsius millivolts		

	<u> </u>	
SAMPLE DATE:	12/20/	12

NEW YORK	STATE AO	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	21_	
Client Na			Monroe Electi	ronics		Sample Pump: Perestaltic Pump			
Project L	ocation	n:	Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene			
Sampler	(s):		Jamey Charte	er		Monitoring Equi	pment:	Horiba, Interfac	e Probe
Well I.D.		MW-7				Screen Setting	(ft btoc):	to	
Well Diameter (inches): 2"PVC						Tubing Intake (1	ft btoc):	10'	
Total De	pth (ft b	otoc):	14			Comments:			
Depth to	Water	(ft btoc):	1.9						
Well Cor	Vell Condition:								
Tim	ie	Depth to	Evacuation		Wa	iter Quality Mon	itoring Parai	meters	
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
18:0	00	2.88		9.71	0.946	13.0	0.23	10.38	48
18:0	03	3.35		9.05	0.950	10.1	0.00	10.40	66
18:0	06	3.81		8.22	0.952	7.0	0.00	10.43	89
18:0	09	4.22		7.99	0.954	6.6	0.00	10.46	100
18:1	12	4.35		7.88	0.957	5.6	0.00	10.42	115
18:1	15	4.40	2 gal	7.83	0.960	6.9	0.00	10.44	134
Tim			of Parameter  Evacuation		cation achieve Conductivity	d for three cons Turbidity		surements) Temperature	ORP
		Water	Rate	рп	Conductivity	ruibluity	oxygen	remperature	OKF
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliza (Yes/I									
Sample 1	Γime: _	18:19				Reviewed by:			
ft btoc		feet below top	of casing	NTU	Nephelometric Turk	oidity Units	°C	degrees Celsius	
ml/min μs/cm		milliliters per m		mg/l	milligrams per liter		mv	millivolts	

ml/min

μs/cm

milliliters per minute

microseimons per centimeter

PAGE	1	OF	21
SAMPLE DATE:		12/21/	12

TOTAL # WELLS: 21

millivolts

mν

AND YORK STATE	, LOW-F	LOW SAM	PLING	LOG	101	AL# WELLS:		
Client Name:	: <u> </u>	Monroe Elect	ronics		Sample Pump:	Perestaltic	Pump	
Project Loca	tion:	Housel Ave. L	yndonvill	e, NY	Tubing Type: Polyethylene			
Sampler(s):		Jamey Charte	er		Monitoring Equi	ipment: _	Horiba, Interfac	e Probe
Well I.D.	MW-8B				Screen Setting	(ft btoc):	to	
Well Diameter (inches):4"Steel Tubing Intake (ft btoc):35'								
Total Depth (	(ft btoc):	40			Comments:			
Depth to Wa	ter (ft btoc):	8.92						
Well Condition	on:							
Time	Depth to			Wa	ater Quality Mon	itoring Paraı	meters	
	Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
10:25	8.70		10.38	0.307	161.0	5.81	10.20	110
10:28	8.70		10.40	0.300	85.1	2.31	10.45	88
10:31	8.70		10.43	0.288	69.1	0.56	10.62	64
10:34	8.70		10.47	0.284	61.0	0.00	10.66	51
10:37	8.70		10.48	0.282	55.5	0.00	10.71	38
10:40	8.70		10.49	0.280	45.5	0.00	10.74	32
10:43	8.70		10.50 0.278 42.1 0.00 10.76			10.76	28	
10:46	8.70	2.4 gal	10.50	0.276	40.1	0.00	10.79	25
			•		d for three cons			
Time	Depth to Water	Evacuation Rate	рН	Conductivity	Turbidity	Dissolved oxygen	Temperature	ORP
FROM TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
							,	
Recommende Stabilization	1 1/- () 3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilization: (Yes/No)								
Sample Time:	10:50		<u> </u>		Reviewed by: —			
ft btoc	feet below top	of casing	NTU	Nephelometric Turi	·	°C	degrees Celsius	

mg/l milligrams per liter

# HRP ENGINEERING, P.C. LOW-FLOW SAMPLING LO

PAGE _	1	OF	21
MPI E DATE:		12/21/1	2

OTAL #134/511.0

NEW YORK	STATE NOT	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	21	
Client Na			Monroe Electr	ronics	_	Sample Pump:	Perestaltic	Pump	_
Project Lo	ocation:	-	Housel Ave. L	yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(	s):		Jamey Charte	er		Monitoring Equipment: Horiba, Interface Probe			
Well I.D.		MW-9			_	Screen Setting	(ft btoc):	to	
Well Dian	neter (ir	nches): _	2"PVC			Tubing Intake (	ft btoc):	10'	
Total Dep	oth (ft bt	oc):	14			Comments:	Field Duplic	cate Taken Here	<u> </u>
Depth to	Water (	ft btoc):	1.46						
Well Con	dition:								
Time	е	Depth to	Evacuation	meters					
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hour	·c)	(ft btoc)	(ml/min)		- 1	(NTU)	oxygen (mg/l)	(°C)	(mv)
11:1		1.20	(1111/111111)	7.74	μs/cm 4.390	38.7	0.00	11.18	-24
11:1		2.22		7.49	4.550	33.5	0.00	11.14	-20
11:1		2.69		7.01	4.610	27.6	0.00	11.09	-17
11:2		2.28		6.76	4.660	26.3	0.00	11.08	-15
11:2		2.35		6.65	4.690	25.1	0.00	11.05	-15
11:2		2.40	2 gal	6.56	4.760	25.5	0.00	11.07	-15
						d for three cons			
Time	е			рН	Conductivity	Turbidity		Temperature	ORP
FROM	TO	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)
		, ,	` '		(,)	()	( 0 /	( 0)	(1114)
Recommended Stabilization +/- 0.3 100-500 +/- 0.1 +/- 3%		+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10			
Stabiliza (Yes/N									
Sample T		1:31				Reviewed by: —			,
ft btoc ml/min us/cm	fe n	eet below top nilliliters per m	<del>-</del>		Nephelometric Tur milligrams per liter	bidity Units	°C mv	degrees Celsius millivolts	

PAGE	1	OF	21
SAMPLE DATE:		12/21/	12

MEW YORK	STATE . HO	LOW-F	LOW SAM	PLING	LOG	101	AL# WELLS:		
Client Na			Monroe Electi	ronics		Sample Pump:	Perestaltic	Pump	
Project L	.ocatior	n:	Housel Ave. L	yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(	(s):		Jamey Charte	er		Monitoring Equipment: Horiba, Interface Probe			
Well I.D.		MW-9B				Screen Setting	(ft btoc):	to	
Well Dia	meter (	inches): _	4"Steel			Tubing Intake (f	ft btoc):	30'	
Total Depth (ft btoc): 35 Comments:									
Depth to	Water	(ft btoc):	6.08						
Well Con	Vell Condition:								
Tim	ie	Depth to	Evacuation		Wa	ter Quality Mon	itoring Paraı	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
12:0	06	5.80		7.39	0.865	64.2	1.75	10.97	-164
12:0	9	5.80		7.36	0.878	55.6	0.66	11.14	-140
12:1	12	5.80		7.35	0.889	45.2	0.00	11.20	-120
12:1	15	5.80		7.34	0.894	41.0	0.00	11.24	-94
12:1	18	5.80		7.33	0.898	39.8	0.00	11.27	-91
12:2	21	5.80		7.33	0.903	38.5	0.00	11.29	-84
		No telle or the	( D ( .	/-(-1-12)	-C	16			
Tim			n of Parameter  Evacuation	•	Conductivity	d for three cons Turbidity		Temperature	ORP
		Water	Rate	Pi i	Conadonvity	ransianty	oxygen	Tomporataro	Orti
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
D									
Recommended Stabilization +/- 0.3 100-500		100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliza (Yes/N									
Sample T	Γime: —	12:25				Reviewed by: —			
ft btoc ml/min μs/cm		feet below top milliliters per m microseimons	ninute		Nephelometric Turk milligrams per liter	pidity Units	°C mv	degrees Celsius millivolts	

### HRP Engineering, P.C.

PAGE _	1	OF	
SAMPLE DATE: _		12/21/	12

WW YORK S	TATE . NO	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	21_	
Client Nar			Monroe Electi	ronics		Sample Pump:	Perestaltic	Pump	
Project Lo	ocation	:	Housel Ave. L	yndonville	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(s): Jamey Charter				Monitoring Equi	pment: _	Horiba, Interfac	e Probe		
Well I.D.		MW-10B				Screen Setting	(ft btoc):	to	
Well Diameter (inches): 4"Steel Tubing Intake (ft btoc): 27'									
Total Dep	th (ft b	toc):	32			Comments:	MS/MSD T	aken	
Depth to \	Water (	(ft btoc):	4.56						
Well Cond	Well Condition:								
Time	Э	Depth to	Evacuation		Wa	ter Quality Mon	toring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hour	s)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
14:10	0	4.34		7.45	1.720	274.0	5.50	8.42	-112
14:13	3	4.36		7.43	1.580	188.0	2.11	9.77	-101
14:10	6	4.36		7.42	1.423	110.0	0.32	10.68	-92
14:19	9	4.37		7.42	1.365	68.3	0.00	10.85	-79
14:22	2	4.38		7.40	1.299	48.5	0.00	10.96	-77
14:2	5	4.38		7.40	1.275	44.1	0.00	11.07	-75
14:28	8	4.38	2.2 gal	7.39	1.260	45.5	0.00	11.11	-75
				,		d for three cons			
Time	Э	Depth to Water	Evacuation Rate	рН	Conductivity	Turbidity	Dissolved oxygen	Temperature	ORP
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
								, ,	
i									
Recomme Stabiliza	tion	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilizat (Yes/N									
Sample Ti	me:	14:32				Reviewed by: —			
ft btoc		feet below top	_		Nephelometric Turk	oidity Units	°C	degrees Celsius	
ml/min μs/cm		milliliters per m microseimons	ninute per centimeter	mg/l	milligrams per liter		mv	millivolts	

PAGE _	1	OF	21
PLE DATE:		12/21/	12

SAM

LOW-FLOW SAMPLING LOG			LOG	тот	AL # WELLS:	21		
	Client Name: Monroe Electronics				Sample Pump:	Perestaltic	Pump	
Project Location	n:	Housel Ave. L	yndonville.	e, NY	Tubing Type:	Polyethyler	ne	
Sampler(s): Jamey Charter Monitoring Equipment: Horiba, Interface F						<u>e Probe</u>		
Well I.D.	MW-10				Screen Setting	(ft btoc):	to	
Well Diameter (	(inches): _	2"PVC			Tubing Intake (1	ft btoc):	10'	
Total Depth (ft b	otoc):	14			Comments:			
Depth to Water	(ft btoc):	1.15						
Well Condition:	-							
Time	Depth to	Trate: Quality morning : anameters						
	Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
13:35	1.90		7.36	2.160	9.8	0.00	9.11	-90
13:38	2.98		7.36	2.175	7.6	0.00	9.22	-126
13:41	4.65		7.37	2.182	7.7	0.00	9.05	-155
13:44	5.23		7.37	2.186	5.9	0.00	8.94	-170
13:47	5.39		7.37	2.188	6.2	0.00	8.90	-175
13:50	5.50	2 gal	7.37	2.190	6.1	0.00	8.89	-180
					II	ı		

Stabilization of Parameters (stabilization achieved for three consecutive measurements) Time Evacuation ORP Depth to рΗ Conductivity Turbidity Dissolved Temperature Water Rate oxygen TO **FROM** (ft btoc) (ml/min) (mg/l) (ms/cm) (NTU) (°C) (mv) Recommended +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 3% +/- 10 Stabilization Stabilization: (Yes/No)

Sample Time: -Reviewed by: NTU Nephelometric Turbidity Units ٥С degrees Celsius ft btoc feet below top of casing

millivolts ml/min milliliters per minute mg/l milligrams per liter mν μs/cm microseimons per centimeter

SAMPLE DATE: 12/21/12	PAGE	1	OF	<u>21</u>
	SAMPLE DATE:		12/21/	12

NEW YORK	STATE NO	LOW-F	LOW SAM	PLING	LOG	тот	AL # WELLS:	21_			
Client Name: Monroe Elec			Monroe Electi	ronics		Sample Pump: Perestaltic Pump					
Project Location: Housel A			Housel Ave. L	yndonville	e, NY	Tubing Type: Polyethylene					
Sampler(s): Ja			Jamey Charter			Monitoring Equipment: Horiba, Interface Probe					
Well I.D. MW-10D						Screen Setting	(ft btoc):	to			
Well Dia	meter (	inches): _	2"PVC			Tubing Intake (f	t btoc):	15'			
Total De	pth (ft b	otoc):	20			Comments:					
Depth to Water (ft btoc): 4.44									_		
Well Cor	ndition:	-									
Tim	ne	Depth to	Evacuation		Wa	/ater Quality Monitoring Parameters					
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP		
(hou	rs)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
13:0		5.60	<u>, , , , , , , , , , , , , , , , , , , </u>	7.45	1.990	36.2	13.07	8.70	-15		
13:0	03	6.60		7.45	1.970	20.2	8.60	8.88	-11		
13:0	06	7.49		7.45	1.950	11.6	2.10	9.03	-7		
13:0	09	8.90		7.45	1.930	8.7	0.00	9.19	-3		
13:	12	10.05		7.45	1.870	4.0	0.00	9.30	0		
13:	15	10.26		7.45	1.850	4.1	0.00	9.41	2		
13:	18	10.35	2.2 gal	7.45	1.820	3.3	0.00	9.64	5		
						d for three cons		,			
Tim	ne	Depth to Water	Evacuation Rate	рН	Conductivity	Turbidity	Dissolved oxygen	Temperature	ORP		
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
						<u> </u>		, ,	, ,		
Recommended +/-		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabiliza (Yes/l	ation:										
Sample 1		13:22				Reviewed by:					
ft btoc		feet below top	of casing	NTU	Nephelometric Turb	urbidity Units °C degrees Celsius					
ml/min milliliters per r μs/cm microseimons		iinute per centimeter	mg/l	milligrams per liter	r mv millivolts						

PAGE \_\_\_\_\_\_ OF \_\_\_ SAMPLE DATE: <u>#/13/13</u>

A SAL YORK STA	TE.	D	_OW SAM	PLING !			AL# WELLS.		•		
Client Name:						Sample Pump: Per					
Project Loc	Project Location: Ato Marro elactiones						LDPE				
Sampler(s)	:					Monitoring Equipment: Land					
Well I.D.	Λ	W-3				Screen Setting					
Well Diame	Vell I.D						t btoc): <u>i</u>	0			
T	/64 1	1 1 -				Comments:					
Depth to W	ater	(ft btoc):	2.39								
Well Condi											
Time	1	Depth to	Evacuation		Water Quality Monitoring Parameters						
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP		
200		(# l- 1 - 1	(mg 1/m-1-)			(NITTI I)	oxygen (mg/l)	(°C)	(max)		
(hours		(ft btoc)	(ml/min)	8,02	us/cm	(NTU)	(mg/l)	(°C)	(mv)		
1400					1635	138	6.69	9,45	63		
1463				7.70	1643	102	4,61	9.01	65		
1406				1.57	.658	91,6		8,31	63		
1409				7,33	,658	58.5	82,40	8.29	61		
1412				7,24	1658	94.1	1,00	8.01	@ 37		
1415			7.19	1661	447	0	7.76	26			
1418				7,03	,666	44,3			39		
1171				7,01	, 613	39.9	0	7,87	34		
1424				1,98	1669	39.7		7,71	)4		
		Stabilization	n of Dorow -t-	re (etchili-	zation achieve	d for three cons	ecutive mor	asurements)			
Time			n of Paramete Evacuation			Turbidity		Temperature	ORP		
		Water	Rate				oxygen				
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
					27184	1000					
					05.171.740 ATT 10.00						
	- 1 - 1 - 1										
Recommended Stabilization		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabilizat	ion:			İ		Ī	T		1		
(Yes/N		147									
Sample Ti	me: _	17/	)			Reviewed by: -	2000 (4) (42 - 117) - 8130 (42 - 1		2-2-3-11 2-11 12 -		
ft btoc		feet below top milliliters per	Market State Control of the Control		J Nephelometric Tu I milligrams per liter	The contract of the contract o	°C mv	degrees Celsius millivolts			
ml/min			minute s per centimeter	ilig/	i mingrams per me						

HRP Associates, Inc.					•	PAGE OF				
I OWELOW STATE					w weather	SAMPLE DATE: 3/14/13				
LOW-FLOW SAMPLING LOG TOT								***************************************		
Client Name: NYTDEC Sample Pump: per Project Location: Lipakinulb, NY Tubing Type: Silican										
Project I	Location	n: Liya	denvilb,	NY	or another trans	Tubing Type:		lican		
Sample		MV				Monitoring Equ				
Well I.D	. Mu	V-5				Monitoring Equipment: U-22  Screen Setting (ft btoc): to				
Well Dia	ameter (	inches): _			Tubing Intake (	ft btoc): _				
Total De	epth (ft l	otoc):				Comments: _				
Depth to	Water	(ft btoc):	2.5-195=	1.55						
Well Co	ndition:	University of the second			Andrews Verlander					
Tin	ne	Depth to	Evacuation		Wa	ater Quality Mon	itoring Para	meters		
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP	
(hou	ırs)	(ft btoc)	(ml/min)		µs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
132	]			7,73	5,84	6.7	Q156	7.42	44	
133	0			8,16	5,75	10,1	δ	8,06	.42	
133				7.83	5,72	1419	0	\$,35	-42	
133				7,69	5.72	17.9	0	6,40	-43	
1334				7,51	5.51	13,3	૪	8137	-50	
134	12			7.31	5.39	10.0	0	8,35	-5-7	
134				7,11	5,23	9.9	٥	8:38	-G0	
134				6,94	15,23	7,3	6	6.41	-68	
135				6,96	5,23	7.6	6	4.43	47	
1356	-(			6,94	6.23	7.7	6	8.44	-09	
		\. I. !!! !	<u> </u>							
Tin	ne S	Depth to	Evacuation	rs (stabiliz pH	Conductivity	d for three cons	ocutive mea		ODD	
		Water	Rate	Pii	Conductivity	1 di bidity	oxygen	Temperature	ORP	
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
							a de la companya de l			
Recommended +/- 0.3		100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabilization Stabilization:					0,0	., 1070	17 1076	17 070	1/2 10	
(Yes/		17.								
Sample 7	Time: —	13/45				Reviewed by:		- Harris - Anna III		
ft btoc feet below top of casing NTU Nephelometric Turbidity Units °C degrees Celsius ml/min milliliters per minute mg/l milligrams per liter my millions										
μs/cm	5 5 7									

### LOW-FLOW SAMPLING LOG

PAGE \_\_\_\_\_\_ OF \_\_\_\_ SAMPLE DATE: 3/14//3 TOTAL # WELLS:

195-01181										
Client Name: DEC					Sample Pump: Deri					
Project Location: Lyndinilly, NY -ME						Tubing Type: 51/1001				
Sampler(s): Wonitoring Equipment:										
Well I.D Screen Setting (ft btoc):to										
Well I.D. MW - 5B Screen Setting (ft btoc):to Well Diameter (inches): Tubing Intake (ft btoc):										
Total Dep	oth (ft b	toc):				Comments: _				
Depth to	Water	(ft btoc): _	5,3	2						
Well Con	dition:									
Tim	е	Depth to	Evacuation	Water Quality Monitoring Parameters						
		Water	Rate	pН	Conductivity	Turbidity	Charles States and Children Inc.	Temperature	ORP	
(hour	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
133	57	5.35		8.37	,969	120	5.15	7.86	-56	
1400	2	5.7		7.29	,253	18/	3.02	7.29	-112	
140		5.7		9.12	e 532	45.7	e.22	7:69	-142	
140	7	2.8		8.9	,504	38	00	7.71	-87	
141	C	187	***************************************	8.86		36	0	7,57	-96	
14/	3	6.1	was union	3,34	v 515	36	0	7,53	- 87	
						W-51697				
							ļ			
		24 - 1-111 11	- f D	/-t-bili-	otion poblava	d for three cons	acutive mee	auromonto)		
Tim		Depth to	Evacuation	pH	Conductivity			Temperature	ORP	
		Water	Rate	P.,			oxygen			
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
					2.					
						1	1			
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliz (Yes/										
Sample		1	126			Reviewed by:				
21				NTI	Nephelometric Tu	BABBA (2008) (884 COMPLEX SAFE) (8 600 SAFE) (8 700 SAFE) (8 700 SAFE)				
ft btoc ml/min		feet below top of casing NTU Nephelometric 7 milliliters per minute mg/l milligrams per li				. ^				
μs/cm		microseimons	per centimeter							

PAGE \_\_\_\_\_\_ OF \_\_\_ SAMPLE DATE: \_\_\_\_\_ 3 /14 /i3

#### LOW-FLOW SAMPLING LOG

DET			wwwnu-nu-n	Sample Pump: Peri					
Project Location: Monne Electorics					Tubing Type: Tilicon				
PR				Monitoring Equipment: U-22					
MW-	100			Screen Setting (	(ft btoc):	to _			
inches): _	2			Tubing Intake (f	t btoc): _	18			
otoc):									
(ft btoc):	2,4			4					
Depth to	Evacuation		Water Quality Monitoring Parameters						
Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP		
(ft btoc)	(ml/min)		цs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
24		7.34	2.26		0	7.16	-75		
4.15		7,59	2	2,2	0	8.72	-65		
4.2		7.6	1,99	2,1	0.93	8.59	-62		
		7.59		1.1			-57		
4,5		7.57	1.99	0.9	0:65	8.35	-49		
		7,57	2:0	0.6	0.55	8.31	46		
ļ									
1		<u> </u>							
V							ORP		
Water	Rate	рп	Conductivity	Turbluity	from the second second	remperature	On		
(ft btoc)	(ml/min)	N.	(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
							£7		
						44	***		
						13/			
+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
/3	20			Reviewed by: —	***************************************	1			
feet below top	of casing	NTU	Nephelometric Tur	bidity Units	°C	degrees Celsius	. 4		
		milligrams per liter	, ,	millivolts	. 4				
	inches):	mw-10 0 inches): in	Monde   Electronic   PR	Monne   Electronic	Tubing Type:  Monitoring Equi  MW-10 0  Screen Setting ( Tubing Intake (from the series):  (ft btoc):  Depth to Water Rate  (ft btoc) (ml/min)  Nater Rate  Tubing Intake (from the series)  Mater Quality Moni  Mater Quality Moni  Mater Quality Moni  PH Conductivity Turbidity  In the series of the	Tubing Type: Simple Fleekonic Tubing Type: Simple Fleekonic Tubing Type: Simple Fleekonic Tubing Type: Monitoring Equipment: Monitoring Equipment: Screen Setting (ft btoc): Inches): Screen Setting (ft btoc): Inches): Comments: Comments: Comments: Stabilization Fleekonic Fleek	Monde   Electronic   Tubing Type:		

 AC	20	
 M	ᇽᆫ	

	O	=	

## LOW-FLOW SAMPLING LOG

SAMPLE DATE: 3/4/13 TOTAL # WELLS:

YORK S	Nr.									
Client Nar		DE	Miller of March More Not the Control of the Control			Sample Pump:	pen	(-,		
Project Lo	cation	: _Mo	noe Elec	tranics		Tubing Type:				
Sampler(s				Salar a to A Mark appears		Monitoring Equ	ipment: _	U-22		
		MW=	0			Screen Setting		to _		
Well Dian	neter (i	inches): _	2			Tubing Intake (				
Total Dep	th (ft b	otoc):	15			Comments: _	Jalfor	oder		
		(ft btoc): _	1 7			Market and the second second				
Well Con	dition:									
Time	9	Depth to	Evacuation		Wa	ter Quality Mon	itoring Parar	neters		
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hour	s)	(ft btoc)	(ml/min)		иs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
121		2:14	()	7.0	1.41	13.8	0	7.93	-60	
	003	3.0		7.0	2.1	8.8	0	6.92	-64	
120		3.1		7.14	2,31	6	0	6,54	-67	
12		3.2		7.11	2.36	615	0	6.09	-69	
12	13	3.2		7.08	2.4	6.3	0	6,01	- 70	
					That was a second					
				7		2011 - 710au 7 111 0 0 0				
						<u> </u>	1			
Time					cation achieve Conductivity	d for three cons		surements) Temperature	ORP	
Tim		Depth to Water	Evacuation Rate	pН	Conductivity	ruibluity	oxygen	Temperature	0111	
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
Recomm Stabiliza		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliza	ation:									
(Yes/I		122	00			Reviewed by: _				
Sample 7	ıme: –			K1711	Nephelometric Tu	1950 2004 - September 200	°C	degrees Celsius		
ft btoc ml/min		feet below top milliliters per r	-1500		milligrams per lite	Park Street Project Park	mv	millivolts		
μs/cm			per centimeter		- 10131					

PAGE \_\_\_\_\_ SAMPLE DATE: 3/14/13

LOW-FLOW SAMPLING LOG

and the first of the second of the second	 	and the second

Client Name:	DEC	STREET, STREET	Sample Pump
Project Location:	Monne	Electionics	Tubing Type:

Tubing Type:

TOTAL # WELLS: \_\_\_\_

Sampler(s):

Monitoring Equipment:

MW-10 B Well I.D. Well Diameter (inches): \_\_\_\_\_4"

Screen Setting (ft btoc): Tubing Intake (ft btoc):

Total Depth (ft btoc): \_

Comments: 1,59

Depth to Water (ft btoc):

Time	Tracer addity memoring raidinetore							
	Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
103840	318		7011	1,03	50.8	0	9.19	-49
1043	3,184		7.13	1.03	36.9	0	9.07	-73
1046	3.15	/	7.14	1,03	25.6	0	9,02	-56
1050	3.15		7/12	1,04	16.9	0	9.14	-56
1053	3.15		7.12	1003	14,4	0	9.07	-28
1055	3.15		7.14	1.03	12.4	0	9,0	- 57
1100	3.15		7,13	1:03	14.6	0	3.7	. 130
					272			
***************************************								
		75	( , , , ;;;		d for three cons			

ORP Time Depth to Evacuation рН Conductivity Turbidity Dissolved Temperature Water Rate oxygen TO FROM (ft btoc) (ml/min) (mg/I)(ms/cm) (NTU) (°C) (mv) Recommended +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 3% +/- 10 Stabilization Stabilization: (Yes/No)

Sample Time:	- 1	02
Sample Time:		gretter

Reviewed by: -

ft btoc

feet below top of casing

NTU Nephelometric Turbidity Units

degrees Celsius

ml/min

milliliters per minute

mg/l milligrams per liter

millivolts mv

°C

μs/cm

microseimons per centimeter

		HRP A	SSOCIAT	ES, INC	•	10.10.10.10.10.10.10.10.10.10.10.10.10.1	PAGE	OF		
16 33 16						SAMPLE DATE: 3/14/13				
	LOW-FLOW SAMPLING LOG					TOTAL # WELLS:				
Client Nan	ne:	DEL				Sample Pump:	Der			
			roe Elect	en (cs		Tubing Type:				
Sampler(s						Monitoring Equi		orm		
		NW 913			-11-20-20-20-20-20-20-20-20-20-20-20-20-20-	Screen Setting				
Well Diam	eter	(inches):	4			Tubing Intake (	27. 8			
Total Dept	th (ft l	btoc):	1			Comments: _				
Depth to V	Vater	(ft btoc): (	1-1.40-	1.60						
Well Cond										
Time Depth to Evacuation Water Quality Monitoring Parameters										
		Water	Rate	pН	Conductivity			Temperature	ORP	
(hours	s)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
1227				4.66	\$33	24/2	256	6,90	-214	
1230				9,06	432	2/2	6.20	6.54	-196	
1253				9.52	1833	93.1	0	6,36	-190	
1236				9181	,835	42,1	٥	6,23	-181	
1234				10,11	.845	32.6	0	6.08	-175	
1242				10,23	1848	35,1	0	6.09	-173	
1245				10.34	-438	221	0	6.10	-172	
120/6				10.47	,445	25.7	0	6.01	-167	
1251			Ula mesangu	1053	,647	24,8	0	5,92	-143	
1254				\$10,56	1849	2511	D	5.93	-140	
		Stabilization	of Paramete	ro (etabiliz	ration achieve	d for three cons	coutive mos	autromonto)		
Time		Depth to	Evacuation	pH	Conductivity	Turbidity	Dissolved	Temperature	ORP	
FROM	ТО	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)	
									()	
						***************************************				
Recommer Stabilizat	ion	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabilizat (Yes/No										
Sample Tir		(*)	ひらし	-	***************************************	Reviewed by: —				
ft btoc ml/min		feet below top milliliters per n			Nephelometric Tur milligrams per liter		°C mv	degrees Celsius millivolts	8	
μs/cm		microseimons	per centimeter		55% E.					

	HRPA	SSOCIATI	ES, INC	•	SA	PAGE	3/14/3/	
	LOW-F	LOW SAM	IPLING	LOG				
Client Name:	DEC				Sample Pump:	Pen		The second second
Project Locatio	n: More	& ETECTOMS	e Essere		Tubing Type:	The same and the s		
	MN				Monitoring Equi	,	J= [HOM	
Well I.D	W-9				Screen Setting			
Well Diameter	(inches): _	2			Tubing Intake (			
Total Depth (ft	btoc):				Comments:		/// / / / / / / / / / / / / / / / / /	,
Depth to Water	r (ft btoc):	2-163-	1.37		-			
Well Condition:								
Time	Depth to	Evacuation		Wa	ater Quality Mon	itoring Para	meters	
	Water	Rate	рН	Conductivity		Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		Mus/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
145			6.62	455	51.1	3.3/	7,14	-9
114			6.47	4.58	49,1	O	1.35	3
1451			645	4,59	56.3	0	7,36	2
1154			6.40	4.59	54.6	0	7.46	1
14-7			6.36	4,54	53.1	2.	7,53	1
17.60			6.35	4,59	52,2	0	7.59	
	Stabilization	n of Paramete	rs (stabiliz	ration achieve	d for three cons	ecutive mea	asurements)	
Time	Depth to	Evacuation	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
FROM TO	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)
Recommended								
Stabilization	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabilization: (Yes/No)								
Sample Time: _		400	110 - W 12 - 1		Reviewed by: -			
ft btoc ml/min μs/cm	feet below top milliliters per n microseimons			Nephelometric Turi milligrams per liter	bidity Units	°C mv	degrees Celsius millivolts	

Client Name:   DEX			HRP A	SSOCIAT	ES, INC			PAGE	OF	
Project Location:   Mil 10   Place   Place   Monitoring Equipment:   Monitoring Parameters   Monitor	LOW-FLOW SAMPLING LOG									
Tubing Type:   DPF	Client Na	ame:	DEC				Sample Pump:	Do-		
Monitoring Equipment:   Move   Monitoring   Move   Monitoring   Monitoring   Move   Monitoring   Move	Project L	ocatio	n: MNN	re Fle	1 rouce					
Well Diameter (inches):	H		A 100 To	-	139		Monitoring Fau	inment: H	ww	
Well Diameter (inches):	Well I.D.	<i>ι</i> Λ	NW-G		- Autom					
Total Depth (ft btoc):   Depth to Water Quality Monitoring Parameters   ORP oxygen (mg/l):   Conductivity   Turbidity   Dissolved (mg/l):   Conductivity   Depth to Water (mg/l):   Conductivity   Depth to Water (mg/l):   Conductivity   Depth to Water (ft btoc):   Depth to Water (f	I.	(50)								
Water   Condition:   Water   Depth to   Water   Rate     Water   Conductivity   Turbidity   Dissolved   Temperature   ORP							7/	36. 37		<del></del>
Water   Condition:   Water   Depth to   Water   Rate     Water   Conductivity   Turbidity   Dissolved   Temperature   ORP   Oxygen   (mg/l)   (°C)   (mv)     Oxygen   (mg/l)   (°C)   (mv)   (mg/l)	Depth to	Water	(ft btoc):	3-196:	2.04		_			201 American (1994)
Water   Rate   PH   Conductivity   Turbidity   Turbi	Well Cor	ndition:								
Conductivity   Turbidity   Dissolved   Temperature   ORP	Tim	ie		Evacuation		Wa	ater Quality Mon	itoring Para	meters	
Chours   (ft btoc)   (ml/min)			Water	Rate	рН					ORP
1057	(hou	re\	(ft btoc)	(ml/min)			(NITLI)		(0.0)	
100			(11 5100)	(1117)11111)	4:711					
163									Company of the state of the sta	
106										
					10	400		CONTRACTOR AND PARTY OF THE		
									7	
115	7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -				1					
1					1					
Stabilization of Parameters (stabilization achieved for three consecutive measurements)  Time Depth to Water (ft btoc) (ml/min) PH Conductivity Turbidity Oxygen (mg/l) (°C) (mv)  Recommended Stabilization +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 10% +/- 3% +/- 10  Sample Time: 125 Reviewed by:	1									
Stabilization of Parameters (stabilization achieved for three consecutive measurements)  Time Depth to Water (it btoc) Water (it btoc) (ml/min) PH Conductivity Turbidity Object (mg/l) (°C) (mv)  Recommended Stabilization +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 10% +/- 3% +/- 10  Sample Time: Name achieved for three consecutive measurements)  Turbidity Dissolved Oxygen (mg/l) (°C) (mv)  (ms/cm) (NTU) (mg/l) (°C) (mv)  Feecommended Stabilization +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 10% +/- 3% +/- 10	1121	1			100.000					
Time		1							Un III	~~\
Time										
Time				***************************************						
Recommended   100-500   100-500   1-0.1   1-0.2   100-500   1-0.1   1-0.2   100-500   1-0.1   1-0.2	T.									
FROM   TO   (ft btoc)   (ml/min)   (ms/cm)   (NTU)   (mg/l)   (°C)   (mv)					pΗ	Conductivity	Turbidity		Temperature	ORP
Recommended   +/- 0.3   100-500   +/- 0.1   +/- 3%   +/- 10%   +/- 10%   +/- 3%   +/- 10     Stabilization: (Yes/No)   Reviewed by:   Reviewed by:	FROM	TO				(ms/cm)	(NTU)	17.4774	(°C)	(my)
Stabilization         +/- 0.3         100-500         +/- 0.1         +/- 3%         +/- 10%         +/- 10%         +/- 3%         +/- 10           Stabilization: (Yes/No)         (Yes/No)         Reviewed by:						, ,			( 0)	(1114)
Stabilization         +/- 0.3         100-500         +/- 0.1         +/- 3%         +/- 10%         +/- 10%         +/- 3%         +/- 10           Stabilization: (Yes/No)         (Yes/No)         Reviewed by:										
Stabilization         +/- 0.3         100-500         +/- 0.1         +/- 3%         +/- 10%         +/- 10%         +/- 3%         +/- 10           Stabilization: (Yes/No)         (Yes/No)         Reviewed by:							24-42 (			
Stabilization         +/- 0.3         100-500         +/- 0.1         +/- 3%         +/- 10%         +/- 10%         +/- 3%         +/- 10           Stabilization: (Yes/No)         (Yes/No)         Reviewed by:										
Stabilization: (Yes/No)  Sample Time: Reviewed by:			+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Sample Time: 175 Reviewed by:	Stabiliza	ation:								
number of the second of the se			105				Reviewed by:	2011		
		015096554747	feet below top	of casing	NTU	Nephelometric Turk	5.	°c	degrees Celsius	
ml/min milliliters per minute mg/l milligrams per liter mv millivolts  µs/cm microseimons per centimeter			milliliters per m	inute						

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		SAMPLE DATE:	
TORK STATE	LOW-FLOW SAMPLING LOG	TOTAL # WELLS:	

	LOW-FLOW SAMPLING LOG TOTAL # WELLS:									
Client Na		DEC				Sample Pump: Pcr				
Project L	ocation	1: MORE	se Elicon	3/16		Tubing Type: LDPE / SILL @  Monitoring Equipment: HO'				
Sampler						Monitoring Equi	ipment: _	HOM		
Well I.D.	1146	0				Screen Setting				
Well Dia	meter (	inches): _	4			Tubing Intake (	ft btoc):			
Total De	Total Depth (ft btoc):									
Depth to	Water	(ft btoc): (	9-,27=	5.73						
Well Cor										
Tim	ne	Depth to	The Control of the Co		Wa	ter Quality Mon	itoring Para	meters		
		Water	Rate	pН	Conductivity	Turbidity	Dissolved	Temperature	ORP	
(hou	ro)	(ft btoc)	(ml/min)		,	(NTU)	oxygen	(90)	()	
100		(11 5100)	(1113/171111)	5.18	us/cm	37.9	(mg/l)	(°C)	(mv)	
100				8,40	1,15	46.3	2.90	1,22	115	
100				8,93	1,09	47.5	2.06	2.63	100	
101			3 Table 1111	9,62	1,07	43.2	151	3,41	95	
103				9,37	1.00	43,5	0;	5,12	72	
1033			9.43	1,60	45.6	0	5,77	69		
163				9.45	3999	44.3	0	5,93	67	
100				1	7111			3,17	0 /	
						-				
						N S C - 10 C S C S C S C S C S C S C S C S C S C				
						d for three cons				
Tim	ne	Depth to Water	Evacuation Rate	pН	Conductivity	Turbidity		Temperature	ORP	
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)	
					(,	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		( 0)	(1117)	
						10-10-10-10-10-10-10-10-10-10-10-10-10-1				
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliz (Yes/										
Sample	-752	109	0		L	Reviewed by: —				
ft btoc		feet below top		NTU	Nephelometric Turi	- 56 Mariana - Mariana	°C	degrees Celsius		
ml/min		milliliters per n			milligrams per liter		mv	millivolts		
μs/cm microseimons per centimeter				With the state of						

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PAGE	_ OF	
DATE:		

### LOW-FLOW SAMPLING LOG

SAMPLE DATE: \_\_\_\_\_ TOTAL # WELLS:

Very York	STATE									
Client Na		DEC				Sample Pump: fer				
Project L	ocation	1: Mour	or Electo	م) لا د		Tubing Type:				
Sampler						Monitoring Equi	ipment: _			
Well I.D.	_M(	w.4				Screen Setting				
Well Dia	Well Diameter (inches): 2					Tubing Intake (	ft btoc): _			
Total De	pth (ft b	otoc):				Comments:				
Depth to Water (ft btoc):										
Well Cor	ndition:									
Time Depth to Evacuation				Water Quality Monitoring Parameters				-		
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hou	rs)	(ft btoc)	(ml/min)		∱αs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
1459				7.3	2.76	1318	9.72	7,22	~(do	
1500				7.14	279	3.1	9,03	7,16	-68	
1503				7.14	214	303	4,24	7,03	-67	
1506				67,12		5.1	7.77	667	-32	
1509				7,09	2.09	2,6	0.72	6.44	-14	
1512				7,05	1,90	2.4	0.71	6151	~7	
1515			****	7,01	1,83	2.5	0.13	6.49	- 4	
1518				7,02	177	25	0.78	6:45	~	
1251				7,01	1,75	2.1	0.77	6,54	0	
Tim		Depth to		rs (stabiliz pH	Conductivity	d for three cons Turbidity		surements) Temperature	ORP	
		Water		Pii	Conductivity	rarbidity	oxygen	remperature	ONP	
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
					***					
Recomm Stabiliz	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliza (Yes/										
Sample *		1524				Reviewed by: —	·			
ft btoc		feet below top	of casing	NTU	Nephelometric Tur	bidity Units	°C	degrees Celsius		
ml/min		milliliters per n		mg/l	milligrams per liter		mv	millivolts		
μs/cm microselmons per centimeter										

PAGE \_\_\_\_\_ OF \_\_\_\_

SAMPLE DATE: 3/13/13

# LOW-FLOW SAMPLING LOG

TOTAL # WELLS:

- VONK						- Andrews Company of the Company of			
Client Na	ame:	MOET				Sample Pump: Der			
Project L	ocation	1: Marsoz	Plater	************		Tubing Type: LOD			
Sampler		mu	want Color Way and Alling and			Monitoring Equipment: Mann			
		W 83				Screen Setting			
Well Dia	meter (	inches): _	4	Air oz sa zome		Tubing Intake (f	t btoc): _		
Total De	pth (ft b	otoc):				Comments:			
Depth to Water (ft btoc): 0,46									
Well Cor									
Tim	ie	Depth to	Evacuation		Wa	ter Quality Moni	toring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hou	rs)	(ft btoc)	(ml/min)		µs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
1545				7.54	0.412	621	C.58	(240	115
1748			**************************************	7-29-65		72.9	0.41	7,79	21
1551				8171	0,015	61,9	0	7,42	15
1554	١			4,88	0,675	57,4	0	7,77	6
155)				8,91	0,015	5R.6	0	1.72	7
1600				8,95	0.015	58:1	0	7.69	7
						d for three cons			
Tim	ne	Water	Evacuation Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
FROM	TO	(ft btoc)			(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
									The state of the s
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliz (Yes/									
Sample '		1605		·	J	Reviewed by: —		<del>'</del>	
ft btoc		feet below top	of casing	NTU	Nephelometric Tur	Secretary Control	°C	degrees Celsius	
ml/min		milliliters per n	ninute		milligrams per liter		mv	millivolts	
μs/cm		microseimons	per centimeter	1545-54100-54					

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Se se
7.0

PAGE	 OF	

### SAMPLE DATE:

### LOW-FLOW SAMPLING LOG

TOTAL # WELLS:

Now YORK	STATE.									
Client Na	me:	MW				Sample Pump:				
Project L	ocation	ı:		Hatilist Programme		Tubing Type:				
Sampler(	s):					Monitoring Equi	pment: _			
Well I.D.	N					Screen Setting	(ft btoc):	to		
Well Diar	Nell Diameter (inches): Ц						t btoc): _			
Total Dep	Total Depth (ft btoc):									
Depth to	Water	(ft btoc): 6	·.0U							
Well Con	dition:									
Tim	е	Depth to			Wa	ter Quality Moni	toring Para	meters		
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
132-	1			1,20	377	41.3	1.62	900	43	
(33)				9,09	,377	20,3	0	4.5C	-96	
133				9,00	,377	21,6	0	9,50	-121	
1334				8,94	1377	22,1	0	9,48	-147	
1339				8.84	1377	21.1	0	9.74	165	
134				9,90	.316	1811	0	9.84	-[80	
(346				8.75	374	18,2	0	9,73	-110	
1344	)		****	6.71	373	16,3	0	9.50	-181	
		Stabilization	of Paramete	re (etabilia	ration achieve	d for three cons	ecutive mes	euromente)		
Tim			Evacuation		Conductivity			Temperature	ORP	
FROM	ТО	Water	A Section Committee of the Committee of	•			oxygen			
THOM	10	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
Recomm Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliz (Yes/	ation:									
Sample		139	50	<del></del>	<u> </u>	Reviewed by: —				
ft btoc		feet below top	of casing	NTU	Nephelometric Tur	rbidity Units	°C	degrees Celsius		
ml/min		milliliters per n		mg/l	milligrams per liter		mv	millivolts		
μs/cm microseimons per centimeter										

## LOW-FLOW SAMPLING LOG

PAGE \_\_\_\_\_ OF \_\_\_\_ SAMPLE DATE: 3/13/13 TOTAL # WELLS:

New YORK	STATE	_							
Client Na		DEC				Sample Pump: [Per]			
Project Lo	ocation	1: Me Mor	Aroe elec	Henry		Tubing Type: LDPE			
Sampler(	Sampler(s): $MW$						pment: _	Horsa	
Well I.D.	Well I.D. Mir 25						(ft btoc):	to	
Well Diar	neter (	inches): _	니			Tubing Intake (f	t btoc): _		
Total Depth (ft btoc): Comments:									
Depth to	Depth to Water (ft btoc): 🦳 ເປັນ								
Well Con	dition:								
Tim	е	Depth to	Evacuation		Wa	ter Quality Moni	toring Para	meters	
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hour	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
1242				837	.166	79.5	0	6.40	-19
1245				8,96	,195	70.3	0	6.31	-15
1249				9,18	,201	63.5	0	6.29	~11
125	7			9.46	,198	63.7	0	6.32	11
1250	4								
1257				9.72	.198	60,7	0	G.(8	-}
1360				9,77	,201	60.7	6	6.15	~7
1302	)			9,62	,204	60,4	0	6.15	-9
					22.14.0.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.				
		Stabilization	of Doromoto	ra (atabili-	otion achieve	d for three cons	ocutivo mas	auram anta\	
Tim		Depth to	Evacuation	pH	Conductivity	Turbidity	Dissolved		ORP
FROM	ТО	Water	Rate				oxygen	, , , , , , , , , , , , , , , , , , , ,	
FHOW	10	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)
Recomm	ended						,	/ 05/	
Stabiliza Stabiliza	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
(Yes/i							L		
Sample	Time: _	1306	<u> </u>			Reviewed by:			
ft btoc		feet below top	NO. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10		Nephelometric Tu		°C	degrees Celsius	
ml/min μs/cm		milliliters per r	minute per centimeter	mg/l	milligrams per liter		mv	millivolts	
Laron			Lat animitates						

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572/	1053	VX
)	11/	17

### LOW-FLOW SAMPLING LOG

PAGE OF SAMPLE DATE: TOTAL # WELLS:

V YORK	STATE									
Client Na						Sample Pump: [Ser]				
Project L	ocation	: MONR	or Blechlan	(7)		Tubing Type: LDFE				
Sampler(						Monitoring Equi	pment: HO	rh		
Well I.D.	W	WZD				Screen Setting	(ft btoc):	to		
Nell Diar	Vell Diameter (inches): 2					Tubing Intake (f	t btoc): _	Annual Control of the		
Total Depth (ft btoc):						Comments:	200 200			
Depth to	Water	(ft btoc):	1,50							
Well Con										
Time Depth to Evacuation				Wa	ter Quality Mon	itoring Parar	neters			
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP	
(hou	re)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
1215		(11 5100)	(111411111)	6.74	1865	70,5	0	7.10	69	
1218			W	6.75	1869	44,6	0	7,20	32	
1221				6.74	1879	11.9	0	7.24	13	
1224				6,71	1876	11.0	0	7,25	8	
122				6.71	876	10,6	0	7.23	5	
1	,			0.7		Cio		1.2		
1.00										
						***************************************				
		Stabilization	n of Paramete	rs (stabiliz	ation achieve	d for three cons	ecutive mea	surements)		
Tim	ne	Depth to		рН	Conductivity	Turbidity		Temperature	ORP	
FROM	TO	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(00)	(2014)	
		(It bloc)	(111/111111)		(1115/C111)	(1410)	(mg/i)	(°C)	(mv)	
		<u> </u>								
Recomm	nended	./.00	100 500	1 ./ 0 +	./ 00/	./ 100/	1 1/ 100/	+/- 3%	+/- 10	
Stabiliz Stabiliz		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
(Yes/										
Sample '	Time: _	127	30			Reviewed by:				
ft btoc		feet below top		NTU	Nephelometric Tur	bidity Units	°C	degrees Celsius		
ml/min		milliliters per n		mg/l	milligrams per liter		mv	millivolts		
μs/cm		microseimons	per centimeter							

PAGE \_\_\_\_\_\_ OF \_\_\_\_\_ SAMPLE DATE: 3/13/13

## LOW-FLOW SAMPLING LOG

TOTAL # WELLS:

YORK	STATE								
Client Na	ıme:	DEC				Sample Pump: Part			
Project L	ocation	: Mon ros	Electon	(S		Tubing Type: DPE			
Sampler(	(s): N	W	119.2444			Monitoring Equi	pment:	forus 9	
Well I.D.						Screen Setting	(ft btoc):	to	
Well Dia	Vell Diameter (inches):						t btoc): 1	0	
Total De	pth (ft b	otoc):	4			Comments:			
Depth to	Water	(ft btoc):	5.79			- Anna transport of the second			
	Vell Condition:								
Tim	е	Depth to	Evacuation		Wa	ter Quality Moni	toring Parar	meters	
		Water	Rate	рН	Conductivity	Turbidity		Temperature	ORP
(hou	re)	(ft btoc)	(ml/min)		a/ama	(NTU)	oxygen (mg/l)	(°C)	(mv)
1136	10)	(11 2100)	()	8.98	us/cm	128	1.37	8.54	145
1139				8,46	562	78.1	0	8,21	150
1142				8,46	1878	60.1	0	8,00	128
1145				8,09	1591	44.7	0	7.99	101
1(48				7.81	1596	33.(	Ü	7,56	87
1200				7,00		325	Ö	7,32	70
1203				7110	1595	23.0	Ü	7,23	68
1206				7,0%	1598	337	6	7,21	09
				.,.0					
	NO. 144 - 1 10 / - 11110-								
						d for three cons			
Tim		Depth to Water	Evacuation Rate	рН	Conductivity	Turbidity		Temperature	ORP
FROM	TO	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)
									(1117)
									***************************************
Recomm		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliz	ation:					Ì			
(Yes/		712	L	<u> </u>				L	
Sample	Time: _	1210			¥ŝ	Reviewed by: —	_		
ft btoc ml/min		feet below top milliliters per n			Nephelometric Tur milligrams per liter				
mi/min mililiters per minute μs/cm microseimons per centim			mgn	granio poi illei					

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PAGE	1	OF	1
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SAMPLE DATE: 3/13/13

TONK TAKE	LOW-F	LOW SAM	PLING	LOG		AL # WELLS:		
Client Name:	DEC				Sample Pump:	Per	ar survey as a second result of the second	
Project Location	: MON	ROC Elect	MICS		Tubing Type:			
Sampler(s): A	W				Monitoring Equi	pment:	YOT HOTE	4
Well I.D. $_{ ultrack}$	W-7B	,			Screen Setting	(ft btoc):	to	
Well Diameter (	inches): _	4			Tubing Intake (f	t btoc):	35	
Total Depth (ft b	otoc):4	(0		-	Comments:			
Depth to Water	(ft btoc):	9114			×			
Well Condition:								
Time	Depth to	Evacuation		Wa	ter Quality Mon	itoring Para	meters	
	Water	Rate	pН	Conductivity	Turbidity	Dissolved	Temperature	ORP
(hours)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)
1048		~250	9.70	,80)	81,4	0	9,13	-10
1051			9.81	,605	100)	0	8,96	-13
1054			10,74	1811	13.8	0	9,00	-17
165			1,475	110	177		190	17

1051	19.81	1805	108	10	18196	-12
1054	10,74	1811	13,8	0	9,00	-17
1657	10.25	,810	12.7	0	\$18	-17
1100	10 38	,610	12,6	0	2,40	-17
1(03	10,39	,810	10,9	0	8.89	-17
1106	10,44	,610	9.8	0	9.00	1-17

	5	Stabilization	of Parameter	rs (stabiliz	zation achieved	for three con	secutive mea	surements)	
Tim	ne	Depth to	Evacuation	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP
FROM	ТО	Water (ft btoc)	Rate (ml/min)		(ms/cm)	(NTU)	oxygen (mg/l)	(°C)	(mv)
Recomm		+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10
Stabiliz (Yes/	ation:								

Sample Time:	- FEETH	d
oumpie rime.	(D) 110	•

Reviewed by: -

ft btoc

feet below top of casing

ml/min μs/cm

milliliters per minute

microseimons per centimeter

NTU Nephelometric Turbidity Units

mg/l milligrams per liter

°C

degrees Celsius

millivolts

mv

OF	

# LOW-FLOW SAMPLING LOG

PAGE \_\_\_\_\_ OF \_\_\_\_ SAMPLE DATE: 3//3//3 TOTAL # WELLS:

ame:	DEC				Sample Pump:	Per				
.ocatior	n: MOPIOS	e electronics			Tubing Type:	LOPE				
(s):	$\sim$	-			Monitoring Equipment: Honha					
-M	[~W]									
meter (	(inches):	2								
pth (ft b	otoc): +	ta 12						an market and a		
Water	(ft btoc):	1.10			<u> </u>					
ndition:										
ie	Depth to	Evacuation		Wa	ater Quality Mon	itoring Para	meters			
	Water	Rate	рН	Conductivity	Turbidity			ORP		
rs)	(ft btoc)	(ml/min)		us/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
1			6.87	1.771	9,6		8,80	09		
'			(,43	.777		0		110		
>			6,83	.778	614	0		1000		
)			6,83	776	619	Ò		100		
					Salationic Wiles and Street			7. Panares 1911		
		VIIIVIA								
								Lews _ Company Life (NO.		
								1000		
ie			pН	Conductivity	Turbidity		Temperature	ORP		
TO				(ms/cm)	(NTU)	1 10 10 10 10 10	(°C)	(mv)		
							( 0)	(1117)		
		***************************************								
							,			
ended ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
ation:										
	1025				Distribution Const.			-		
i iiiie:					150 	Service Servic				
					-acreto-reliend					
				G FT. MOI	III					
	meter ( pth (ft l Water ndition: re  TO  ended ation	stabilization  Stabilization  (e)  Stabilization  (ft btoc)  Stabilization  (ft btoc)  Stabilization  (ft btoc)  Stabilization  (ft btoc)  Fime:  Get below top milliliters per milliliters pe	Stabilization of Paramete    Depth to   Water   Rate	Stabilization of Parameters (stabilization Water (ft btoc) (ml/min)  Stabilization of Parameters (stabilization (ft btoc) (ml/min)  Stabilization of Parameters (stabilization (ft btoc) (ml/min)  Stabilization of Parameters (stabilization (ft btoc) (ml/min)  Water Rate (ft btoc) (ml/min)  Stabilization of Parameters (stabilization (ft btoc) (ml/min)  Fine: 1655	Stabilization of Parameters (stabilization achievement (ft btoc) (ml/min)  Stabilization of Parameters (stabilization achievement (ft btoc) (ml/min)  Stabilization of Parameters (stabilization achievement (ft btoc) (ml/min) (ms/cm)  Stabilization of Parameters (stabilization achievement (ft btoc) (ml/min) (ms/cm)	Tubing Type:    Monitoring Equ	Cocation:   Morror Cocation:	Tubing Type: LPT  Monitoring Equipment: HONG  Monitoring Intake (fit btoc): 7  Comments:  Water (fit btoc): 1  Ophth to be a comment in the co		

### LOW-FLOW SAMPLING LOG

PAGE _	OF
SAMPLE DATE: _	3/13/13
TOTAL # WELLS: _	

Very YORK	STATE.										
Client Name: DrC						Sample Pump:					
Project L	ocation	1: NONLO	e electry	4	•	Tubing Type:					
Sampler(			No. of the last term of	Monitoring Equipment:							
Well I.D.		MW-7	D			Screen Setting	(ft btoc):	to			
Well Dia	meter (	inches): _	2	7000 B - 100 -		Tubing Intake (f	t btoc):	22_			
Total De	pth (ft b	otoc):	.1			Comments: _					
Depth to	Water	(ft btoc): _	6.30								
Well Cor											
Tim	е	Depth to Water	Evacuation		Wa	ter Quality Mon	itoring Parar	meters			
		water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP		
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)		
1000				7.54	,651	25.5	3,07	10,54	45		
1003				7.44	16415	20,9	1.20	10,77	-15		
1006				7,19	,665	114	0	10:05	-33		
1009				7.10	.676	911	6	10,96	-34		
1012				7,05	1676	4,6	6	10.94	-34		
1015				7.03	(676	<del>ક</del> ા	0	10.92	-34		
<del></del>											
		Ptobilization	of Davison sta	 		d for three come					
Tim		Depth to		pH	Conductivity	d for three cons Turbidity		Temperature	ORP		
		Water	Rate	ļ	Comacanny	· u.u.u.y	oxygen	, omporator	0		
FROM	ТО	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)		
Recomm	andad										
Stabiliz	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10		
Stabiliz (Yes/											
Sample	Time: _	10	020		SCALL PROVIDE	Reviewed by: —					
ft btoc		feet below top	of casing	NTU	Nephelometric Turk	bidity Units	°C	degrees Celsius			
ml/min us/cm		milliliters per r	ninute per centimeter	mg/l	milligrams per liter		mv	millivolts			

μs/cm

microseimons per centimeter

### HRP ENGINEERING, P.C.

PAGE OF \_\_\_\_

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TOTAL # WELLS: LOW-FLOW SAMPLING LOG DPI Client Name: Sample Pump: Dor Project Location: Morroe elevolis Tubing Type: Horiba Sampler(s): Monitoring Equipment: Well I.D. MW-Screen Setting (ft btoc): \_to \_\_\_\_ Well Diameter (inches): Tubing Intake (ft btoc): 132 Total Depth (ft btoc): Comments: \_\_\_\_\_ Depth to Water (ft btoc): Well Condition: Time Depth to Evacuation Water Quality Monitoring Parameters Water Rate рН Conductivity Turbidity Dissolved Temperature ORP oxygen (hours) (ft btoc) (ml/min) (NTU) (mg/l)(°C) цs/cm (mv) 906 43,7 9.49 629 10.72 7,59 141 909 928 7,38 .638 34,9 10,03 912 ,643 9,10 31.4 993 7.29 219 115 8.74 74.1 4.56 7,15 12 634 8,47 9.07 7.25 277 (034 8,44 9.00 7.25 45,412 1634 7,25 9,14 92 Stabilization of Parameters (stabilization achieved for three consecutive measurements) Time Depth to Evacuation Conductivity Hq Turbidity Dissolved | Temperature ORP Water Rate oxygen **FROM** TO (ft btoc) (ml/min) (ms/cm) (NTU) (mg/l)(°C) (mv) Recommended +/- 0.3 100-500 +/- 0.1 +/- 3% +/- 10% +/- 10% +/- 3% +/- 10 Stabilization Stabilization: (Yes/No) 930 + DUDILIAGE Sample Time: . Reviewed by: \_\_\_\_\_ ft btoc feet below top of casing NTU Nephelometric Turbidity Units °C degrees Celsius ml/min milliliters per minute mg/l milligrams per liter millivolts mv

-	F		
 (	7		
	:		1

### LOW-FLOW SAMPLING LOG

TOTAL # WELLS: \_\_\_\_

NEW YORK	STATE						W24			
Client Na		DEC				Sample Pump:				
Project Location: MOTICE EIRCHENCS					·. >	Tubing Type: 2DP2				
Sampler(s): MW						Monitoring Equipment: Horisc				
Well I.D.		NWIB	)			Screen Setting				
Well Dia	meter (	inches): _	4			Tubing Intake (f	t btoc): _^	J 30		
Total Depth (ft btoc): \( \lambda_{15} \) Comments: \( \lambda_{15} \)										
Depth to	Water	(ft btoc):								
Well Cor	ndition:									
Tim	ie	Depth to	Evacuation		Wa	ter Quality Moni	toring Para	meters		
		Water	Rate	рН	Conductivity	Turbidity	Dissolved	Temperature	ORP	
(hou	rs)	(ft btoc)	(ml/min)		μs/cm	(NTU)	oxygen (mg/l)	(°C)	(mv)	
812				7.52	1528	21	7,21	845	26	
815				8,55	515	26	1,34	8,64	24	
818				8.91	1515	21	0.58	8,94	15	
821				9,61	1513	23	0.4	9,23	1	
424		Contract 25 AV at this		9,64	.513	21	0.10	9.28		
82-	]			9.72	,510	20	0	9,28	j	
430	)			9.95	515	17	0	9.30	-5	
630	~			10,22	,514	15	0	9,46	~11	
847				16.26	,514	15	0	9,47	-13	
44	5			10,27	,514	14	0	9.47	-13	
		Stabilization	f D	/		d f 41				
Tim			Evacuation	rs (stabiliz	Conductivity	d for three cons		Temperature	ORP	
	ТО	Water	Rate	F			oxygen	, omportuna	0,	
FROM	10	(ft btoc)	(ml/min)		(ms/cm)	(NTU)	(mg/l)	(°C)	(mv)	
			***************************************							
Recomm	nended				779 75 W		N. 2 - 22 - 22 - 22 - 22 - 22 - 22 - 22			
Stabiliz	ation	+/- 0.3	100-500	+/- 0.1	+/- 3%	+/- 10%	+/- 10%	+/- 3%	+/- 10	
Stabiliz (Yes/										
Sample 1	Time: _	950	+M5/	M50_		Reviewed by:			The control of the co	
ft btoc		feet below top	of casing	NTU	Nephelometric Tur	bidity Units	°C	degrees Celsius		
ml/min		milliliters per m		mg/l	milligrams per liter	•	mv	millivolts		
μs/cm		microseimons	per centimeter						THE RESERVED	

SAMPLE DATE:  $\frac{C}{7}$ 

TEN PORK STATE	LOW-F	LOW SAM	IPLING LOC	G		TOTAL # WELLS	:	
Client Name:		NYSDEC	5		Sample Pu	ımp:	Peristaltic	
Project Location	on:	100 Housel A	Ave, Lyndonville	, NY	SEE M. C.	oe:		000000
Sampler(s):						Equipment:		
Well I.D.	M	N~10D				tting (ft btoc):		
Well Diameter	(inches): _	Z''	Calle To the Control of the Control			ake (ft btoc):		
Total Depth (ft								
Depth to Wate	er (ft btoc):	3,65					y	10000
Well Condition	1:				-			
Time	Depth to	Evacuation		Wa	ter Quality M	lonitoring Param	neters	
	Water	Rate	Temperature	рН	ORP	Conductivity		Dissolved
(hours)	(ft btoc)	(ml/min)	(oC)		(m)()			oxygen
12.04	4,8	[ (1111/111111)		7.22	(mv)	(ms/cm)	(NTU)	(mg/l)
1207	710		11.12		-164.5	2.418	22.4	5.67
1210			10.87	7.13	-160.5	2,451	21.6	2.23
1213.	5.7		10.83	7.09	-157.8	2.47/	18	5,48
1216	5,8		10,95	7.07	-152	2,466	23	5.44
1210	2,0		10,97	7.06	-150,6	2.964	2	5.40
					-			
	-							
	Stabilizati	on of Paramet	<u>l</u> ters (stabilization	n achiever	for three co	accoutive moss		<u> </u>
Time	Depth to	Evacuation	Temperature	pH	ORP	Conductivity	Turbidity	Dissolved
	Water	Rate	•	150.00	J	Conducting	raibiaity	oxygen
FROM TO	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
						and the second second	and and	
D								
Recommended Stabilization	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)								
Sample Time: -	122.0	)			Reviewed by:			
ft btoc ml/min us/cm	feet below top of milliliters per mi	ninute		Nephelometric milligrams per	Turbidity Units	°C	degrees Celsius millivolts	

# TO SEAN TORK STATE

### HRP ENGINEERING, P.C.

PAGE \_\_\_\_\_\_OF, \_\_\_\_\_ SAMPLE DATE: \_\_\_\_\_\_\_\_/7//3

o WEN YORK		LOW-FLOW SAMPLING LOG					TOTAL # WELLS:			
Client Na	me:		NYSDEC			Sample Pu	mp:	Peristaltic		
Project L	ocation:	1	00 Housel A	ve, Lyndonville	e, NY	Tubing Typ	e:	LDPE/Silicon		
	s):		Wright/ P. R	odman		Monitoring	Equipment:	YSI		
Well I.D.	/	NW-	-10			Screen Set	ting (ft btoc):	to		
Well Diar	meter (inche	s):	2"			Tubing Inta	ke (ft btoc):			
Total Dep	oth (ft btoc):		14/							
Depth to	Water (ft bto	oc):	19/ 23							
Well Con	dition:					***				
Time		(0 - c - c - c - c - c - c - c - c - c -	Evacuation		Wa	ter Quality M	onitoring Paran	neters		
	Wa	iter	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
(hour	rs) (tt b	toc)	(ml/min)	(oC)		(m)()	(majom)		oxygen	
///3			(111///1111)	11,49	100	(mv)	(ms/cm)	(NTU)	(mg/l)	
1118					6.98	-148.6	2.79	10,5	0.87	
1/2/	5.	<del>,</del>		12.8		-198	2.617	29.5	0.52	
1124	3.0	1		12,25	7.12	-212	2.93	3.9	0,41	
112	7 5.8	>		12.02	7.2	-218	3,01	33	0.35	
112	7.0			1/1/0	102	-222	3,03	2.2	43/	
<del></del>		-				<u> </u>		<u> </u>		
***************************************				manan meneral commen				<del> </del>		
***************************************							<u> </u>			
	Stabi	lization	of Paramete	ers (stabilizatio	n achieved	for three co	nsecutive meas	L surements)		
Time	e Dept	h to E		Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
FROM	Wa Wa	THE STATE OF THE PARTY OF THE P	Rate	( 0)					oxygen	
FROM	TO (ft bi	(00)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)	
				-		Linux a la l				
Recomme	nded									
Stabiliza	tion +/- (	0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%	
Stabilizat (Yes/N								19409213-2-1398089213-2		
Sample Ti	me:	130				Reviewed by				
ft btoc	35	ow top of c	casing	NTU	Nephelometric	5.				
ml/min	milliliter	s per minu	ite		milligrams per l		mv	millivolts		
μs/cm	microse	imons per	centimeter							

# AND TORK STATE OF

### HRP ENGINEERING, P.C.

microseimons per centimeter

PAGE	OF
SAMPLE DATE:	6/6/13
TOTAL # WELLS:	•

New YORK STE		LOW SAM	IPLING LO	G		TOTAL # WELLS	S:			
Client Nam	ne:	NYSDEC	5		Sample Pu	ımp:	Peristaltic			
Project Loc	cation:	100 Housel A	Ave, Lyndonville	e, NY		e:				
Sampler(s)		И. Wright/ Р. R		en e						
Well I.D.	WW- 8	ß			Monitoring Equipment: YSI  Screen Setting (ft btoc): to					
Well Diame	eter (inches): _	411								
Total Depth										
Depth to W	/ater (ft btoc):	7.79								
Well Condi	tion:									
Time	Depth to	and the contract of the contra		Water Quality Monitoring Parameters						
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
(hours)	(ft btoc)	(ml/min)	(0(;)		(m)/)		2556 2740000000000	oxygen		
10:10		(1111/11111)	(00)	05	(mv)	(ms/cm)	(NTU)	(mg/l)		
10:14			12.48	8.5	228.9	0	51.7	1.23		
10:1				6.7	227.6	0	34	0.47		
10:20			11.4	8,24	219.1	0	273	0.37		
10:23			10.8	8,6	-47,4	,310	69	0.24		
10:26			10.68	8.61		.316	452			
10:29				8.63	-127	.316	46.5	0,17		
10.21	7,8		10.7	8.0	-125	.317	45	0.18		
			CONTRACTOR CONTRACTOR							
	Stabilizati	on of Paramet	ers (stabilization	n achieved	for three co	neacutive meas				
Time	Depth to		Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
	Water	Rate				o o i i de carriej	larbianty	oxygen		
FROM T	O (ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)		
				THE PERSONAL PROPERTY.						
Recommend Stabilizatio	1 4/- () 3 (	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%		
Stabilization (Yes/No)	n:									
Sample Time	1032									
ft btoc	feet below top of				Reviewed by:					
ml/min	milliliters per m			Nephelometric 7 milligrams per li		°C mv	degrees Celsius millivolts			

PAGE OF SAMPLE DATE: 4/7/13

### LOW-FLOW SAMPLING LOG

TOTAL # WELLS:

TORK STATE								
Client Name:		NYSDEC	>		Sample Pu	mp:	Peristaltic	
Project Locat	ion:	100 Housel A	ve, Lyndonville	, NY	Tubing Typ	e:	LDPE/Silicon	
Sampler(s):	N	I. Wright/ P. R	odman		Monitoring	Equipment:	YSI	
Well I.D.	M	W-7D			Screen Set	tting (ft btoc):	to	
	er (inches): _				Tubing Inta	ke (ft btoc):		
Total Depth (	ft btoc):	IM			Comments		2201110	
Depth to Wat	ter (ft btoc):	NM				200		
Well Condition	on:							
Time	Depth to	Evacuation		Wat	er Quality M	onitoring Paran	neters	
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hours)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
14/4			13.57	7,23	-40	,981	10,5	0.15
1-121		Let the like to the second						
1424				_				
1427			13,35	7:27	-30	.999	9.)	057
1430			13,36	7.77	-28	1998	6.1	0.95
1433			13.35	7.25	-28	1,607	7.5	052
<del>VINOVATITATION</del>								
mwiir- mu-, u. u								
	Stabilizati	on of Paramet	l ters (stabilizatio	n achieved	for three or	nacquitive mea		1
Time	Depth to	Evacuation		pH	ORP	Conductivity	Turbidity	Dissolved
-0.55	Water	Rate			20.417		Tanadany	oxygen
FROM TO	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
Recommende	1				<u> </u>			
Stabilization +/- 0.3   100-500   +/- 3%   +/- 0				+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)								
Sample Time:	142	5			Reviewed by	<b></b>		U.PS.U
ft btoc	feet below top	of casing	NTU	Nephelometric	20-00-00 (Union 200-000)	°C	degrees Celsius	
ml/min us/cm	milliliters per n	ninute per centimeter	mg/l	milligrams per	liter	mv	millivolts	
	11110100011110115	POI POINTIGICA						

PAGE SAMPLE DATE: 6/7/13

LOW-FLOW SAMPLING LOG TOTAL # WELLS: \_\_ Client Name: NYSDEC Sample Pump: Peristaltic Project Location: 100 Housel Ave, Lyndonville, NY Tubing Type: LDPE/Silicon Sampler(s): M. Wright/ P. Rodman Monitoring Equipment: YSI MIN-11 Well I.D. Screen Setting (ft btoc): \_\_\_\_\_ to Well Diameter (inches): \_ Tubing Intake (ft btoc): Total Depth (ft btoc): Comments: Depth to Water (ft btoc): Well Condition: Time Depth to Evacuation Water Quality Monitoring Parameters Water Rate Temperature рН ORP Conductivity Turbidity Dissolved oxygen (hours) (ft btoc) (ml/min) (oC) (mv) (ms/cm) (NTU) (mg/l) 957 1000 -34 11,93 6.96 98.5 0.57 1003 6.90 0.32 1006 696 -33 1205 0,30 90,6 6,94 0,10 6.93 231 Stabilization of Parameters (stabilization achieved for three consecutive measurements) Time Depth to Evacuation Temperature ORP Conductivity pH Turbidity Dissolved Water Rate oxygen FROM TO (ft btoc) (ml/min) (oC) (mv) (ms/cm) (NTU) (mg/I)Recommended +/- 0.3 100-500 +/- 3% +/- 0.1 +/- 10 +/- 3% +/- 10% Stabilization +/- 10% Stabilization: (Yes/No) 1014

Samp	le T	ime:	-

Reviewed by:-

ft btoc ml/min

feet below top of casing milliliters per minute

NTU mg/l Nephelometric Turbidity Units milligrams per liter

°C mv

degrees Celsius millivolts

us/cm

microseimons per centimeter

PAGE \_

PAGE OF SAMPLE DATE: 6/7/13

### LOW-FLOW SAMPLING LOG

TOTAL # WELLS: \_\_\_\_\_

NEW YO	DAK STATE				7300-7-100					
Client N	lame:	20,000	NYSDE	3		Sample P	ump:	Peristaltic		
Project	Location	on:	100 Housel A	Ave, Lyndonville	e. NY	Tubing Ty	pe:	LDPE/Silicon		
Sample	er(s):	N	Л. Wright/ Р. R	Rodman		2742 975	g Equipment:			
Well I.D	) <i>P</i>	14-53				Screen Setting (ft btoc): to				
Well Dia	ameter	(inches): _	4/2		(PL) (TATE)	Tubing Intake (ft btoc): 51 Fran Balan				
						Comment				
Depth to	o Wate	er (ft btoc):	A CONTRACT OF THE PARTY OF THE			o di iliinoni.	J		40.11	
Well Co										
Tir	me	Depth to	Evacuation		Water Quality Monitoring Parameters					
	Water R		Rate	Temperature		ORP	Conductivity	Turbidity	Dissolved	
(ho	urs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)	
HIS	1121			12.81	7,56	-153	5.447	38	O SE	
11-27	1123			1201	7.56	-157	1.190	44	0.27	
1/2	11				1	10)	1000		10.0	
113	٠δ'			12180	7,62	1-173	1.116	50,4	0.17	
113	3			12,83	7,64	1-178	1,018	21,9	OILS	
11/2	à			12,10	7,64	-183	1.047	54.2	0,6	
113	φ			12.99	7.64	-150	1,047	56,8	0.11	
	1			1 11					10.4	
									1	
					Description of the second					
		Stabilization	on of Paramet	ers (stabilization			onsecutive meas	surements)		
Tin	ne	Depth to Water	Evacuation Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
FROM	ТО	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	/NITII)	oxygen (mg/l)	
						1 ()	T (moroni)	(NTU)	(mg/l)	
								Luc-		
									-	
Recomm		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	1/ 100/	
Stabilization: 17-0.3 100-500 +/-3%				7 070	., 0.1	1 10	17-370	+7- 1076	+/- 10%	
(Yes/	No)	1117								
Sample 7	Time: —	e: NY 0 Reviewed by:								
ft btoc		feet below top o				ric Turbidity Units °C degrees Celsius				
ml/min μs/cm		milliliters per mi microseimons p		mg/l	milligrams per l					



# ALL POINT STATE

### HRP ENGINEERING, P.C.

microseimons per centimeter

### OW-FLOW SAMPLING LOG

PAGE \_\_\_\_\_\_OF \_\_\_\_\_

NEW YORK		LOVV-F	LOW SAM	PLING LOC	5		TOTAL # WELLS:				
Client Na	ame:		NYSDEC	;		Sample Pu	ımp:	Peristaltic			
Project L	.ocation	:	100 Housel A	ve, Lyndonville	, NY	Tubing Typ	pe:				
Sampler	(s):	M	. Wright/ P. R	odman		Olivio do Colonia de la Calenda	Equipment:	14 300 5000000000000000000000000000000000			
Well I.D.	M	J-5					tting (ft btoc):				
						Tubing Intake (ft btoc): 13					
Total De	pth (ft b	toc):			- 1000 -	Comments:					
Depth to	Water	(ft btoc): _	1/19	The second secon							
Well Cor	ndition:										
Tim	ie	Depth to	Evacuation		Water Quality Monitoring Parameters						
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
(hou	rs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen		
104		()	(**************************************	12.52	649	1-14	5.05-3	4.9	(mg/l)		
1048				12,39	6,57	-27	5,095	0.3	0.73		
1044				2,31	6,61	-35	5,090	0	0.30		
1051			10.00	12.47	6,61	-42	5,035	0	030		
1054				12.51	659	-05	14928	0	0.0		
105	7			12,57	657	-69	841904	0	G,18		
(100)				12.63	6156	-73	4,905	O O	0.0		
						1.7.			0.0		
			7/// 1// 2// 1// 2// 2// 2// 2// 2// 2//								
							nsecutive meas	urements)			
Tim	е	Depth to Water	Evacuation Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
FROM	TO	(ft btoc)		(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)		
		,		(/		(,	(!!!!!)	(N10)	(mg/l)		
						THE NEW TONE OF THE OWNER.					
				30, 30, 000 Billion Bi			1.11.11.11.11.11.11.11.11.11.11.11.11.1				
Recomm		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%		
Stabiliza Stabiliza	ation:					1 10	., 0,0	1070	1 1070		
(Yes/N		1105									
Sample T	ime: —	1103				Reviewed by					
ft btoc ml/min		eet below top o milliliters per m			Nephelometric milligrams per		°C mv	degrees Celsius millivolts			

# Age by POINT STATE OF

### HRP ENGINEERING, P.C.

PAGE

0101.2

TOTAL # WELLS:

SAMPLE DATE: 49

OW-FLOW	SAMPLING	LOG
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TEN YORK STATE								
Client Name:	-	NYSDE		Sample Pump:	Peristaltic			
Project Location	n:	100 Housel A	Ave, Lyndonville, NY	Tubing Type:	LDPE/Silicon			
Sampler(s):	N	l. Wright/ P. R	odman	Monitoring Equipment:	YSI			
Well I.D. M	W-3B			Screen Setting (ft btoc):	to			
Nell Diameter	(inches): _	***		Tubing Intake (ft btoc):				
Γotal Depth (ft l			700 AND	Comments:				
Depth to Water	(ft btoc):	5.40						
Well Condition:						=		
Time	Depth to		V	meters				
	Water	Rate	T	T ASS TS				

Depth to Water (ft btoc)	Evacuation Rate (ml/min)	Temperature	pH	ter Quality M	onitoring Param				
			рН	ORP					
(ft btoc)	(ml/min)	(0(3)	1		Conductivity	Turbidity	Dissolve		
		(oC)		(mv)	(ms/cm)	/ (NTU)	oxygen (mg/l)		
		1218	8,47	-97	.577	2918	175		
		1219	8,53	-160	572	1 1	1C9		
miles - Significant		12113	858				0		
W		12115	8,60				0		
		12.15	8,61		C71	23.4	0		
	estant control -	12,18	8,61	-290	\$71	237	0		
		12/19	8,Gl	-291		240	0		
					Marine Marine				
tabilizatio	n of Paramet	ers (stabilizatio	n achieved	for three co	nsecutive meas	urements)			
Depth to Water	Evacuation Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)		
+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%		
1	1:30			Reviewed by:					
	Pepth to Water (ft btoc) +/- 0.3	Depth to Evacuation Water Rate (ft btoc) (ml/min)	tabilization of Parameters (stabilization Vater Rate (ml/min) (oC)  +/- 0.3 100-500 +/- 3%	1213   858   1215   860   1215   8,61   1216   8,61   1219   8,61   12					

ft btoc ml/min feet below top of casing milliliters per minute

NTU mg/l Nephelometric Turbidity Units

°C mv degrees Celsius millivolts

μs/cm microseimons per centimeter

milligrams per liter

PAGE \_\_

## LOW-FLOW SAMPLING LOG

SAMPLE DATE: 6/6/13 TOTAL # WELLS: \_\_\_\_

- NOR	TK STAT									
Client N	ame:		NYSDEC	)		Sample Pu	ımp:	Peristaltic	Peristaltic	
Project I	Locatio	on:	100 Housel A	ve, Lyndonville	. NY	Tubing Typ	oe:	LDPE/Silicon		
Sample	r(s):	M	1. Wright/ P. R	odman		Monitoring	Equipment:	YSI		
Well I.D		(inches):						to		
Well Dia	ameter	(inches): _	12			Tubing Inta	ike (ft btoc): 🔊	7	Source - Corner	
Total De	epth (ft	btoc):		144000		Comments	•			
Depth to	Wate	r (ft btoc):	2.83			-				
Well Co										
Tin	ne	Depth to	Evacuation		Wat		lonitoring Paran	neters		
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
(hou	urs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)	
842		2,03	~200	11.80	6.43	2224	1.747	175	2.19	
845	-		***	11.99	6,94	223	1,744	5.1	1.79	
				12,48					1	
418				12,98	6.91	552	1.69	0	2,92	
921				12.99	6,91	230	1,65	Q.	582	
424				13,07	6.92	220	1.68	Ö	टरडे	
								2 (0. )		
								9		
		-		-						
		Ctabilization	on of Donomor	(-1-1-111111111111-				l qu		
Tim	ne	Depth to	Evacuation	Temperature	pH	ORP	nsecutive meas	Turbidity	Dissolved	
		Water	Rate	remperature	Pii	OIN	Conductivity	Turblaity	oxygen	
FROM	ТО	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)	
Desamo	: - de d									
Recomm Stabiliz	ation	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%	
Stabiliza (Yes/l			A							
Sample 1		m.	-DUP			Reviewed by				
ft btoc		feet below top	of casing	NTU	Nephelometric		°C	degrees Celsius		
ml/min		milliliters per m			milligrams per l		mv	millivolts		
μs/cm		microseimons p	per centimeter							

μs/cm

microseimons per centimeter

### HRP ENGINEERING, P.C.

PAGE SAMPLE DATE: G/G/

TOTAL # WELLS:									
Client N	ame:		NYSDEC			Sample Pump:		Peristaltic	
Project I	Location	n:	100 Housel A	ve, Lyndonville	, NY	Tubing Type: LDPE/Silicon			
	Sampler(s): M. Wright/ P. Rodman						Equipment:	-community of the second of the	
Well I.D	MI	W-112					tting (ft btoc):		
Well Dia	ameter (	inches):	11-2				ake (ft btoc): 2		
Total De	epth (ft b	otoc):	35	1001 J. 2502* 14000-250-					
		(ft btoc):	~						
Well Co									
Tin	ne	Depth to	Evacuation		Wa	ter Quality M	lonitoring Paran	neters	
		Water	Rate	Temperature	рН	ORP	Conductivity		Dissolved
(hou	ırs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen
1202		( ) )	~ 200	11.29	9.77	184	.498	4614	(mg/l)
102-				11.23	10.14	167	1466	44,0	0,44
1037	-		N. A. C.	11.23	10.23	164	.465	46,2	
	1053			11.23	10.31	151	1461	400	0,33
1636		11,24	10,32	148	1461	48,1	6)20		
103	1039		11,26	16.34	144	54/1	418.5	0,0	
104	Ü			11126	10,34	143	1461	49,6	0,49
		100-100-2							
Augustania (									
			*****						
Tim	20						nsecutive meas		T = .
1111	ie	Water	Rate	Temperature	pН	ORP	Conductivity	Turbidity	Dissolved oxygen
FROM	ТО	(ft btoc)		(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
								100	
	227-228-75.123.2								
Recomm Stabiliz		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabiliz	ation:								
(Yes/l		1045	+MS/MSD	)		D		L	
Sample 7			, , , , , , , , , , , , , , , , , , , ,	NATURE OF THE PARTY OF THE PART	Market	Reviewed by		1	
ft btoc ml/min		feet below top o milliliters per m			Nephelometric milligrams per	Section of the sectio	°C mv	degrees Celsius millivolts	

ml/min

μs/cm

milliliters per minute

microseimons per centimeter

### HRP ENGINEERING, P.C.

PAGE	OF	
SAMPLE DATE: 4/6	113	
TOTAL # WELLS		

millivolts

mν

O ARIV YORK STATE	LOW-FLOW SAMPLING LO			G	TOTAL # WELLS:			
Client Name:		NYSDEC	)		Sample Pu	mp:	Peristaltic	
Project Location	on:	100 Housel A	ve, Lyndonville, NY		Tubing Type:		LDPE/Silicon	
Sampler(s):		1. Wright/ P. R	odman		Monitoring	Equipment:	YSI	
Well I.D. M					Screen Set	ting (ft btoc):	to	
Well Diameter	(inches): _	2			Tubing Inta	ike (ft btoc <u>): 5</u>	Par Bee	
Total Depth (ft	btoc): 👺		W045 W.A.S		Comments			
Depth to Wate	r (ft btoc): [	2.78				American and a second		
Well Condition								
Time	Depth to	Evacuation		Wat	er Quality M	onitoring Param	neters	
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hours)	(tt btoc)	(ml/mın)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
124/ 125			Moss	697	И3	1996	143	0-184
1254			11.58	6.96	3,7	982	4.9	052
1257								
1300			W189	6.18	3911	.871	2.6	6
1303			11:58	6.74	398	1864	26	0
1300			Migol	6.75	423	1869	lu1	0
				25 100 110 15 15 15 15 15 15 15 15 15 15 15 15 15				
							4)	
	<u> </u>				100			
<u> </u>						nsecutive meas		
Time	Depth to Water	Evacuation Rate	Temperature	pН	ORP	Conductivity	Turbidity	Dissolved
FROM TO	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
								[ (5)
						***************************************		
		100000000000000000000000000000000000000						
Recommended Stabilization	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)								
Sample Time: -	17	510			Reviewed by			
ft btoc	feet below top	of casing	NTU	Nephelometric		°C	degrees Celsius	

milligrams per liter

mg/l

PAGE SAMPLE DATE: 4613

OF
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1100000

New YOR	K STATE NO	LOW-F	LOW SAM	IPLING LOC	3 	TOTAL # WELLS:			
Client N	ame:	N	NYSDEC	;		Sample Pump: Peristaltic			
Project Location:100 Housel Ave			ve, Lyndonville	, NY		oe:			
			I. Wright/ P. R	odman		Monitoring	Equipment:	YSI (50	
Well I.D.		<u> 3</u>	1/2			Screen Set	tting (ft btoc):	to	
Well Dia	meter	(inches):	1/2			Tubing Inta	ike (ft btoc): 5	निया हरन	
Total De	anth (ft	htoc):		100000		Comments	•		
Depth to	Water	r (ft btoc):	4.05			***************************************			
Well Co	ndition:	:							
Tim	ne	Depth to	Evacuation		Wat	ter Quality M	onitoring Param	neters	
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hou	ırs)	(ft btoc)	(ml/mın)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
1213				11185	8.80	143	666	246	CZ4
1213	•			11.82	8.54	145	689	123	0,29
12-14				(181	8,32	174	694	127	0.26
122				11.84	8,23	150	(92)	27	0,17
124	-14			11.86	6,18	iso	: Gad	9,8	Oill
122	•			11 AB	8:15	150	1694	97	00
							,- (	V. C	
								×	
		Otabilizati	- f Dansas d	/ 1 GH - C	<u> </u>				
Tim	20	Depth to	on of Paramet			for three co	nsecutive meas		Trissaluad
1111	16	Water	Rate	Temperature	рп	UKP	Conductivity	Turbidity	Dissolved oxygen
FROM	ТО	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
Recomm Stabiliz		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabiliza (Yes/	ation:								
Sample		1230				Reviewed by			
ft btoc	Timo.	feet below top of	of casing	NTU	Nephelometric	and the second	°C	degrees Celsius	
ml/min		milliliters per m			milligrams per		mv	millivolts	
μs/cm		microseimons p	per centimeter						

OW-FL	WO.	SAMPLING	LOG

PAGE \_\_\_ SAMPLE DATE: \_\_ TOTAL # WELLS: \_

Client Nam	ne:	NYSDEC	;		Sample Pump: Peristaltic			
Project Lo	cation:	100 Housel A	ve, Lyndonville	e, NY	Tubing Type:		LDPE/Silicon	
Sampler(s	): N	1. Wright/ P. R	odman		Monitoring	Equipment:	YSI	
Well I.D.	MW-21	)			Monitoring Equipment: YSI  Screen Setting (ft btoc): to			
Well Diam	eter (inches): _	2			Tubing Inta	ake (ft btoc):		
Total Dept	h (ft btoc):		1911/04		Comments	Si		
Depth to V	Vater (ft btoc):	5.79			-	The state of the s		
Well Cond								
Time	The second secon	Evacuation		Wa	ter Quality M	lonitoring Paran	neters	
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hours	) (ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
1324			1119	6.38	47.0	1,284	518	0.62
132	7		1467	6.88	320	1,297	0	10
133			Miloto	6.86	29.3	1,303	0	O
133			11 / 4/		006	L.,		
	0		Miles	C 8 ]	236	1304	4	0,
133	9		1169	0,49	23,4	1306	O	à
								-
								-
					-			<del> </del>
	I Stabilizati	I on of Paramet	l ters (stabilizatio	n achieved	I for three co	I Insecutive meas	Surements)	
Time		Evacuation	Temperature		ORP	Conductivity	Turbidity	Dissolved
FROM	Water	Rate		1				oxygen
FROM	TO (ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
								-
					ļ	<u> </u>		-
Recommen	ided 1,700	400 500	./ 00/	1 0.4	I 10	I	1 100/	1
Stabilization Stabilization		100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
(Yes/No	)							
Sample Tim	ne: - 134	٥		7.17	Reviewed by	/ <del>:</del>		THE STATE OF THE S
ft btoc ml/min	feet below top milliliters per n	ninute	NTU mg/l	Nephelometric milligrams per	Turbidity Units	°C mv	degrees Celsius millivolts	
μs/cm	microseimons	per centimeter						

## LOW-FLOW SAMPLING LOG

SAMPLE DATE: G/G//3
TOTAL # WELLS:

	NVODEO				Alice and the second				
-		Cari — Dimitor — III — We		Sample Pump: Peristaltic					
			, NY						
		odman		Monitoring	Equipment:	YSI			
1W-3				Screen Setting (ft btoc): to					
(inches):	2	201021		Tubing Inta	ake (ft btoc):	3			
btoc):	timiene			Comments	i	***			
r (ft btoc):	2,88								
:									
Depth to	Evacuation		Wat	er Quality N	lonitoring Param	neters			
Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
(tt btoc)	(ml/mın)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)		
		12:33	6.72	7.6	179	512	5,7		
			7	2,7		115	27/		
				7.0	1940	37.2	0		
		12AU	-	87		252	0		
		Control of the Contro	, ,	9.7			0		
		19119	411		1 1 -1				
							<b> </b>		
						<u> </u>	1		
		Hora					<u> </u>		
Stabilization	on of Paramet	ers (stabilizatio	n achieved	for three co	nsecutive meas	surements)			
Depth to	Evacuation	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
Water	Rate					0.17. 2009 t 3000 t24 2000 €	oxygen		
(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)		
					***************************************				
+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%		
1466					<u> </u>	I			
	7457 10.					25 15 WE	<u></u>		
				grand with the state of the	°C				
		mg/i	mangrants per	inci	IIIV	THINVOID	/		
	(inches):btoc): r (ft btoc): r (ft btoc): T (ft bt	M. Wright/ P. R  M. Wri	M. Wright/ P. Rodman  A W - 3  (inches): 2  btoc): r (ft btoc): 2	M. Wright/ P. Rodman  A W - 3  (inches): 2  btoc):  r (ft btoc): 285  :	m: 100 Housel Ave, Lyndonville, NY  M. Wright/ P. Rodman  Monitoring  Screen Set Tubing Interpretation (inches): 2  Depth to Water Rate (ft btoc) (ml/min) (oC) (mv)    1	m: 100 Housel Ave, Lyndonville, NY  M. Wright/ P. Rodman  Monitoring Equipment:  Screen Setting (ft btoc):  Tubing Intake (ft btoc):  Comments:  Comments:  Temperature pH ORP Conductivity  (it btoc) (mi/min) (oC) (mv) (ms/cm)  Topy Conductivity  Tubing Type:  Monitoring Equipment:  Comments:  Comments:  Tubing Intake (ft btoc):  Comments:  Tubing Intake (ft btoc):  Comments:  Tubing Intake (ft btoc):  Tubing Intake (ft btoc):  Comments:  Tubing Intake (ft btoc):  Tubing Intake (	100   Housel Ave, Lyndonville, NY   M. Wright/ P. Rodman   Monitoring Equipment; YSI		

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### HRP ENGINEERING, P.C.

LOW-FLOW SAMPLING LOG

PAGE	OF
SAMPLE DATE:	6/6/13
TOTAL # WELLS:	

NVCDEC CONTRACTOR

Client Name: NYSDEC Sample Pump: Peristaltic Project Location: \_\_\_\_\_ 100 Housel Ave, Lyndonville, NY Tubing Type: LDPE/Silicon M. Wright/ P. Rodman Sampler(s): Monitoring Equipment: YSI Well I.D. Screen Setting (ft btoc): \_ to Well Diameter (inches): Tubing Intake (ft btoc): Total Depth (ft btoc): Comments:\_

Depth to Water (ft btoc): / # 8

Well Condition:								
Time	Depth to	Evacuation		Wat	er Quality M	onitoring Param	eters	
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hours)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
1155	2,7		10,91	7.84	6816	2.705	A3 18	1.19
1207	4,4,		11.15	7.6	88.4	2.678	参り	0.94
1210	4,6		11.26	7.55	108	2,554	W 12	0.78
1213	4.6		11,3	7.52	104	2.46	フ	0.42
1216	84.7		11.37	7.49	99.8	2.26	5	0.39
							***************************************	
				and the same				
			ters (stabilizatio					T5: 1 7
Time	Depth to Water	Evacuation Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved oxygen
FROM TO	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)
Recommended Stabilization	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabilization: (Yes/No)								
Sample Time: -	122	20		Almes and Assert a Published Life of	Reviewed by	/:-		
ft btoc	feet below top	of casing	NTU	Nephelometric	Turbidity Units	°C	degrees Celsius	

ft bloc feet below top of casing NTU Nepnelometric Turbidity Units C degrees Celsic mil/min milliliters per minute mg/l milligrams per liter mv millivolts microseimons per centimeter

PAGE SAMPLE DATE:

	, Or	-
0171	0	
91.11	14	
_/ //		

New YORK	K STATE , NO.	LOW-F	LOW SAM	PLING LOC	3	TOTAL # WELLS:				
Client Na	ame:		NYSDEC	,		Sample Pump: Per		Peristaltic		
Project L	_ocatio	n:	100 Housel A	ve, Lyndonville	, NY	Tubing Typ	e:	LDPE/Silicon		
	Sampler(s): M. Wright/ P. Rodman						Equipment:	YSI		
Well I.D.		MW 6B		****		Screen Set	ting (ft btoc):	to		
Well Dia	meter	(inches): _	2	1	1. 3. 3. 4.	Tubing Inta	ke (ft btoc <u>): 5</u> /	Flan Baron		
Total De	epth (ft	btoc):	1							
Depth to	Water	(ft btoc):	5:78	- Control of the Cont					(2.114.11	
Well Cor										
Tim	ne	Depth to	Evacuation		Wat	er Quality M	onitoring Param	neters		
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
(hou	ırs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)	
424	,			1227	9,14	177	1,884	Ô	10.00	
427	701			1227	1.18	173	1.887	324	057	
930				12,27	9,20	168	1.889	30.9	0.57	
900				12,20	9,22	11:4	1,890	328	0,8	
1974 - AP 200-743 C						101	1015	22.6	10,0	
10V4-2012-104					3311 3327					
Tim				ers (stabilizatio						
ıııı	ie	Depth to Water	Evacuation Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved oxygen	
FROM	ТО	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)	
			race content of the second							
Recomm Stabiliz		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%	
Stabiliza	ation:									
(Yes/l		130					L			
Sample 7	ı ime: —	. /)				Reviewed by		TOLKE		
ft btoc ml/min		feet below top milliliters per m			Nephelometric milligrams per I		°C mv	degrees Celsius millivolts		
μs/cm	and the Salvay	milliliters per minute mg/l milligrams microseimons per centimeter		J por 1	THY HIMPORS					

microseimons per centimeter

PAGE OF SAMPLE DATE: 9/7/13

W PORK STA	LOW-F	FLOW SAM	PLING LOG	3		TOTAL # WELLS:			
Client Nam	e:	NYSDEC Sample Pump: Peristaltic							
Project Loc	ation:	100 Housel A	ve, Lyndonville, NY		Tubing Type:		LDPE/Silicon		
Sampler(s)	: 1	M. Wright/ P. R	odman		Monitoring Equipment: YSI				
Well I.D.	MW-7B	>				ting (ft btoc):			
Well Diame	eter (inches):	4/2	22-2-		Tubing Intake (ft btoc): 5 Fan Braden				
Total Depth	n (ft btoc):			Comments:					
Depth to W	later (ft btoc):	1.06							
Well Condi					V				
Time	Depth to		Water Quality Monitoring Parameters						
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
(hours)	(ft btoc)	(mi/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)	
747	1 (11 5100)	1	12,301	10.71	97.5	1983	36.4	1.57	
748	-		10121	10.11	1115	1107	2012	110/	
748			12,40	10:32	46.5	1,009	17 3	0,97	
737			12,47	10.32	53,0	1,010	14.3	0,82	
754			12:39	10.33	83,2	1,009	13,6	,50	
121			1217	101)	1012	1110-1	1 3/ 8	1/ 50	
					<u> </u>				
				1					
			7/ 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/	Inches Inches					
	Stabiliza	tion of Parame	ters (stabilizatio	n achieved	for three co	onsecutive meas	surements)		
Time	4		Temperature	рН	ORP	Conductivity	Turbidity	Dissolved	
FROM	TO (ft btoc)		(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)	
TICON	10 (11 5100)	1	1 (00)	1	(1117)	1 (111070111)	(1410)	1 (1119/1)	
Recommen	+/- 1) 3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%	
Stabilizati Stabilizati	Off	100-300	1 17- 370	17-0.1	1 ./- 10	1,7,570	1	1 1070	
(Yes/No				<u> </u>					
Sample Tin	ne: — 158	5			Reviewed b	y <del>:</del>			
ft btoc				Nephelometric Turbidity Units °C degrees Celsius					
ml/min	milliliters pe	r minute	mg/l	milligrams per	liter	mv	millivolts		

PAGE \_\_\_\_\_OF \_\_\_SAMPLE DATE: \_\_\_\_G/7/13

## LOW-FLOW SAMPLING LOG

TOTAL # WELLS: \_\_\_\_

Client Name: NYSDEC					Sample Pump: Peristaltic					
Sampler(s): M. Wright/ P. Ro				. 19.1						
Well I.D. /YW - 7										
Well Diameter (inches):						16)				
			200545		Comments:	1-741				
	(ft btoc): _	0,25								
ie		and the second s								
	vvalei	Nate	Temperature	pН	ORP	Conductivity	Turbidity	Dissolved		
rs)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)		
			f(1,7)	7,27	186	1.047	108	7,441		
			12,07	7.25	191	1,00142	0	0,71		
2001			1228	7,24	196	1,040	6	6,78		
			1236	7,23	198	1.635	0	0,05		
								(*9		
						omic,				
			*****							
						The section of the se				
	Stabilization	on of Paramet	ers (stabilizatio	n achieved	for three co	nsecutive meas	surements)			
ie	Depth to	Evacuation	Temperature	pН	ORP	Conductivity	Turbidity	Dissolved oxygen		
ТО	- 23200 2000 0000		(oC)		(mv)	(ms/cm)	(NTU)	(mg/l)		
					\			(g/		
						(v) 1 1/2 - 1/2 -				
ended	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%		
ation:										
	ध्ये ।									
ple Time: Reviewed by:					DANIEL .					
ft btoc feet below top of casing ml/min milliliters per minute		NTU	Nephelometric Turbidity Units °C degrees Celsius				8			
			mg/I	milligrams per liter mv millivoits						
	meter (pth (ft k Water ndition: re)  ended ation ation: No)	scation:  (s): M  //W / /  meter (inches): pth (ft btoc): Water (ft btoc):  dition:  (tt btoc)  Stabilization  (ft btoc)  Stabilization  Water  TO (ft btoc)  Fime: 6  Feet below top millilitiers per m	Stabilization of Parameter (ml/min)   Stabilization of Parameters (stabilization of Parameters (fft btoc)  Stabilization of Parameters (stabilization of Parameters (fft btoc) (ml/min) (oC)  Stabilization of Parameters (stabilization of Parameters of the complete of the comple	Stabilization of Parameters (stabilization achieved water TO (ft btoc) (ml/min) (oC)   Stabilization of Parameters (stabilization achieved milligrams per minute mg/l milligrams per mil	Cocation:   100 Housel Ave, Lyndonville, NY   Tubing Type	Tubing Type:  Monitoring Equipment:  Screen Setting (ft btoc):  Tubing Intake (ft btoc):  Tubing	Cocation:   100 Housel Ave, Lyndonville, NY   Tubing Type:   LDPE/Silicon   Monitoring Equipment:   YSI			

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### HRP ENGINEERING, P.C.

LOW-FLOW SAMPLING LOG

PAGE _	, OF,
SAMPLE DATE: _	6/7/13
TOTAL # WELLS:	

NEW YORK STATE										
Client Name:		NYSDEC	C Sample Pump: Peristaltic					······································		
Project Location	:	100 Housel A	ve, Lyndonville, NY		Tubing Type:		LDPE/Silicon			
Sampler(s):	М	. Wright/ P. R	odman		Monitoring	Equipment <u>:</u>	YSI			
	Well I.D. MW = 9B Well Diameter (inches):					Screen Setting (ft btoc): to				
Well Diameter (i						Tubing Intake (ft btoc):				
Total Depth (ft btoc):  Depth to Water (ft btoc):  5.0 5					Comments:					
Depth to Water	(ft btoc): _	5.03			***************************************					
Well Condition:					ik					
Time	Depth to	Evacuation	Water Quality Monitoring Parameters							
	Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved		
(hours)	(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)		
743	511		10.5	11,56	132	0.975	25.6	2.6		
746			10.22	11,51	125	0.970	17.1	1.87		
749			10.12	11.58	109:1	0.969	11.5	0.92		
752	5.1		10.10	11.59	97.9	0.965	617	0.61		
753			10.07	11.6	96	0.962	5./	0.48		
758	5.2		10.06	11.61	93.1	0,961	5.9	0.47		
			Committee Committee							
				ļ						
	1			<u> </u>						
	Stabilization	on of Paramet	ters (stabilizatio	n achieved	for three co	nsecutive meas	surements)			

Time Depth to Evacuation Temperature рН ORP Turbidity Dissolved Conductivity Water Rate oxygen **FROM** TO (ft btoc) (ml/min) (oC) (mv) (ms/cm) (NTU) (mg/l) Recommended +/- 10% +/- 10% +/- 0.3 100-500 +/- 3% +/- 10 +/- 3% +/- 0.1 Stabilization Stabilization: (Yes/No)

Sample Time: Reviewed by:

ft bloc feet below top of casing NTU Nephelometric Turbidity Units °C degrees Celsius

ml/min milliliters per minute mg/l milligrams per liter mv millivolts

µs/cm microseimons per centimeter

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# HRP ENGINEERING, P.C.

microseimons per centimeter

LOW-FLOW SAMPLING LOG

PAGE	OF
SAMPLE DATE:	6/7/13
TAL # MELLO	' /

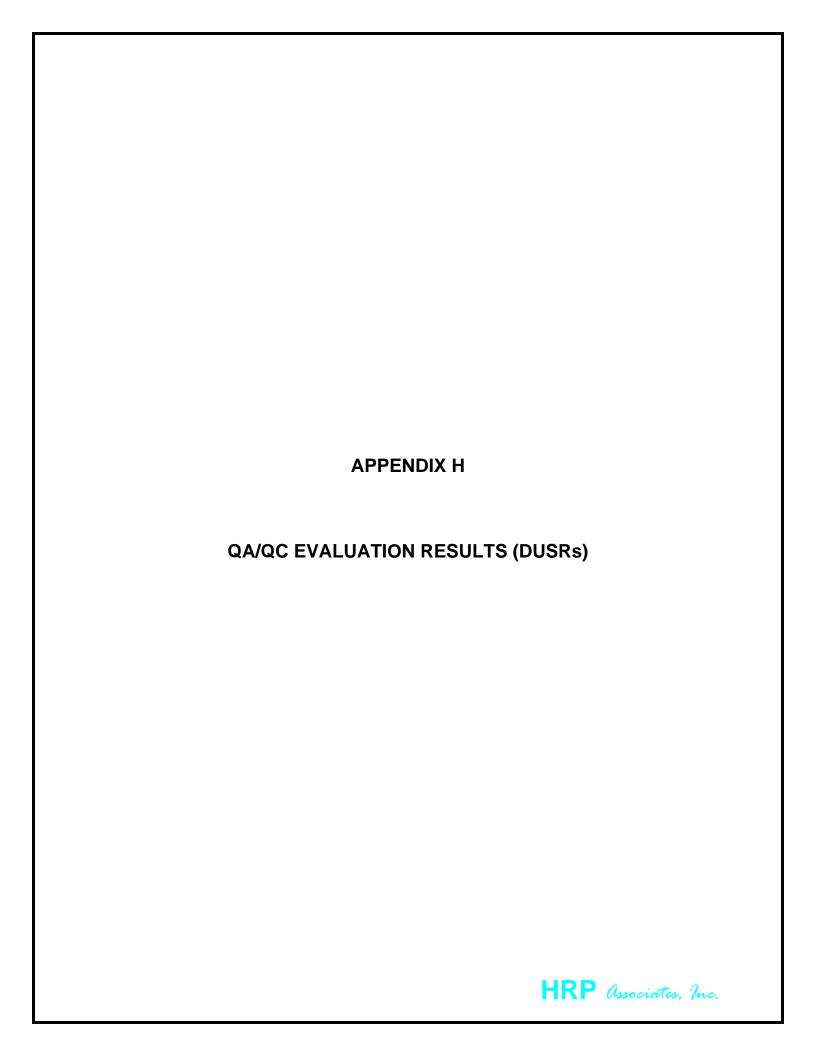
, NEW YOR	K STATE								
Client N	Client Name: NYSDEC		;		Sample Pump:		Peristaltic		
Project I	Location	n:	100 Housel A	ve, Lyndonville, NY		Tubing Type:			
Sampler	(s):	M	1. Wright/ P. R	odman		Monitoring	Equipment:	YSI	
						Screen Set	tting (ft btoc):	to	
Well Dia	meter (	(inches): _		THE SALE WILLIAM TO SALE OF THE SALE OF TH		Tubing Inta	ake (ft btoc):		
Total De	epth (ft l	btoc):					:		
Depth to	) Water	(ft btoc):					(S)		
Well Co	ndition:								
Tin	ne	Depth to	Evacuation		Wat	er Quality M	lonitoring Param	neters	
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
(hou	ırs)	(tt btoc)	(ml/mın)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
9:1	3	4.9		11.56	6.43	41.7	4.26	6.2	0.39
9:1	6	5,5		11.33	6,36	43.8	4.28	3.7	0.24
90	19			11,3	6,35	46	4.3	1	0.21
900	22	5.6		11.24	6133	41,4	4.32	<del>-                                    </del>	0.21
90,		2:22		11.13	6.33	40	4.307	05	0,19
					0130	10	11.5-	6	011
								1 4	
		1777,000							
			on of Paramet	ers (stabilizatio	n achieved	for three co	nsecutive meas	urements)	
Tim	ne	Depth to	Evacuation	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
FROM	TO	(ft btoc)	Rate (ml/min)	(oC)		(m)()	(malam)	(AITL)	oxygen
TROW	10	(11 5100)	(1111/11111)	(00)		(mv)	(ms/cm)	(NTU)	(mg/l)
		-							
						THE STATE OF THE S			
Recomm	nended	1	100 500						
Stabiliz Stabiliza	zation	+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabiliza (Yes/l	76 800000								
Sample 1	Гіте: —					Reviewed by			
ft btoc		feet below top of	of casing	NTU	Nephelometric 1		°C	degrees Celsius	
ml/min		milliliters per mi	inute		milligrams per l	일일 시간하다 보고 있다면 가게 하다.	mv	millivolts	

# HRP ENGINEERING, P.C.

PAGE	, OF
SAMPLE DATE:	6/7/13

LOW-FLOW	SAMPLING	LOG

· NEW YOU	RK STATE , NO	LOW	LOW SAIV	IFLING LOC	3		TOTAL # VVELLS	):	
Client N	lame: NYSDEC		Sample Pump:		Peristaltic				
Project Location: 100 Housel Ave, Lyndo		Ave, Lyndonville	, NY			AND THE PROPERTY OF THE PROPER			
Sample	r(s):	N	I. Wright/ P. R	todman	Monitoring Equipment:		YSI		
Well I.D	)	MW.	-10 B			Screen Setting (ft btoc): to			
Well Dia	ameter	(inches): _	411			Tubing Intake (ft btoc <u>):</u>			
Total De	epth (ft	btoc):							
Depth to	Wate	r (ft btoc):	3,6	*					
Well Co		:							
Tin	ne	Depth to	Evacuation		Wat	ter Quality M	onitoring Parar	neters	
		Water	Rate	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
; (hou		(ft btoc)	(ml/min)	(oC)		(mv)	(ms/cm)	(NTU)	oxygen (mg/l)
103		3,65		11.61	7.06	55,3	1.573	34.2	1,43
109				11.58	7.07	58.7	1.588	3.3	1.18
104	1 2			11.49	7.67	68.2	1.601	31.1	0195
104				11.49	7.1	5912	1,591	27	0.8.
10	50	3.7	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	11,48	7.11	67.4	1,592	28.6	0.07
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					- A-70				
	***************************************		***************************************					<u> </u>	
	40.00								
		Stabilization	on of Paramet	ers (stabilizatio	n achieved	for three co	nsecutive meas	surements)	
Tin	ne	Depth to	Evacuation	Temperature	рН	ORP	Conductivity	Turbidity	Dissolved
FROM	ТО	Water (ft btoc)	Rate (ml/min)	(oC)		(mv)	(ms/cm)	(AITII)	oxygen
THOM		(1000)	(1111/11111)	(00)		(1110)	(ms/cm)	(NTU)	(mg/l)
								<del> </del>	
							A, 4. T. A. C.		
Recomm		+/- 0.3	100-500	+/- 3%	+/- 0.1	+/- 10	+/- 3%	+/- 10%	+/- 10%
Stabiliz	ation:					1 10	-7 070	1 1070	17- 1070
(Yes/		777. ;;	1055						
Sample 7	Time:			<b>33,1110.</b> 75 37		Reviewed by:			
ft btoc ml/min		feet below top of milliliters per m			Nephelometric milligrams per l		°C	degrees Celsius	
μs/cm		microseimons p		mgn	mingrams per i	ilei	mv	millivolts	



# DATA USABILITY SUMMARY REPORT Monroe Electrics

Soil Volatile Organic Analyses by Method SW846 8260B Samples Collected: August 1<sup>st</sup> through 3<sup>rd</sup>, 2011 Samples Received at Test America on August 4, 2011

Sample Delivery Group: 480-8202 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix	<b>Date Collected</b>
480-8202-1	SB-1 (4-5)	Solid	08/01/2011
480-8202-2	SB-2 (3-4)	Solid	08/01/2011
480-8202-3	SB-3 (2-3)	Solid	08/01/2011
480-8202-4	SB-4 (12-16)	Solid	08/01/2011
480-8202-5	SB-5 (8-12)	Solid	08/01/2011
480-8202-6	SB-6 (5-6)	Solid	08/01/2011
480-8202-7	SB-7 (4-5)	Solid	08/02/2011
480-8202-8	SB-8 (4-5)	Solid	08/02/2011
480-8202-9	SB-9 (8-12)	Solid	08/02/2011
480-8202-10	SB-10 (10-12)	Solid	08/02/2011
480-8202-11	SB-11 (5-6)	Solid	08/02/2011
480-8202-12	SB-12 (7-8)	Solid	08/02/2011
480-8202-13	SB-13 (3-4)	Solid	08/02/2011
480-8202-14	SB-14 (5-6)	Solid	08/02/2011
480-8202-15	SB-15 (5-7)	Solid	08/02/2011
480-8202-16	SB-16 (5-6)	Solid	08/02/2011
480-8202-17	SB-17 (5-6)	Solid	08/02/2011
480-8202-18	SB-18 (5-6)	Solid	08/02/2011
480-8202-19	SB-19 (5-6)	Solid	08/02/2011
480-8202-20	SB-20 (5-6)	Solid	08/02/2011
480-8202-21	SB-21 (4-5)	Solid	08/03/2011
480-8202-22	SB-22 (2-4)	Solid	08/03/2011
480-8202-23	SB-23 (0-4)	Solid	08/03/2011
480-8202-24	SB-24 (3-4)	Solid	08/03/2011
480-8202-24MS	SB-24 (3-4)	Solid	08/03/2011
480-8202-24MSD	SB-24 (3-4)	Solid	08/03/2011
480-8202-25	SB-25 (1-2)	Solid	08/03/2011
480-8202-26	SB-25 (3-4)	Solid	08/03/2011
480-8202-27	SB-26 (2-4)	Solid	08/03/2011
480-8202-27MS	SB-26 (2-4)	Solid	08/03/2011
480-8202-27MSD	SB-26 (2-4)	Solid	08/03/2011
480-8202-28	SB-27 (2-4)	Solid	08/03/2011
480-8202-29	SB-28 (2-4)	Solid	08/03/2011
480-8202-30	SB-29 (2-4)	Solid	08/03/2011
480-8202-31	SB-30 (2-4)	Solid	08/03/2011
480-8202-32	DUPLICATE 1	Solid	08/03/2011
480-8202-33	DUPLICATE 2	Solid	08/03/2011

Soil samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
  - Calibrations
  - Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
  - Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
- \* Compound Quantitation

#### **DATA VALIDATION SUMMARY**

The problems with the matrix spikes, continuing calibration and method blank contamination should be noted. These are discussed in detail below

#### **Holding Times**

All of the samples were analyzed within 14 days of collection.

#### **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group.

#### **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

#### Calibrations

All of the %RSDs in the one initial calibration were less than 20% with the exceptions of bromomethane (28%), chloroethane (22%), methylene chloride (22%) and bromoform (24%).

The data for these compounds were only qualified when they were detected ina sample. Non-detects were not required to be qualified for the high recoveries.

All of the percent differences in the 8/9 continuing calibration associated with samples -18, -19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32 and -33 were less than 20% with the following exceptions:

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

Bromomethane	33%
Chloroethane	28%
Trichlorofluoromethane	32%
Methyl acetate	21%
2-Butanone	21%

The data for these compounds were flagged with the "J" qualifier and are estimated values.

Page 3

All of the relative response factors (rrfs) were greater than 0.05.

# Matrix Spike

Two matrix spikes were analyzed with this sample delivery group.

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Sample 480-8202-24 / (SB-24 (3-4)) was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the following exceptions:

Compound	MS	MSD
1,1-Dichloroethane		59%
1,1-Dichloroethene		65%
1,2-Dichlorobenzene	60 %	52%
Ethylbenzene		67%
Methyl tert-butyl ether		66%
Tetrachloroethene		63%
Toluene		69%
trans-1,2-Dichloroethene		68%
Trichloroethene		67%

Sample 480-8202-27 / SB-26 (2-4) was used as the second matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the following exceptions:

Compound	MS	MSD
1,1-Dichloroethane		67%
1,1-Dichloroethene		55%
1,2-Dichlorobenzene		62%
Benzene		65%
Chlorobenzene		74%
cis-1,2-Dichloroethene		67%
Ethylbenzene		67%
Methyl tert-butyl ether		63%
Tetrachloroethene		64%
Toluene		64%
trans-1,2-Dichloroethene		65%
Trichloroethene		63%

The data for these compounds in the two samples were flagged with the "J" qualifiers and are estimated values.

All RPDs were less than 30%.

Only 13 compounds were included in the laboratory control sample.

It is not known how compounds that were not part of the spiking solution would have been recovered.

Both matrix spike pairs were collected on the same day and it is not know how similar the matrices of the other samples would be to the two that were selected for spiking.

The data for the non-spiked samples were not qualified during the validation, but end users of the data should be aware that other significant matrix interferences may exist.

## **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

#### **Method Blanks**

A low concentration of toluene 0.840J ug/kg was detected in the 8/9 method blank MB 480-26742/5 associated with the analyses of samples -18 through -33.

Only low concentrations were found in samples -22 (0.76 ug/kg), -26 (0.90 ug/kg) and -29 (0.48 ug/kg)

The toluene data for theses samples were flagged with the "U" concentration and reported at the CRDL.

#### **Trip Blank**

A trip blank was not analyzed.

#### **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

#### Sample Results

No problems were detected with any of the samples.

# SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics

**Soil Total Metals** 

Samples Collected: August 3, 2011

Samples Received at Test America on August 4, 2011

Sample Delivery Group: 480-8203 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID
480-8203-1	SS-1
480-8203-2	SS-2
480-8203-3	SS-3
480-8203-4	SS-4
480-8203-5	SS-5
480-8203-6	SS-6
480-8203-7	SS-7
480-8203-8	SS-8
480-8203-8MS	SS-8 MS
480-8203-8MSD	SS-8 MSD
480-8203-9	SS-9
480-8203-10	SS-10
480-8203-11	DUPLICATE 3

Soil samples were validated for inorganic analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following criteria:

- \* Holding Times
- \* Calibration Verification
- \* CRDL Standard
- \* Laboratory Control Sample
- \* Serial Dilution
- \* Calibration Blanks
  - Field Blank
  - Preparation Blanks
  - Matrix Spike
- Duplicate Analyses
- \* ICP Interference Check Sample
- \* Detection Limit Results
- \* Linear Range
- \* Sample Results

#### **Data Validation Summary**

The problems with the matrix spike should be noted. These are described in detail below.

No other problems were detected that would affect the use of the data.

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

## **Holding Times**

All samples were analyzed within the required holding times.

#### CRDL Standards

All of the CRDL standards were within the 70% - 130% quality control limits.

# **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

## **Preparation Blank**

No compounds were detected in the one preparation blank associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

#### Calibration Blanks

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

#### Field Blank

A field blank was not collected with this sample delivery group.

# **ICP Interference Check Sample**

All of the ICP Interference Check Sample recoveries were within the required limits.

# **Matrix Spike Recovery**

Sample 480-8203-8 / SS-8 was used as the matrix spike and matrix spike duplicate.

All recoveries were within the 75% - 125% quality control limits with the following exceptions:

Analyte	MS % Rec.	MSD % Rec.
Aluminum	234%	265%
Antimony	69%	74%
Iron	316%	136%
Lead	137%	
Manganese	408%	

The data for these compounds were flagged with the "J" qualifier and are estimated values.

The required "N" qualifier was not added to the FORM I's or EDDs as required by the NYS DEC ASP program. These were added during the validation.

# **Duplicate Analysis**

An unspiked matrix duplicate was not analyzed.

# **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

#### **Serial Dilutions**

Sample 480-8203-8 / SS-8 was used as the serial dilution.

All percent differences were less than 10%.

#### **Instrument Detection Limit**

No problems were found with the instrument detection limits.

# **ICP Linear Ranges**

No problems were detected with the linear ranges.

# **Sample Results**

No problems were detected with any of the data.

# SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics

Soil Pesticide Analyses

Samples Collected: August 3, 2011

Samples Received at Test America on August 4, 2011

Sample Delivery Group: 480-8203 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID
480-8203-1	SS-1
480-8203-2	SS-2
480-8203-3	SS-3
480-8203-4	SS-4
480-8203-5	SS-5
480-8203-6	SS-6
480-8203-6 DL	SS-6 DL
480-8203-7	SS-7
480-8203-7 DL	SS-7 DL
480-8203-8	SS-8
480-8203-8 DL	SS-8 DL
480-8203-8MS	SS-8 MS
480-8203-8MSD	SS-8 MSD
480-8203-9	SS-9
480-8203-9 DL	SS-9 DL
480-8203-10	SS-10
480-8203-10 DL	SS-10 DL
480-8203-11	<b>DUPLICATE 3</b>
480-8203-11 DL	DUPLICATE 3 DL

Soil samples were validated for analyses of pesticides by the US EPA Region II data validation SOP (HW-44, Revision 1). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* Holding Times
- \* Laboratory Blanks
  - Field Blank
  - Surrogate Recoveries
- \* Surrogate Retention Times
  - Matrix Spike / Matrix Spike Duplicate
- \* Laboratory Control Sample
- \* Calibrations
- \* Method Blanks
  - Florisil Cartridge Check
  - GPC Calibration
  - Compound Identification

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

#### **DATA VALIDATION SUMMARY**

The laboratory reported the pesticide value from the RTX-CLP1 column, as opposed to reporting the lower of the two values as required in the NYS DEC ASP protocols. The lower values were reported in the EDD.

The problems with the surrogate and matrix spike recoveries and sample reporting discrepancies should be noted. These are described in detail below.

Form IX for a florisil cleanup was not included in the data package.

# **Holding Times**

All extractions and analyses were performed within the required holding times.

#### **Surrogate Recoveries**

All of the surrogate recoveries were within the required limits with the following exceptions:

Lab Sample ID	Field Sample ID	Dilution	TCX1	TCX2	DCB1	DCB2
480-8203-2	SS-2	50X	0%	0%	0%	0%
480-8203-3	SS-3	10X			0%	0%
480-8203-5	SS-5	20X			0%	0%
480-8203-6	SS-6	10X			0%	0%
480-8203-6 DL	SS-6 DL	50X	DL	DL	DL	DL
480-8203-7	SS-7	50X	0%	0%	0%	0%
480-8203-7 DL	SS-7 DL	500X	DL	DL	DL	DL
480-8203-8	SS-8	10X			0%	0%
480-8203-8 DL	SS-8 DL	50X	DL	DL	DL	DL
480-8203-8MS	SS-8 MS	10X			0%	0%
480-8203-8MS DL	SS-8 MS DL	50X	DL	DL	DL	DL
480-8203-8MSD	SS-8 MSD	10X			0%	0%
480-8203-8MS DL	SS-8 MS DL	50X	DL	DL	DL	DL
480-8203-9	SS-9	10X			0%	0%
480-8203-9 DL	SS-9 DL	100X	DL	DL	DL	DL
480-8203-10	SS-10	20X			0%	0%
480-8203-10 DL	SS-10 DL	50X	DL	DL	DL	DL
480-8203-11	DUPLICATE 3	10X			0%	0%
480-8203-11 DL	DUPLICATE 3 DL	50X	DL	DL	DL	DL

The data were not qualified for the lack of surrogate recovery due to the high dilutions of the samples.

#### Matrix Spike

Sample 480-8203-8MS / SS-8 MS was used as the matrix spike and matrix spike duplicate. The matrix spike and matrix spike duplicate were analyzed at 10X and 50X dilutions due to the high concentrations of some of the compounds

All recoveries and RPDs were within the required limits with the following exceptions:

		CPL Pest	
Compound	Dilution	MS	MSD
4,4'-DDD	10X	0%	0%
4,4'-DDD	50X	101%	81% (OK)
4,4'-DDE	10X	799%	358
4,4'-DDT	10X	950%	1072
Endosulfan I	10X	0%	0%
Endosulfan sulfate	10X		133%
Endrin	10X	0%	0%
Heptachlor epoxide	10X	0%	0%

DDD was not recovered from either the matrix spike and matrix spike duplicate in the 10X dilution, but it was recovered at 108% and 99% in the 50X dilution of the sample.

This discrepancy is most likely due to matrix interference from some of the nearby compounds with high concentrations.

The detected DDD concentrations were flagged with the "J" qualifier and are estimated values.

When DDD was undetected in a sample, it was flagged with the "R" qualifier and technically rejected.

Detected concentrations were flagged with the "J" qualifier and are estimated values.

The concentrations of DDE and DDT in the original sample were greater than four times the concentration of the spiking solution. As a result, the recoveries could not be accurately determined.

The data for endosulfan I, endrin and heptachlor epoxide were flagged with the "R" qualifier and technically rejected.

The recovery of the matrix spike duplicate of endosulfan sulfate (133%) was just over the 120% quality control limit. When this compound was detected in a sample the data were also qualified for a high percent difference between the concentrations on the two column.

Matrix spike and matrix spike duplicate data were only reported in the summary from the CLP1 column.

# **Laboratory Control Samples**

All recoveries were within the quality control limits.

#### **Initial Calibrations**

No problems were detected with the initial calibration associated with the analyses of the samples. All RSDs were less than 20%.

The PRSDs were not included in the copy of the analytical report submitted for validation. These were calculated during the validation.

## Continuing Calibrations

All percent differences were less than 20%.

# Florisil Cartridge Check

Form IX for a florisil cleanup was not included in the data package.

#### **GPC Calibration**

A GPC cleanup was not performed on these samples.

#### Method Blanks

No problems were detected with any of the method blanks.

#### Calibration Blanks

No problems were detected with the calibration blanks associated with this sample delivery group.

#### Field Blank

A field blank was not analyzed.

#### Sample Results

# Sample 480-8203-6 / SS-6

Endrin Ketone (25J ug/kg) was reported in the EDD in the 50X diluted analysis of this sample, but it was not detected in the 10X dilution and was not reported in the raw data. This was removed from the EDD.

#### Sample 480-8203-9 / SS-9

Endrin ketone was reported in the 100X dilution of this sample, but it was not detected in the 10X analysis. The low concentration is likely to be a false positive and was removed from the EDD.

During the validation data were qualified on the basis of the percent difference of the concentrations on the two columns:

% Difference		<b>Qualifier</b>
0 - 25%		None
25 - 70%		"JP"
70 - 100%	"JNP"	
> 100%		"RP"
100 - 200% (Interference detected)*		"JPN"

No other problems were detected with the sample data.

# SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics

**Water Total Metals** 

Samples Collected: September 13<sup>th</sup> & 14<sup>th</sup>, 2011

Samples Received at Test America on September 14, 2011

Sample Delivery Group: 480-9766 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix	Date Collected
480-9766-2	MVV-1	Water	09/13/2011
480-9766-3	MW-2	Water	09/13/2011
480-9766-4	MW-3	Water	09/13/2011
480-9766-4MS	MW-3	Water	09/13/2011
480-9766-4MD	MW-3	Water	09/13/2011
480-9766-5	MW-4	Water	09/13/2011
480-9766-6	MW-5	Water	09/13/2011
480-9766-7	MW-6	Water	09/13/2011
480-9766-8	MW-7	Water	09/13/2011

Water samples were validated for inorganic analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following criteria:

- \* Holding Times
- \* Calibration Verification
- \* CRDL Standard
- \* Laboratory Control Sample
- \* Serial Dilution
- \* Calibration Blanks
- Field Blank
- \* Preparation Blanks
- \* Matrix Spike
- Duplicate Analyses
- \* ICP Interference Check Sample
- \* Detection Limit Results
- \* Linear Range
- \* Sample Results

# **Data Validation Summary**

No problems were detected that would affect the use of the data.

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

# **Holding Times**

All samples were analyzed within the required holding times.

#### CRDL Standards

All of the CRDL standards were within the 70% - 130% quality control limits.

#### **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

#### **Preparation Blank**

No compounds were detected in the one preparation blank associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

#### **Calibration Blanks**

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

#### Field Blank

A field blank was not collected with this sample delivery group.

#### **ICP Interference Check Sample**

All of the ICP Interference Check Sample recoveries were within the required limits.

# **Matrix Spike Recovery**

Sample 480-9766-4 / MW-3 was used as the matrix spike and matrix spike duplicate.

All recoveries were within the 75% - 125% quality control limits.

#### **Duplicate Analysis**

An unspiked matrix duplicate was not analyzed.

## **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

#### **Serial Dilutions**

Sample 480-9766-4 / MW-3 was used as the serial dilution.

All percent differences were less than 10% with the one exception of sodium (13%).

The data for sodium were flagged with the "J" qualifier and are estimated values.

# **Instrument Detection Limit**

No problems were found with the instrument detection limits.

# **ICP Linear Ranges**

No problems were detected with the linear ranges.

# **Sample Results**

No problems were detected with any of the data.

# SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics

Water Pesticide Analyses

Samples Collected: September 13th & 14th, 2011

Samples Received at Test America on September 14, 2011

Sample Delivery Group: 480-9766 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix	<b>Date Collected</b>
480-9766-2	MW-1	Water	09/13/2011
480-9766-3	MW-2	Water	09/13/2011
480-9766-4	MW-3	Water	09/13/2011
480-9766-4MS	MW-3	Water	09/13/2011
480-9766-4MD	MW-3	Water	09/13/2011
480-9766-5	MW-4	Water	09/13/2011
480-9766-6	MW-5	Water	09/13/2011
480-9766-7	MW-6	Water	09/13/2011
480-9766-8	MW-7	Water	09/13/2011

Water samples were validated for analyses of pesticides by the US EPA Region II data validation SOP (HW-44, Revision 1). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* Holding Times
- \* Laboratory Blanks
- Field Blank
- \* Surrogate Recoveries
- \* Surrogate Retention Times
- \* Matrix Spike / Matrix Spike Duplicate
- \* Laboratory Control Sample
  - Calibrations
- \* Method Blanks
  - Florisil Cartridge Check
  - GPC Calibration
  - Compound Identification

#### DATA VALIDATION SUMMARY

The laboratory reported the pesticide value from the RTX-CLP1 column, as opposed to reporting the lower of the two values as required in the NYS DEC ASP protocols. The lower values were reported in the EDD.

This created some problems, because in many instances the concentration on the CLP2 column was much lower. It was often less than  $\frac{1}{2}$  of the reporting limit, which is lower reporting limit used by most laboratories.

During the validation, concentrations were only reported to ½ of the reporting limit. Concentrations less than this were flagged with the "U" qualifier as well as any

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

relevant qualifiers to denote a high percent difference between the concentrations on the two columns.

The problems with the calibrations should be noted. These are described in detail below.

Form IX for a florisil cleanup was not included in the data package.

# **Holding Times**

All extractions and analyses were performed within the required holding times.

## **Surrogate Recoveries**

All of the surrogate recoveries were within the required limits.

# Matrix Spike

Sample 480-9766-4 / MW-3 was used as the matrix spike and matrix spike duplicate.

All recoveries were within the required limits.

The laboratory used very low criteria (<20%) for most of the RPDs. An RPD of 20% was used during the data validation.

All of the RPDs were less than or equal to 20% and were not required to be qualified.

#### **Laboratory Control Samples**

All recoveries were within the quality control limits.

#### **Initial Calibrations**

The %RSDs were not included in the copy of the analytical report submitted for validation. These were calculated during the validation.

All %RSDs were less than 20% with the one exception of endosulfan II (27%).

This compound was not detected in any of the samples and the data were not required to be qualified for the high %RSD.

# **Continuing Calibrations**

All percent differences in the two CLP11 continuing calibrations bordering the analyses of all of the samples were greater than 20%, with percent differences ranging as high as 42%.

All of the calculated amounts were greater than the spike amount so only detected data were affected by the high percent differences. These were flagged with the "J" qualifier and are estimated values.

# Florisil Cartridge Check

Form IX for a florisil cleanup was not included in the data package.

#### **GPC Calibration**

A GPC cleanup was not performed on these samples.

#### **Method Blanks**

No problems were detected with any of the method blanks.

#### **Calibration Blanks**

No problems were detected with the calibration blanks associated with this sample delivery group.

#### Field Blank

A field blank was not analyzed.

## Sample Results

#### Sample 480-9766-7 / MW-6

The data for alpha-chlordane and DDD were not included in the FORM X. The percent differences for these compounds were reviewed from the raw data and reported on the data validation worksheet.

#### Sample 480-9766-8 / MW-7

The data for alpha-chlordane were not included in the FORM X. The percent differences for these compounds were reviewed from the raw data and reported on the data validation worksheet.

During the validation data were qualified on the basis of the percent difference of the concentrations on the two columns:

<u>% Difference</u>		<b>Qualifier</b>
0 - 25%		None
25 - 70%		"JP"
70 - 100%	"JNP"	
> 100%		"RP"
100 - 200% (Interference detected)*		"JPN"

No other problems were detected with the sample data.

# DATA USABILITY SUMMARY REPORT Monroe Electrics

Water Volatile Organic Analyses by Method SW846 8260B

Samples Collected: September 13<sup>th</sup> & 14<sup>th</sup>, 2011

Samples Received at Test America on September 14, 2011

Sample Delivery Group: 480-9766 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Matrix	<b>Date Collected</b>
480-9766-1	TRIP BLANK	Water	09/14/2011
480-9766-2	MW-1	Water	09/13/2011
480-9766-3	MW-2	Water	09/13/2011
480-9766-4	MW-3	Water	09/13/2011
480-9766-4MS	MW-3	Water	09/13/2011
480-9766-4MSD	MW-3	Water	09/13/2011
480-9766-5	MW-4	Water	09/13/2011
480-9766-6	MW-5	Water	09/13/2011
480-9766-7	MW-6	Water	09/13/2011
480-9766-7 DL	MW-6 DL	Water	09/13/2011
480-9766-8	MW-7	Water	09/13/2011
480-9766-8 DL	MW-7 DL	Water	09/13/2011
480-9766-9	MW-3B	Water	09/14/2011
480-9766-9DL	MW-3B DL	Water	09/14/2011
480-9766-9MS	MW-3B	Water	09/14/2011
480-9766-9MSD	MW-3B	Water	09/14/2011
480-9766-10	MW-5B	Water	09/14/2011
480-9766-10 DL	MW-5B DL	Water	09/14/2011
480-9766-11	MW-6B	Water	09/14/2011
480-9766-11 DL	MW-6B DL	Water	09/14/2011
480-9766-12	MW-7B	Water	09/14/2011
480-9766-12 DL	MW-7B DL	Water	09/14/2011

Water samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
- Calibrations
- \* Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
- \* Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
- \* Compound Quantitation

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

#### **DATA VALIDATION SUMMARY**

The problems with the calibrations should be noted. These are discussed in detail below

# **Holding Times**

All of the samples were analyzed within 14 days of collection.

#### Tunes

No problems were detected with the tunes associated with the samples of this delivery group.

# **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

#### **Calibrations**

Two initial calibrations were analyzed with this sample delivery group.

All of the %RSDs in the 9/19 initial calibration associated with samples -7DL, -8DL, -9, -10, -11, -12, -9DL, 10DL, 11DL and 12DL were less than 20% with the exception of bromoform (33%).

All of the %RSDs in the 9/20 initial calibration associated with samples -1, -2, -4, -4, - 5, -6, -7 and -8 were less than 20% with the exceptions of bromomethane (31%).

Neither of these compounds were detected in any of the associated samples and the data were not required to be qualified for the high RPDs.

All of the percent differences in the 9/22 continuing calibration associated with samples 7DL, -8DL, -9, -10, -11 and -12 were less than 20% with the following exceptions:

Compound	%D
1,1,2,2-TETRACHLOROETHANE	23%
1,2,4-TRICHLOROBENZENE	24%
1,3-DICHLOROBENZENE	21%
1,4-DICHLOROBENZENE	21%
ISOPROPYLBENZENE (CUMENE)	23%

All of the percent differences in the 9/22 continuing calibration associated with samples 9DL, 10DL, 11DL and 12DL were less than 20% with the exception of bromoform (25%).

The data for these compounds were flagged with the "J" qualifier and are estimated values.

All of the relative response factors (rrfs) were greater than 0.05.

# Matrix Spike

Two matrix spikes were analyzed with this sample delivery group.

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Sample 480-9766-4 / MW-3 was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits.

Sample 480-9766-9 / MW-3B was used as the second matrix spike and matrix spike duplicate. All of the recoveries which could be accurately determined were within the 70% - 130% limits .

All RPDs were less than 30%.

Only 13 compounds were included in the laboratory control sample.

# **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

#### Method Blanks

No compounds were detected in any of the method blanks.

# Trip Blank

No compounds were detected in the trip blank.

#### **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

#### Sample Results

No problems were detected with any of the samples.

# **DATA USABILITY SUMMARY REPORT Monroe Electrics**

Soil Volatile Organic Analyses by Method SW846 8260B Samples Collected: August 1<sup>st</sup> through 3<sup>rd</sup>, 2011 Samples Received at Test America on August 4, 2011 Sample Delivery Group: 480-8202

**Laboratory Reference Numbers:** 

Lab Sample ID	Field Sample ID	Matrix	<b>Date Collected</b>
480-8202-1	SB-1 (4-5)	Solid	08/01/2011
480-8202-2	SB-2 (3-4)	Solid	08/01/2011
480-8202-3	SB-3 (2-3)	Solid	08/01/2011
480-8202-4	SB-4 (12-16)	Solid	08/01/2011
480-8202-5	SB-5 (8-12)	Solid	08/01/2011
480-8202-6	SB-6 (5-6)	Solid	08/01/2011
480-8202-7	SB-7 (4-5)	Solid	08/02/2011
480-8202-8	SB-8 (4-5)	Solid	08/02/2011
480-8202-9	SB-9 (8-12)	Solid	08/02/2011
480-8202-10	SB-10 (10-12)	Solid	08/02/2011
480-8202-11	SB-11 (5-6)	Solid	08/02/2011
480-8202-12	SB-12 (7-8)	Solid	08/02/2011
480-8202-13	SB-13 (3-4)	Solid	08/02/2011
480-8202-14	SB-14 (5-6)	Solid	08/02/2011
480-8202-15	SB-15 (5-7)	Solid	08/02/2011
480-8202-16	SB-16 (5-6)	Solid	08/02/2011
480-8202-17	SB-17 (5-6)	Solid	08/02/2011
480-8202-18	SB-18 (5-6)	Solid	08/02/2011
480-8202-19	SB-19 (5-6)	Solid	08/02/2011
480-8202-20	SB-20 (5-6)	Solid	08/02/2011
480-8202-21	SB-21 (4-5)	Solid	08/03/2011
480-8202-22	SB-22 (2-4)	Solid	08/03/2011
480-8202-23	SB-23 (0-4)	Solid	08/03/2011
480-8202-24	SB-24 (3-4)	Solid	08/03/2011
480-8202-24MS	SB-24 (3-4)	Solid	08/03/2011
480-8202-24MSD	SB-24 (3-4)	Solid	08/03/2011
480-8202-25	SB-25 (1-2)	Solid	08/03/2011
480-8202-26	SB-25 (3-4)	Solid	08/03/2011
480-8202-27	SB-26 (2-4)	Solid	08/03/2011
480-8202-27MS	SB-26 (2-4)	Solid	08/03/2011
480-8202-27MSD	SB-26 (2-4)	Solid	08/03/2011
480-8202-28	SB-27 (2-4)	Solid	08/03/2011
480-8202-29	SB-28 (2-4)	Solid	08/03/2011
480-8202-30	SB-29 (2-4)	Solid	08/03/2011
480-8202-31	SB-30 (2-4)	Solid	08/03/2011
480-8202-32	DUPLICATE 1	Solid	08/03/2011
480-8202-33	DUPLICATE 2	Solid	08/03/2011

Soil samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
  - Calibrations
  - Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
  - Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
- \* Compound Quantitation

#### **DATA VALIDATION SUMMARY**

The problems with the matrix spikes, continuing calibration and method blank contamination should be noted. These are discussed in detail below

#### **Holding Times**

All of the samples were analyzed within 14 days of collection.

#### **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group.

#### **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

#### Calibrations

All of the %RSDs in the one initial calibration were less than 20% with the exceptions of bromomethane (28%), chloroethane (22%), methylene chloride (22%) and bromoform (24%).

The data for these compounds were only qualified when they were detected ina sample. Non-detects were not required to be qualified for the high recoveries.

All of the percent differences in the 8/9 continuing calibration associated with samples -18, -19, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -30, -31, -32 and -33 were less than 20% with the following exceptions:

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

Bromomethane	33%
Chloroethane	28%
Trichlorofluoromethane	32%
Methyl acetate	21%
2-Butanone	21%

The data for these compounds were flagged with the "J" qualifier and are estimated values.

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All of the relative response factors (rrfs) were greater than 0.05.

# Matrix Spike

Two matrix spikes were analyzed with this sample delivery group.

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Sample 480-8202-24 / (SB-24 (3-4)) was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the following exceptions:

Compound	MS	MSD
1,1-Dichloroethane		59%
1,1-Dichloroethene		65%
1,2-Dichlorobenzene	60 %	52%
Ethylbenzene		67%
Methyl tert-butyl ether		66%
Tetrachloroethene		63%
Toluene		69%
trans-1,2-Dichloroethene		68%
Trichloroethene		67%

Sample 480-8202-27 / SB-26 (2-4) was used as the second matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the following exceptions:

Compound	MS	MSD
1,1-Dichloroethane		67%
1,1-Dichloroethene		55%
1,2-Dichlorobenzene		62%
Benzene		65%
Chlorobenzene		74%
cis-1,2-Dichloroethene		67%
Ethylbenzene		67%
Methyl tert-butyl ether		63%
Tetrachloroethene		64%
Toluene		64%
trans-1,2-Dichloroethene		65%
Trichloroethene		63%

The data for these compounds in the two samples were flagged with the "J" qualifiers and are estimated values.

All RPDs were less than 30%.

Only 13 compounds were included in the laboratory control sample.

It is not known how compounds that were not part of the spiking solution would have been recovered.

Both matrix spike pairs were collected on the same day and it is not know how similar the matrices of the other samples would be to the two that were selected for spiking.

The data for the non-spiked samples were not qualified during the validation, but end users of the data should be aware that other significant matrix interferences may exist.

## **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

#### **Method Blanks**

A low concentration of toluene 0.840J ug/kg was detected in the 8/9 method blank MB 480-26742/5 associated with the analyses of samples -18 through -33.

Only low concentrations were found in samples -22 (0.76 ug/kg), -26 (0.90 ug/kg) and -29 (0.48 ug/kg)

The toluene data for theses samples were flagged with the "U" concentration and reported at the CRDL.

#### **Trip Blank**

A trip blank was not analyzed.

#### **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

#### Sample Results

No problems were detected with any of the samples.

# **DATA USABILITY SUMMARY REPORT Monroe Electrics**

Water Volatile Organic Analyses by Method SW846 8260B Samples Collected: December 20<sup>th</sup> & 21<sup>st</sup>, 2012 Samples Received at Test America: December 20<sup>th</sup> & 22nd, 2012

Sample Delivery Group: 480-30649 **Laboratory Reference Numbers:** 

Lab Sample ID	Field Sample ID	<b>Date Collected</b>
480-30649-1	MW-1	12/20/2012
480-30649-2	MW-1B	12/20/2012
480-30649-2 DL	MW-1B DL	12/20/2012
480-30649-3	MW-2	12/20/2012
480-30649-4	MW-2D	12/20/2012
480-30649-4 DL	MW-2D DL	12/20/2012
480-30649-5	MW-2B	12/20/2012
480-30649-6	MW-3B	12/20/2012
480-30649-7	MW-3	12/20/2012
480-30649-8	MW-4	12/20/2012
480-30649-9	MW-5B	12/20/2012
480-30649-10	MW-5	12/20/2012
480-30735-1	MW-6B	12/20/2012
480-30735-2	MW-6	12/20/2012
480-30735-2 DL	MW-6 DL	12/20/2012
480-30735-3	MW-7D	12/20/2012
480-30735-4	MW-7B	12/20/2012
480-30735-5	MW-7	12/20/2012
480-30735-6	MW-8B	12/21/2012
480-30735-7	MW-9	12/21/2012
480-30735-7 DL	MW-9 DL	12/21/2012
480-30735-8	MW-9B	12/21/2012
480-30735-8 DL	MW-9B DL	12/21/2012
480-30735-9	MW-10D	12/21/2012
480-30735-10	MW-10	12/21/2012
480-30735-11	MW-10B	12/21/2012
480-30735-11 MS	MS MW-10B	12/21/2012
480-30735-11 MSD	MSD MW-10B	12/21/2012
480-30735-12	FIELD DUPLICATE 122112	12/21/2012
480-30735-12 MS	FIELD DUPLICATE 122112 MS	12/21/2012
480-30735-12 MSD	FIELD DUPLICATE 122112 MSD	12/21/2012
480-30735-12 DL	FIELD DUPLICATE 122112 DL	12/21/2012

Water samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

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- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
- Calibrations
- \* Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
  - Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
  - Compound Quantitation

#### **DATA VALIDATION SUMMARY**

The undiluted and 2X dilutions of sample 480-30735-8 / MW-9B do not agree. It is recommended that the data be reported from the undiluted analysis.

The problems with the matrix spikes and calibrations should be noted.

These are discussed in detail below

# **Holding Times**

All of the samples were analyzed within 14 days of collection.

## **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group.

#### **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

#### **Calibrations**

Two initial calibrations were analyzed with this sample delivery group.

All of the %RSDs in the 12/04 initial calibration were less than 20% with the exceptions of bromoform (24%) and 1,2-dibromo-3-chloropropane (21%).

All of the %RSDs in the 12/04 initial calibration were less than 20% with the exceptions of trichlorofluoromethane (22%), carbon tetrachloride (26%), cis-1.3-

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

dichloropropene (23%), trans-1,3-dichloropropene (50%), trans-1,3-dichloropropene (33%), dibromochloromethane (24%), bromoform (37%) and 1,2-dibromo-3-chloropropane (36%).

None of these compounds were detected in any of the samples and the data were not required to be qualified for the high %RSDs.

All of the percent differences in the 12/30 continuing calibration were less than 20% with the exceptions of carbon disulfide (33%) and cyclohexane (29%). This continuing calibration was associating with the following samples:

480-30735-1	MW-6B
480-30735-2	MW-6
480-30735-3	MW-7D
480-30735-4	MW-7B
480-30735-5	MW-7
480-30735-6	MW-8B
480-30735-7	MW-9
480-30735-8	MW-9B
480-30735-11	MW-10B
480-30735-12	FIELD DUPLICATE 122112

All of the percent differences in the 12/31 GC/MS N continuing calibration were less than 20% with the following exceptions:

Compound	% Difference
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	51%
1,2-DIBROMO-3-CHLOROPROPANE	33%
BROMOFORM	38%
CARBON DISULFIDE	71%
CYCLOHEXANE	51%
DICHLORODIFLUOROMETHANE	27%
METHYL ACETATE	21%
METHYLCYCLOHEXANE	39%

This continuing calibration is associated with the following samples:

480-30735-2 DL	MW-6 DL
480-30735-7 DL	MW-9 DL
480-30735-8 DL	MW-9B DL
480-30735-9	MW-10D
480-30735-10	MW-10
480-30735-12 DL	FIELD DUPLICATE 122112 DL

All of the percent differences in the 12/31 GC/MS S continuing calibration were less than 20% with the following exceptions:

Compound	% Difference
1,2-DICHLOROETHANE	25%
ACETONE	30%
BROMOMETHANE	22%
CHLOROETHANE	44%
METHYL ETHYL KETONE (2-BUTANONE)	21%

This continuing calibration is associated with the following samples:

480-30649-1	MW-1
480-30649-2	MW-1B
480-30649-3	MW-2
480-30649-4	MW-2D
480-30649-5	MW-2B
480-30649-8	MW-4
480-30649-10	MW-5

All of the percent differences in the 1/02/2013 continuing calibration were less than 20% with the exception of 1,1,1-trichloroethane (29%). This continuing calibration was associating with the following samples:

MW-1B DL
MW-2D DL
MW-3B
MW-3
MW-5B

The data for these compounds were flagged with the "J" qualifier and are estimated values.

All of the relative response factors (rrfs) were greater than 0.05.

# **Matrix Spike**

Two matrix spikes were analyzed with this sample delivery group.

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Sample 480-30735-11 / MW-10B was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130%.

Sample 480-30735-12/ FIELD DUPLICATE 122112 was used as the second matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the following exceptions:

Compound	MS	MSD
1,1-Dichloroethane	57%	45%
1,1-Dichloroethene		69%
Trichloroethene	43%	28%

The data for these compounds in all samples ,with the one exception of sample 480-30735-11 / MW-10B, were flagged with the "J" qualifiers and are estimated values.

All RPDs were less than 30%.

Only 13 compounds were included in the laboratory control sample.

It is not known how compounds that were not part of the spiking solution would have been recovered.

Both matrix spike pairs were collected on the same day and it is not know how similar the matrices of the other samples would be to the two that were selected for spiking.

The data for the non-spiked samples were not qualified during the validation, but end users of the data should be aware that other significant matrix interferences may exist.

## **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

#### **Method Blanks**

No compounds were detected in any of the method blanks.

#### Trip Blank

A trip blank was not analyzed.

#### **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

# **Sample Results**

## Sample 480-30735-8 / MW-9B

There was poor agreement between the concentrations reported for the original undiluted analysis and those found in the 2X dilution:

	1X	2X
Compound	Dilution	Dilution
1,1-DICHLOROETHANE	420E	150D
1,2-DICHLOROETHANE	100E	27D
CHLOROETHANE	240E	60D

The concentrations reported for the 2X diluted analysis for 1,2-dichloroethane and chloroethane were both less than the 100 ug/l linear range. If the diluted

concentrations were accurate, there would not have been a reason for these to be above the linear range in the undiluted analysis.

There is also a poor agreement between the two concentrations of 1,1-dichloroethane.

SDG: 480-30649

It is recommended that the data from the undiluted analysis be used for the final reporting. The data for of 1,1-dichloroethane and chloroethane in the original analysis should be considered to be highly estimated.

The "E" qualifier was removed from 1,2-dichloroethane since the reported concentration in the undiluted analysis was at the upper limit of linear range (100 ug/l)

No other problems were detected with any of the samples.

# **SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics**

Water Wet Chemistry Analyses Samples Collected: March 13<sup>th</sup> & 14<sup>th</sup>, 2013 Samples Received at Test America: March 13<sup>th</sup> & 14<sup>th</sup>, 2013 Sample Delivery Group: 480-34321

Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	<b>Date Collected</b>
480-34321-1	MW-1B (31313)	03/13/2013
480-34321-1MS	MW-1B (31313)	03/13/2013
480-34321-1MSD	MW-1B (31313)	03/13/2013
480-34321-2	MW-1 (31313)	03/13/2013
480-34321-3	MW-7D (31313)	03/13/2013
480-34321-4	MW-7 (31313)	03/13/2013
480-34321-5	MW-7B (31313)	03/13/2013
480-34321-6	MW-2 (31313)	03/13/2013
480-34321-7	MW-2D (31313)	03/13/2013
480-34321-8	DUP (31313)	03/13/2013
480-34321-9	MW-2B (31313)	03/13/2013
480-34321-10	MW-3B (31313)	03/13/2013
480-34321-11	MW-3 (31313)	03/13/2013
480-34321-12	MW-4 (31313)	03/13/2013
480-34321-13	MW-8B (31313)	03/13/2013
480-34321-14	Trip Blank	03/13/2013
480-34415-1	MW-6B (31413)	03/14/2013
480-34415-2	MW-6 (31413)	03/14/2013
480-34415-3	MW-9 (31413)	03/14/2013
480-34415-3 MS	MW-9 (31413) MS	03/14/2013
480-34415-3 MSD	MW-9 (31413) MSD	03/14/2013
480-34415-4	MW-9B (31413)	03/14/2013
480-34415-5	MW-5 (31413)	03/14/2013
480-34415-6	MW-5B (31413)	03/14/2013
480-34415-7	MW-10B (31413)	03/14/2013
480-34415-8	MW-10 (31413)	03/14/2013
480-34415-9	MW-10D (31413)	03/14/2013

Water samples were validated for wet chemistry analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following analytes:

- \* Total Kjeldahl Nitrogen x
- \* Nitrate as N
- \* Nitrite as N
- \* Phosphorus
- \* Chloride
- \* Sulfate
- \* Total Organic Carbon
  - Alkalinity, Total
- \* Sulfide
- \* Indicates that all criteria were met for this parameter.

## **Data Validation Summary**

The total alkalinity matrix spikes all recovered in the 60% range. All of the alkalinity data were flagged with the "J" qualifier and are estimated values.

No other problems were detected that would affect the use of the data.

#### **Holding Times**

All samples were analyzed within the required holding times.

#### CRDL Standards

The recovery of the iron CRDL standard (131%) was just above the 130% quality control limit.

All of the iron concentrations in the samples were too high to be affected by the CRDL recovery.

# **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

## **Preparation Blank**

No compounds were detected in the one preparation blank associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

#### **Calibration Blanks**

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

#### Field Blank

A field blank was not collected with this sample delivery group.

#### **ICP Interference Check Sample**

All of the ICP Interference Check Sample recoveries were within the required limits.

## **Matrix Spike Recovery**

Several samples were used for matrix spikes due to the many runs often used for each parameter.

All recoveries were within the 70% - 130% quality control limits used for the purpose of the data validation with the exception of alkalinity which exhibited low recoveries for all spikes (57% - 60%).

Samples 480-34321-1 / MW-1B (31313) and 480-34415-9 / MW-10D (31413) were used as the matrix spikes for the alkalinity analyses.

All of the alkalinity data were flagged with the "J" qualifier and are estimated values.

All RPDs were within the required limits.

#### **Duplicate Analysis**

A matrix duplicate only appeared to be analyzed for total kjeldahl nitrogen, nitrite, phosphorus, total organic carbon, alkalinity and sulfide.

All RPDs for these analyses were less then 20%.

#### **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

#### **Instrument Detection Limit**

No problems were found with the instrument detection limits.

# **Sample Results**

No problems were detected with any of the data.

## **SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics**

Water Total Metals - Arsenic & Iron Samples Collected: March 13<sup>th</sup> & 14<sup>th</sup>, 2013 Samples Received at Test America: March 13<sup>th</sup> & 14<sup>th</sup>, 2013 Sample Delivery Group: 480-34321

Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	<b>Date Collected</b>
480-34321-1	MW-1B (31313)	03/13/2013
480-34321-1MS	MW-1B (31313)	03/13/2013
480-34321-1MSD	MW-1B (31313)	03/13/2013
480-34321-2	MW-1 (31313)	03/13/2013
480-34321-3	MW-7D (31313)	03/13/2013
480-34321-4	MW-7 (31313)	03/13/2013
480-34321-5	MW-7B (31313)	03/13/2013
480-34321-6	MW-2 (31313)	03/13/2013
480-34321-7	MW-2D (31313)	03/13/2013
480-34321-8	DUP (31313)	03/13/2013
480-34321-9	MW-2B (31313)	03/13/2013
480-34321-10	MW-3B (31313)	03/13/2013
480-34321-11	MW-3 (31313)	03/13/2013
480-34321-12	MW-4 (31313)	03/13/2013
480-34321-13	MW-8B (31313)	03/13/2013
480-34321-14	Trip Blank	03/13/2013
480-34415-1	MW-6B (31413)	03/14/2013
480-34415-2	MW-6 (31413)	03/14/2013
480-34415-3	MW-9 (31413)	03/14/2013
480-34415-3 MS	MW-9 (31413) MS	03/14/2013
480-34415-3 MSD	MW-9 (31413) MSD	03/14/2013
480-34415-4	MW-9B (31413)	03/14/2013
480-34415-5	MW-5 (31413)	03/14/2013
480-34415-6	MW-5B (31413)	03/14/2013
480-34415-7	MW-10B (31413)	03/14/2013
480-34415-8	MW-10 (31413)	03/14/2013
480-34415-9	MW-10D (31413)	03/14/2013

Water samples were validated for inorganic analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following criteria:

- \* Holding Times
- \* Calibration Verification
  - CRDL Standard
- \* Laboratory Control Sample
- \* Serial Dilution
- \* Calibration Blanks
  - Field Blank
- \* Preparation Blanks
- \* Matrix Spike
- Duplicate Analyses
- \* ICP Interference Check Sample
- \* Detection Limit Results
- \* Linear Range
- \* Sample Results
- \* Indicates that all criteria were met for this parameter.

## **Data Validation Summary**

No problems were detected that would affect the use of the data.

## **Holding Times**

All samples were analyzed within the required holding times.

## **CRDL Standards**

The recovery of the iron CRDL standard (131%) was just above the 130% quality control limit.

All of the iron concentrations were too high to be affected by the CRDL recovery.

## **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

## **Preparation Blank**

No compounds were detected in the one preparation blank associated with the digestions of these samples at concentrations above the CRDL. Several analytes were found in the preparation blank at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table.

## **Calibration Blanks**

Several analytes were found in the continuing calibration blanks at concentrations between the CRDL and instrument detection limit. These very low concentrations are not required to be noted in the data validation summary table and do not affect the end use of the data.

#### Field Blank

A field blank was not collected with this sample delivery group.

## **ICP Interference Check Sample**

All of the ICP Interference Check Sample recoveries were within the required limits.

# Matrix Spike Recovery

Two samples were used for the matrix spike and matrix spike duplicate.

Sample 480-34321-1 / MW-1B (31313) was used as the matrix spike and matrix spike duplicate for the samples collected on 3/13/2013.

Sample 480-34415-3 /MW-9 (31413) was used as the matrix spike and matrix spike duplicate for the samples collected on 3/14/2013.

All recoveries and RPDs were within the required limits.

### **Duplicate Analysis**

A matrix duplicate was not analyzed.

## **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

#### Serial Dilutions

Two samples were used for the serial dilutions.

Sample 480-34321-1 / MW-1B (31313) was used as the serial dilution for the samples collected on 3/13/2013.

Sample 480-34415-3 /MW-9 (31413) was used as the serial dilution for the samples collected on 3/14/2013.

All percent differences that could be accurately calculated were less than 10%.

#### **Instrument Detection Limit**

No problems were found with the instrument detection limits.

# **ICP Linear Ranges**

No problems were detected with the linear ranges.

# Sample Results

No problems were detected with any of the data.

## DATA USABILITY SUMMARY REPORT **Monroe Electrics**

Water Volatile Organic Analyses by Method SW846 8260B Samples Collected: March 13<sup>th</sup> & 14<sup>th</sup>, 2013 Samples Received at Test America: March 13<sup>th</sup> & 14<sup>th</sup>, 2013

Sample Delivery Group: 480-34321 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Date Collected / Received
480-34321-1	MW-1B (31313)	03/13/2013
480-34321-1MS	MW-1B (31313)	03/13/2013
480-34321-1MSD	MW-1B (31313)	03/13/2013
480-34321-2	MW-1 (31313)	03/13/2013
480-34321-3	MW-7D (31313)	03/13/2013
480-34321-3 DL	MW-7D (31313) DL	03/13/2013
480-34321-4	MW-7 (31313)	03/13/2013
480-34321-5	MW-7B (31313)	03/13/2013
480-34321-6	MW-2 (31313)	03/13/2013
480-34321-7 480-34321-8 480-34321-9 480-34321-10	MW-2D (31313) DUP (31313) MW-2B (31313)	03/13/2013 03/13/2013 03/13/2013 03/13/2013
480-34321-10 480-34321-11 480-34321-12 480-34321-13	MW-3B (31313) MW-3 (31313) MW-4 (31313) MW-8B (31313)	03/13/2013 03/13/2013 03/13/2013
480-34321-14	Trip Blank	03/13/2013
480-34415-1	MW-6B (31413)	03/14/2013
480-34415-2	MW-6 (31413)	03/14/2013
480-34415-3	MW-9 (31413)	03/14/2013
480-34415-4	MW-9B (31413)	03/14/2013
480-34415-4 DL	MW-9B (31413) DL	03/14/2013
480-34415-5	MW-5 (31413)	03/14/2013
480-34415-6	MW-5B (31413)	03/14/2013
480-34415-6 DL	MW-5B (31413) DL	03/14/2013
480-34415-7	MW-10B (31413)	03/14/2013
480-34415-7 DL	MW-10B (31413) DL	03/14/2013
480-34415-8	MW-10 (31413)	03/14/2013
480-34415-9	MW-10D (31413)	03/14/2013

Water samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

Page 2

- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
- Calibrations
- \* Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
  - Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
- \* Compound Quantitation

### DATA VALIDATION SUMMARY

The problems with the matrix spikes and calibrations should be noted.

These are discussed in detail below

## **Holding Times**

All of the samples were preserved and analyzed within 14 days of collection.

## **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group.

## **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

#### **Initial Calibrations**

Three initial calibrations were analyzed with this sample delivery group.

All of the %RSDs in the 03/07/2013 initial calibration were less than 20% with the exceptions of 1,1,2-trichloro-1,2,2-trifluoroethane (22%) and methylcyclohexane (21%).

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

This initial calibration was associated with the following samples:

480-34415-1	MW-6B (31413)
480-34415-2	MW-6 (31413)
480-34415-3	MW-9 (31413)
480-34415-4	MW-9B (31413)
480-34415-5	MW-5 (31413)
480-34415-6	MW-5B (31413)
480-34415-7	MW-10B (31413)
480-34415-8	MW-10 (31413)
480-34415-9	MW-10D (31413)

All of the %RSDs in the 03/14/2013 HP5973N initial calibration were less than 20% with the exceptions of bromomethane (73%), chloroethane (24%),

This initial calibration was associated with the following samples:

480-34415-4 DL	MW-9B (31413) DL
480-34415-6 DL	MW-5B (31413) DL
480-34415-7 DL	MW-10B (31413) DL

All of the %RSDs in the 03/14/2013 HP5973Q initial calibration were less than 20% with the exceptions of bromomethane (23%), bromoform (32%) and 1,2-dibromo-3-chloropropane (22%).

This initial calibration was associated with the following samples:

480-34321-1	MW-1B (31313)
480-34321-2	MW-1 (31313)
480-34321-3	MW-7D (31313)
480-34321-3 DL	MW-7D (31313) DL
480-34321-4	MW-7 (31313)
480-34321-5	MW-7B (31313)
480-34321-6	MW-2 (31313)
480-34321-7	MW-2D (31313)
480-34321-8	DUP (31313)
480-34321-9	MW-2B (31313)
480-34321-10	MW-3B (31313)
480-34321-11	MW-3 (31313)
480-34321-12	MW-4 (31313)
480-34321-13	MW-8B (31313)
480-34321-14	Trip Blank

When any of the above samples were detected in an associated sample they were flagged with the "J" qualifier and are estimated values.

Undetected data were not affected by the high %RSDs and were not required to be qualified.

# **Continuing Calibrations**

All of the percent differences in the 3/21/2013 continuing calibration were less than 20% with the following exceptions:

Compound	%D
1,1-DICHLOROETHENE	23%
BROMOFORM	32%
BROMOMETHANE	21%
CHLOROETHANE	27%
METHYL ACETATE	24%
METHYLENE CHLORIDE	22%

This continuing calibration was associating with the following samples:

480-34415-2	MW-6 (31413)
480-34415-3	MW-9 (31413)

All of the percent differences in the 3/22/2013 continuing calibration were less than 20% with the following exceptions:

Compound	%D
BROMOFORM	31%
CARBON DISULFIDE	22%
CHLOROETHANE	26%
DIBROMOCHLOROMETHANE	21%

This continuing calibration was associating with the following samples:

480-34415-1	MW-6B (31413)
480-34415-4	MW-9B (31413)
480-34415-5	MW-5 (31413)
480-34415-6	MW-5B (31413)
480-34415-7	MW-10B (31413)
480-34415-8	MW-10 (31413)
480-34415-9	MW-10D (31413)

All of the percent differences in the 3/25/2013 continuing calibration were less than 20% with the following exceptions:

Compound	%D
1,2-DIBROMO-3-CHLOROPROPANE	23%
BROMOFORM	37%
CHLOROETHANE	24%
DIBROMOCHLOROMETHANE	22%

This continuing calibration was associating with the following samples:

480-34415-4 DL	MW-9B (31413) DL
480-34415-6 DL	MW-5B (31413) DL

All of the percent differences in the 3/26/2013 continuing calibration were less than 20% with the following exceptions:

Compound	CC
1,2-DIBROMO-3-CHLOROPROPANE	22%
BROMOFORM	32%
CHLOROETHANE	24%

This continuing calibration was associating with the analysis of sample 480-34415-7 DL / MW-10B (31413) DL.

All of the percent differences in the 3/20/2013 09:05 continuing calibration were less than 20% with the following exceptions:

Compound	%D
BROMOMETHANE	51%
CHLOROETHANE	28%

This continuing calibration was associating with the following samples:

480-34321-2	MW-1 (31313)
480-34321-3	MW-7D (31313)
480-34321-4	MW-7 (31313)
480-34321-5	MW-7B (31313)
480-34321-6	MW-2 (31313)
480-34321-9	MW-2B (31313)
480-34321-11	MW-3 (31313)
480-34321-12	MW-4 (31313)

All of the percent differences in the 3/20/2013 21:39 continuing calibration were less than 20% with the exception of chloroethane (25%).

This continuing calibration was associating with the following samples:

480-34321-1	MW-1B (31313)
480-34321-3 DL	MW-7D (31313) DL
480-34321-7	MW-2D (31313)
480-34321-8	DUP (31313)
480-34321-10	MW-3B (31313)
480-34321-14	Trip Blank

All of the percent differences in the 3/21/2013 continuing calibration were less than 20%.

This continuing calibration was associated with the analysis of sample 480-34321-13 / MW-8B (31313)

The data for the compounds with percent differences greater than 20% were flagged with the "J" qualifier and are estimated values.

All of the relative response factors (rrfs) were greater than 0.05.

## **Matrix Spike**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Sample 480-34321-1 //MW-1B (31313) was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% with the exception of 1,1-dichloroethane (64% & 67%) in the matrix spike and matrix spike duplicate.

The data for 1,1-dichloroethane were flagged with the "J" qualifier and are estimated values.

All RPDs were less than 30%.

Only 13 compounds were included in the matrix spike.

It is not known how compounds that were not part of the spiking solution would have been recovered.

## **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

#### **Method Blanks**

No compounds were detected in any of the method blanks.

## **Trip Blank**

No compounds were detected in the trip blank.

## **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

# **Sample Results**

No problems were detected with any of the samples.

# **SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics**

**Water Wet Chemistry Analyses** 

Samples Collected: June 6th & 7th, 2013 Samples Received at Test June 6th & 7th, 2013

Sample Delivery Group: 480-39633 **Laboratory Reference Numbers:** 

<b>Lab Sample ID</b> 480-39633-1	Field Sample ID MW-1-613	Date Collected / Received 06/06/2013
480-39633-1	MW-1B-613	06/06/2013
480-39633-2MS	MW-1B-613 MS	06/06/2013
480-39633-2MD	MW-1B-613 MS	06/06/2013
480-39633-2MD 480-39633-3	MW-2-613	06/06/2013
480-39633-4	MW-2B-613	06/06/2013
	MW-2D-613	06/06/2013
480-39633-5		
480-39633-6	MW-4-613	06/06/2013
480-39633-7	MW-8-613	06/06/2013
480-39633-8	DUP-613	06/06/2013
480-39633-9	MW-3-613	06/06/2013
480-39633-10	MW-3B-613	06/06/2013
480-39742-1	MW-7B-613	06/07/2013
480-39742-2	MW-7-613	06/07/2013
480-39742-3	MW-6B-613	06/07/2013
480-39742-3 MS	MW-6B-613 MS	06/07/2013
480-39742-3 MD	MW-6B-613 MD	06/07/2013
480-39742-4	MW-6-613	06/07/2013
480-39742-5	MW-5B-613	06/07/2013
480-39742-6	MW-5-613	06/07/2013
480-39742-7	MW-9B-613	06/07/2013
480-39742-8	MW-9-613	06/07/2013
480-39742-9	MW-10-613	06/07/2013
480-39742-10	MW-10B-613	06/07/2013
480-39742-11	MW-10D-613	06/07/2013
480-39742-12	MW-7D-613	06/07/2013

Water samples were validated for wet chemistry analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following analytes:

- Total Kjeldahl Nitrogen x
- \* Nitrate as N
- \* Nitrite as N
- \* Phosphorus
- \* Chloride
- \* Sulfate
- \* Total Organic Carbon
  - Alkalinity, Total
- \* Sulfide
- \* Indicates that all criteria were met for this parameter.

## **Data Validation Summary**

The problems with the alkalinity and TKN matrix spikes should be noted. These are described in detail below.

No other problems were detected that would affect the use of the data.

## **Holding Times**

All samples were analyzed within the required holding times.

## **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

## **Preparation Blank**

No compounds were detected in the preparation blanks.

### Calibration Blanks

No compounds were detected in the calibration blanks.

## Field Blank

A field blank was not collected with this sample delivery group.

### Matrix Spike Recovery

Several samples were used for matrix spikes due to the many runs often used for each parameter.

All recoveries were within the 70% - 130% quality control limits used for the purpose of the data validation with the following exceptions:

Alkalinity exhibited low recoveries for two spikes (53% - 59%) collected on 6/6 and 6/7.

All of the alkalinity data, with the exception of sample 480-39633-2 / MW-1B-613, were flagged with the "J" qualifier and are estimated values.

Sample 480-39633-2 / MW-1B-613 was also used for an alkalinity matrix spike and the recovery (90%) was within the required limits.

TKN recovered at 229% in sample 480-39742-12 / MW-7D-613.

Detected TKN data for the samples collected on 6/7 were flagged with the "J" qualifier and are estimated values.

All other recoveries and RPDs were within the required limits.

## **Duplicate Analysis**

Several samples were used for matrix duplicates due to the many runs often used for each parameter.

All RPDs for these analyses were less than 20%.

## **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

## **Instrument Detection Limit**

No problems were found with the instrument detection limits.

## Sample Results

No problems were detected with any of the data.

# DATA USABILITY SUMMARY REPORT Monroe Electrics

Water Volatile Organic Analyses by Method SW846 8260B

Samples Collected: June 6th & 7th, 2013

Samples Received at Test June 6th & 7th, 2013

Sample Delivery Group: 480-39633 Laboratory Reference Numbers:

Lab Sample ID	Field Sample ID	Date Collected / Received
480-39633-1	MW-1-613	06/06/2013
480-39633-2	MW-1B-613	06/06/2013
480-39633-2MS	MW-1B-613	06/06/2013
480-39633-2MSD	MW-1B-613	06/06/2013
480-39633-3	MW-2-613	06/06/2013
480-39633-4	MW-2B-613	06/06/2013
480-39633-5	MW-2D-613	06/06/2013
480-39633-6	MW-4-613	06/06/2013
480-39633-7	MW-8-613	06/06/2013
480-39633-8	DUP-613	06/06/2013
480-39633-9	MW-3-613	06/06/2013
480-39633-10	MW-3B-613	06/06/2013
480-39742-1	MW-7B-613	06/07/2013
480-39742-2	MW-7-613	06/07/2013
480-39742-4	MW-6-613	06/07/2013
480-39742-5	MW-5B-613	06/07/2013
480-39742-5 DL	MW-5B-613 DL	06/07/2013
480-39742-5 MS	MW-5B-613 MS	06/07/2013
480-39742-5 MSD	MW-5B-613 MSD	06/07/2013
480-39742-6	MW-5-613	06/07/2013
480-39742-7	MW-9B-613	06/07/2013
480-39742-8	MW-9-613	06/07/2013
480-39742-9	MW-10-613	06/07/2013
480-39742-10	MW-10B-613	06/07/2013
480-39742-11	MW-10D-613	06/07/2013
480-39742-12	MW-7D-613	06/07/2013

Water samples were validated for analyses of volatile organics by the US EPA Region II data validation SOP (HW-24, Revision 2, 2008). Data were reviewed for usability according to the following criteria:

- \* Data Completeness
- \* GC/MS Tuning
- \* Holding Times
  - Calibrations
  - Laboratory Blanks
- \* Trip Blank
- \* Surrogate Compound Recoveries
- \* Internal Standard Recoveries
- Matrix Spike
- \* Laboratory Control Samples
- \* Compound Identification
- \* Compound Quantitation

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

### **DATA VALIDATION SUMMARY**

The problems with the matrix spike, calibrations and laboratory blank should be noted.

These are discussed in detail below.

## **Holding Times**

All of the samples were preserved and analyzed within 14 days of collection.

### **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group.

## **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the quality assurance limits.

## **Calibrations**

Two initial calibrations were analyzed with this sample delivery group.

Several compounds had %RSDs greater than 20%. None of these were detected in any of the samples with the exception of chloroethane (27%) in the samples labeled 480-39633 collected on 6/6.

When chloroethane was detected in one of these samples, it was flagged with the "J" qualifier and is an estimated value.

All of the percent differences in the 6/11 (09:27) continuing calibration were less than 20% with the following exceptions:

Compound	%D
1,2-DIBROMO-3-CHLOROPROPANE	23%
CARBON DISULFIDE	25%
CYCLOHEXANE	24%
METHYLCYCLOHEXANE	23%

This continuing calibration was associating with the following samples:

480-39742-1	MW-7B-613
480-39742-2	MW-7-613
480-39742-3	MW-6B-613
480-39742-5	MW-5B-613
480-39742-6	MW-5-613
480-39742-7	MW-9B-613

480-39742-8	MW-9-613
480-39742-9	MW-10-613
480-39742-11	MW-10D-613

All of the percent differences in the 6/11 (20:56) continuing calibration were less than 20% with the exceptions of 1,2-dibromo-3-chloropropane (37%) and carbon tetrachloride (24%).

This continuing calibration was associating with the following samples:

480-39742-4	MW-6-613
480-39742-5 DL	MW-5B-613 DL
480-39742-10	MW-10B-613
480-39742-12	MW-7D-613

The data for these compounds were flagged with the "J" qualifier and are estimated values.

All of the relative response factors (rrfs) were greater than 0.05.

# Matrix Spike

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

Two matrix spikes were analyzed with this sample delivery group.

Sample 480-39633-2 / MW-1B-613 was used as the first matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% quality control limits.

Sample 480-39742-5 / MW-5B-613 was used as the second matrix spike and matrix spike duplicate. All of the recoveries were within the 70% - 130% limits with the exceptions of the 1,1-dicholoroethane recoveries in the MS and MSD (66% & 58%).

The data for this compound in all samples labeled 480-39742, collected on 6/7, were flagged with the "J" qualifiers and are estimated values.

All RPDs were less than 30%.

Only 13 compounds were included in the laboratory control sample.

It is not known how compounds that were not part of the spiking solution would have been recovered.

## **Laboratory Control Sample**

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits.

Only 13 compounds were included in the laboratory control sample.

### **Method Blanks**

No target compounds were detected in any of the method blanks.

A low level of non-target naphthalene (2 ug/l) was detected in the method blank associated with the following samples:

480-39633-1	MW-1-613
480-39633-3	MW-2-613
480-39633-4	MW-2B-613
480-39633-6	MW-4-613
480-39633-7	MW-8-613
480-39633-9	MW-3-613
480-39633-10	MW-3B-613

Low concentrations of naphthalene, less than 1.7 ug/l, were detected in the following samples:

480-39633-1	MW-1-613
480-39633-3	MW-2-613
480-39633-4	MW-2B-613

The naphthalene data for these samples were flagged with the "R" qualifier and technically rejected.

## **Trip Blank**

A trip blank was not analyzed.

## **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

## **Sample Results**

No problems were detected with any of the samples.

# **SUMMARY OF THE ANALYTICAL DATA VALIDATION Monroe Electrics**

Water Total Metals - Arsenic & Iron

Samples Collected: June 6th & 7th, 2013

Samples Received at Test June 6th & 7th, 2013 Sample Delivery Group: 480-39633

**Laboratory Reference Numbers:** 

Lab Sample ID	Field Sample ID	Date Collected / Received
480-39633-1	MW-1-613	06/06/2013
480-39633-2	MW-1B-613	06/06/2013
480-39633-2MS	MW-1B-613 MS	06/06/2013
480-39633-2MSD	MW-1B-613 MSD	06/06/2013
480-39633-3	MW-2-613	06/06/2013
480-39633-4	MW-2B-613	06/06/2013
480-39633-5	MW-2D-613	06/06/2013
480-39633-6	MW-4-613	06/06/2013
480-39633-7	MW-8-613	06/06/2013
480-39633-8	DUP-613	06/06/2013
480-39633-9	MW-3-613	06/06/2013
480-39633-10	MW-3B-613	06/06/2013
480-39742-1	MW-7B-613	06/07/2013
480-39742-2	MW-7-613	06/07/2013
480-39742-3	MW-6B-613	06/07/2013
480-39742-3 MS	MW-6B-613 MS	06/07/2013
480-39742-3 MSD	MW-6B-613 MSD	06/07/2013
480-39742-4	MW-6-613	06/07/2013
480-39742-5	MW-5B-613	06/07/2013
480-39742-6	MW-5-613	06/07/2013
480-39742-7	MW-9B-613	06/07/2013
480-39742-8	MW-9-613	06/07/2013
480-39742-9	MW-10-613	06/07/2013
480-39742-10	MW-10B-613	06/07/2013
480-39742-11	MW-10D-613	06/07/2013
480-39742-12	MW-7D-613	06/07/2013

Water samples were validated for inorganic analyses by the US EPA Region II data validation SOP (HW-2, Revision 13). Data were reviewed for usability according to the following criteria:

- \* Holding Times
- \* Calibration Verification
- \* CRDL Standard
- \* Laboratory Control Sample
- \* Serial Dilution
- \* Calibration Blanks
  - Field Blank
- \* Preparation Blanks
- \* Matrix Spike
- Duplicate Analyses
- \* ICP Interference Check Sample
- \* Detection Limit Results
- \* Linear Range
- \* Sample Results

## **Data Validation Summary**

No problems were detected that would affect the use of the data.

# **Holding Times**

All samples were analyzed within the required holding times.

### **CRDL Standards**

All of the CRDL standards were within the required limits.

## **Initial and Continuing Calibrations**

No problems were found with any of the initial or continuing calibrations.

## **Preparation Blank**

No compounds were detected in the one preparation blank.

### **Calibration Blanks**

No compounds were detected in the calibration blanks.

### Field Blank

A field blank was not collected with this sample delivery group.

<sup>\* -</sup> Indicates that all criteria were met for this parameter.

## **ICP Interference Check Sample**

All of the ICP Interference Check Sample recoveries were within the required limits.

## **Matrix Spike Recovery**

Two samples were used for the matrix spike and matrix spike duplicate.

Sample 480-39633-2 / MW-1B-613 was used as the matrix spike and matrix spike duplicate for the samples collected on 6/6/2013.

Sample 480-39742-3 / MW-6B-613 was used as the matrix spike and matrix spike duplicate for the samples collected on 6/7/2013.

All recoveries and RPDs were within the required limits.

## **Duplicate Analysis**

A matrix duplicate was not analyzed.

## **Laboratory Control Sample**

No problems were detected with the recoveries of the LCS standards.

### **Serial Dilutions**

Two samples were used for the serial dilutions.

Sample 480-39633-1 / MW-1-613 was used as the serial dilution for the samples collected on 6/6/2013.

Sample 480-39742-3 / MW-6B-613 was used as the serial dilution for the samples collected on 6/7/2013.

All percent differences that could be accurately calculated were less than 10%.

#### **Instrument Detection Limit**

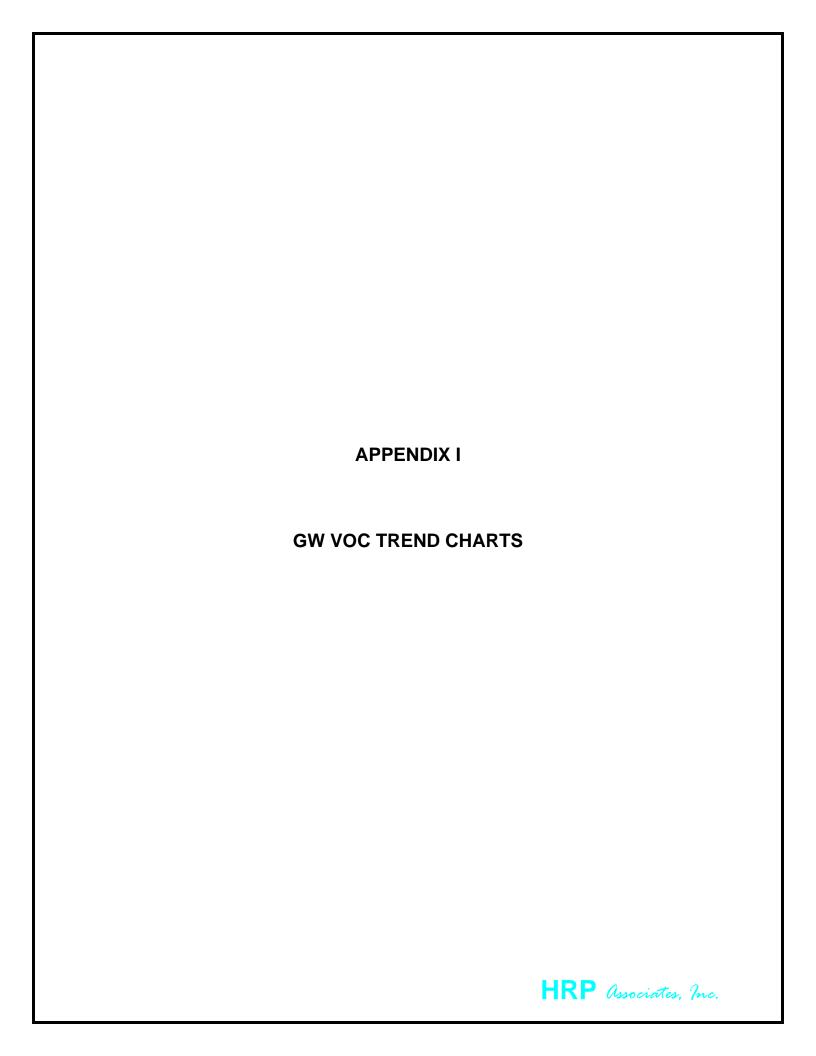
No problems were found with the instrument detection limits.

### **ICP Linear Ranges**

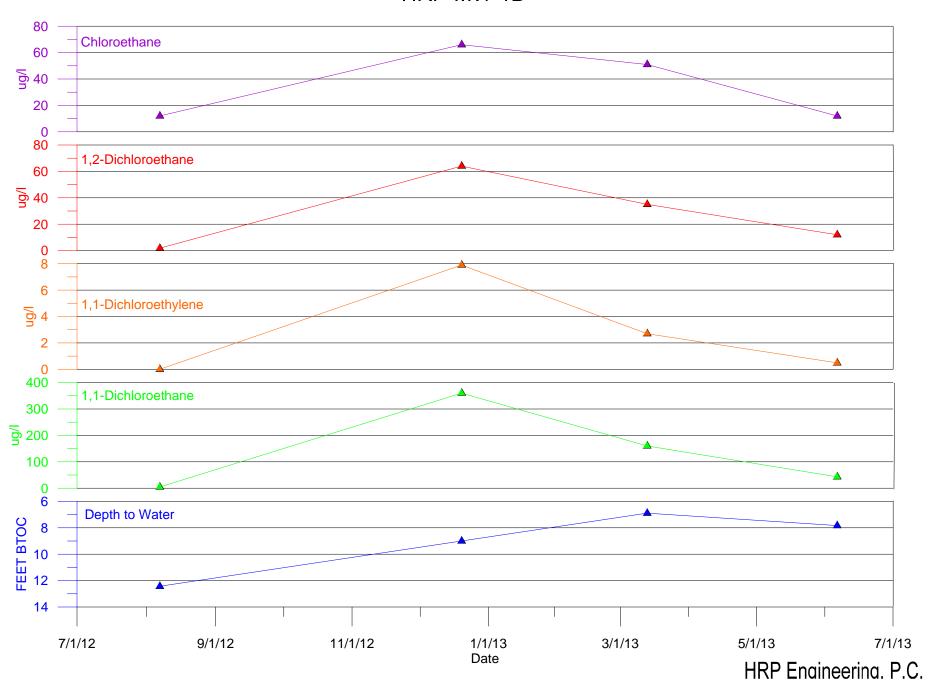
No problems were detected with the linear ranges.

## Sample Results

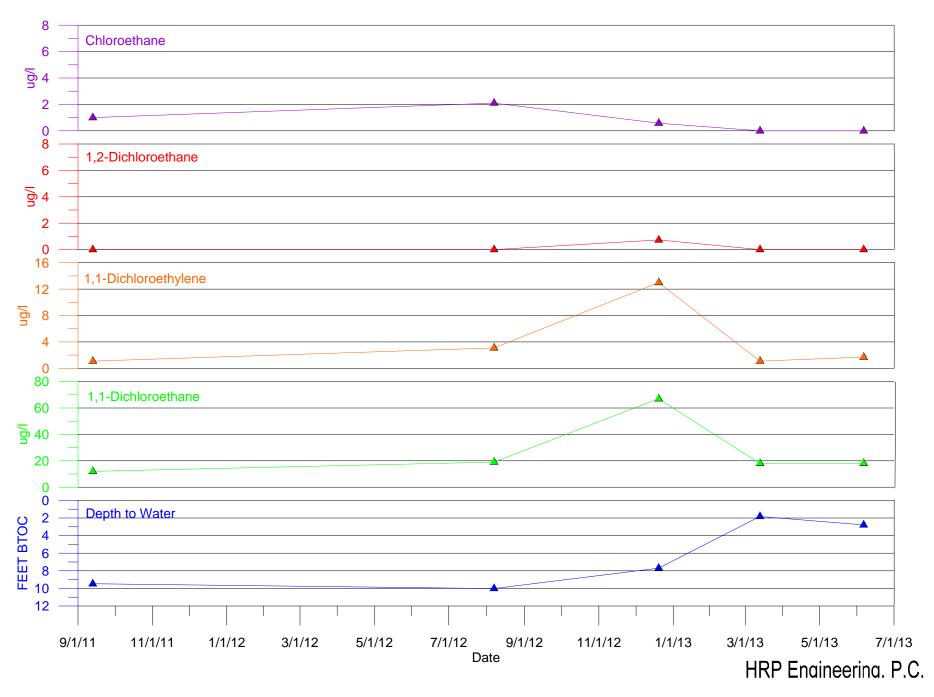
No problems were detected with any of the data.



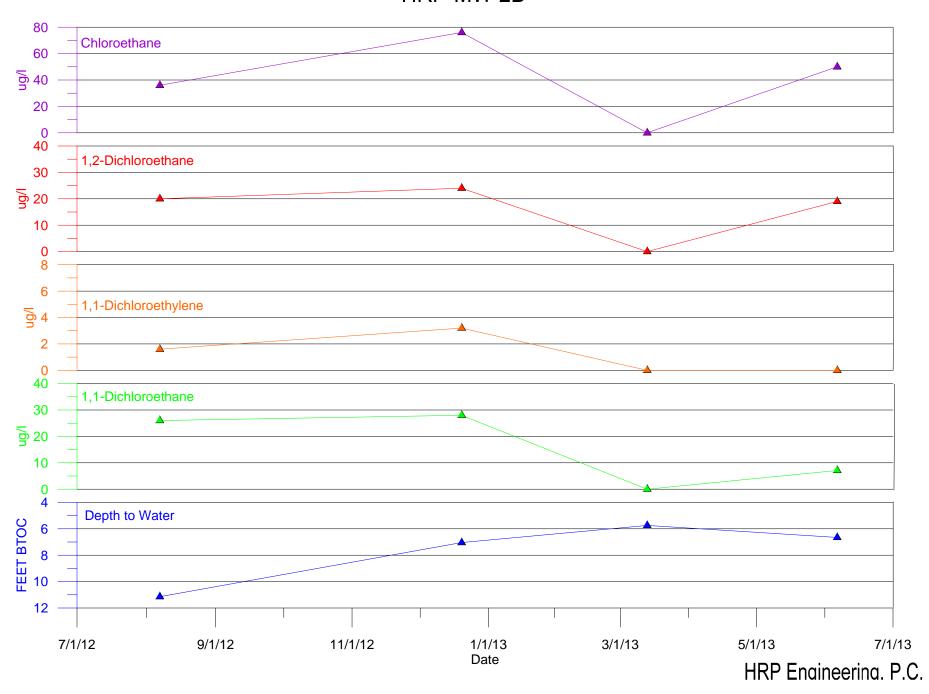
# Monroe Electronics Groundwater Trends HRP-MW-1B



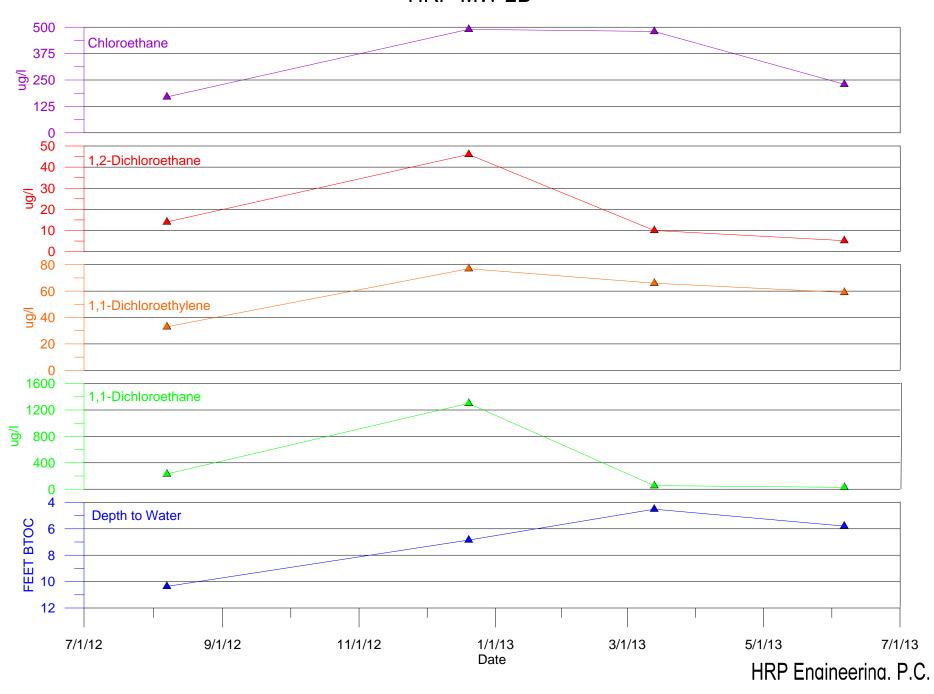
# Monroe Electronics Groundwater Trends HRP-MW-2



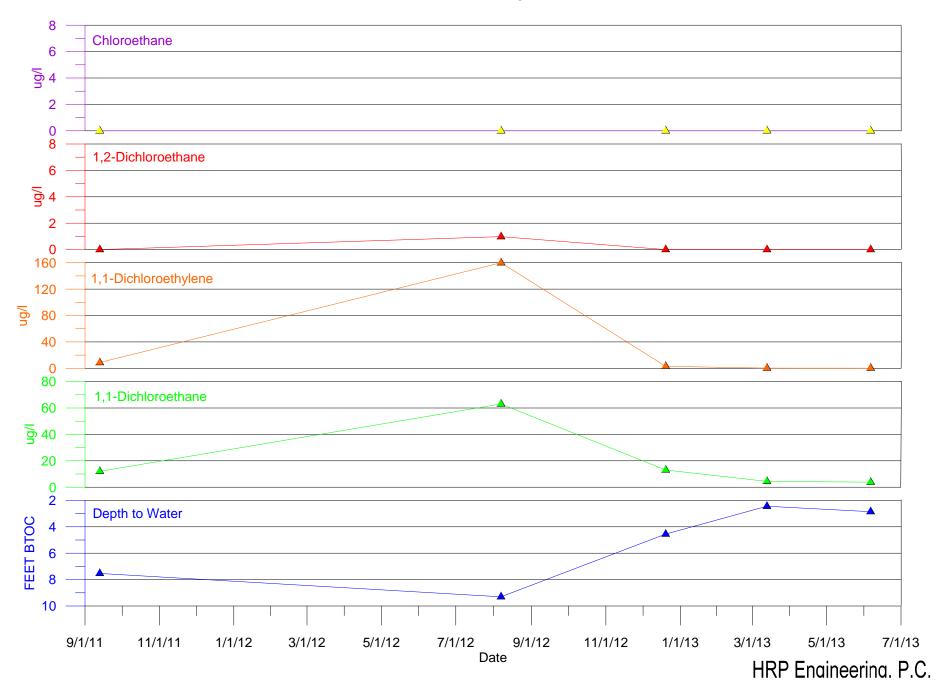
# Monroe Electronics Groundwater Trends HRP-MW-2B



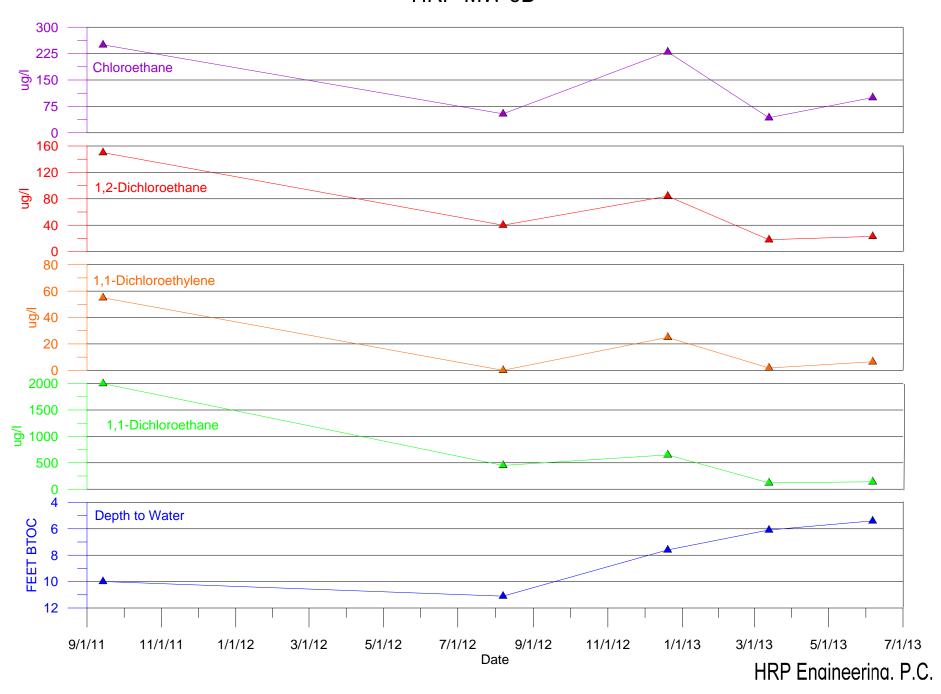
# Monroe Electronics Groundwater Trends HRP-MW-2D



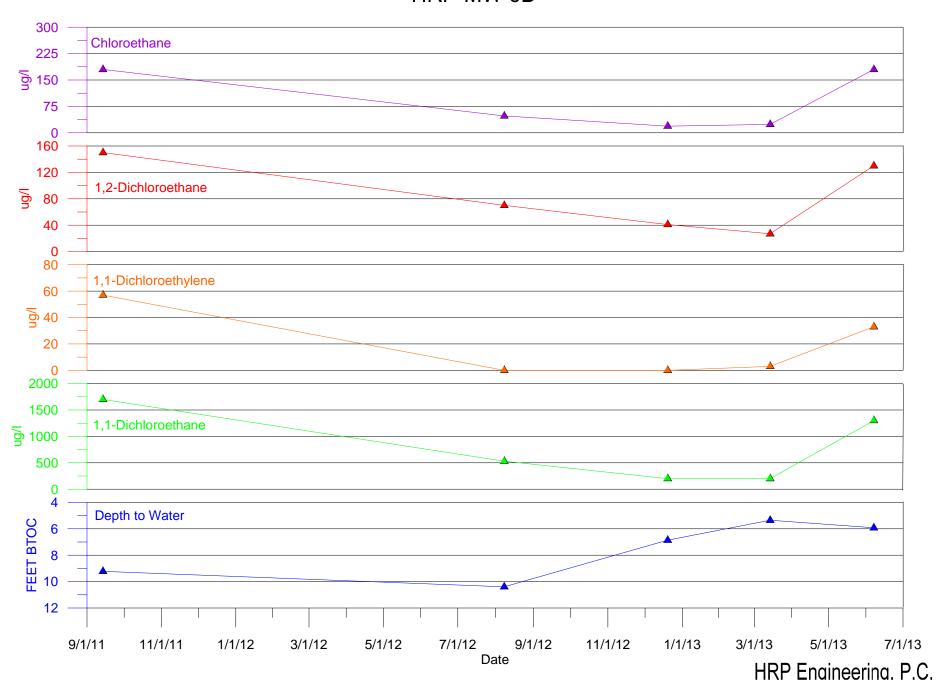
# Monroe Electronics Groundwater Trends HRP-MW-3



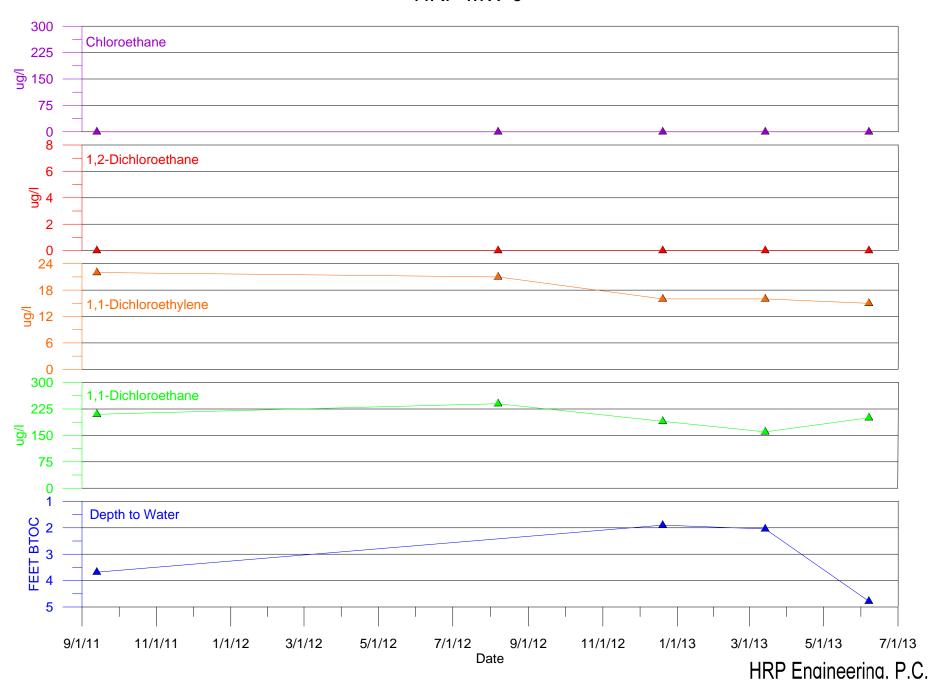
# Monroe Electronics Groundwater Trends HRP-MW-3B



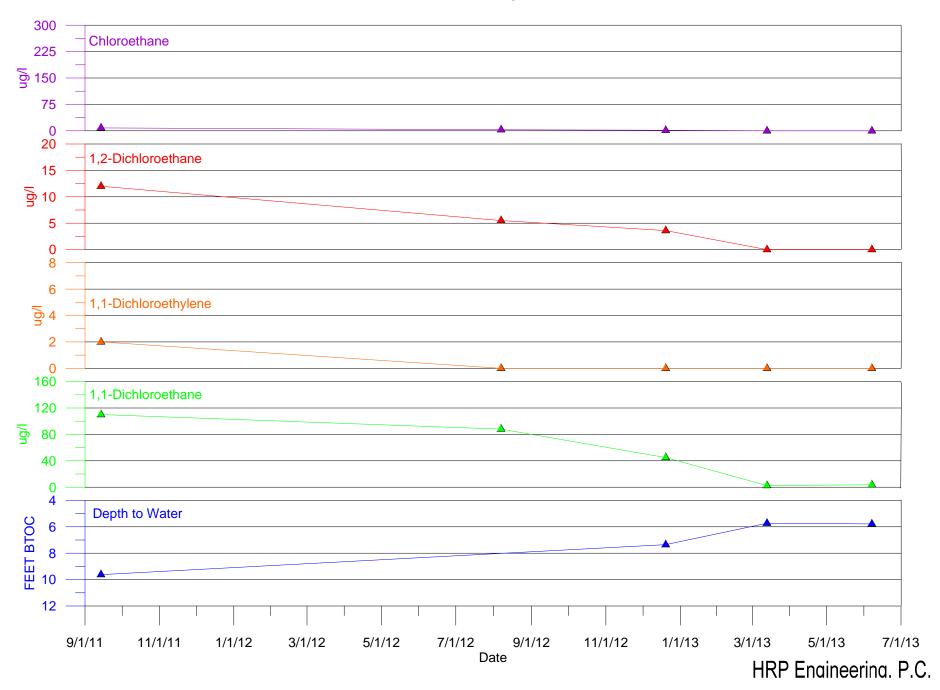
# Monroe Electronics Groundwater Trends HRP-MW-5B



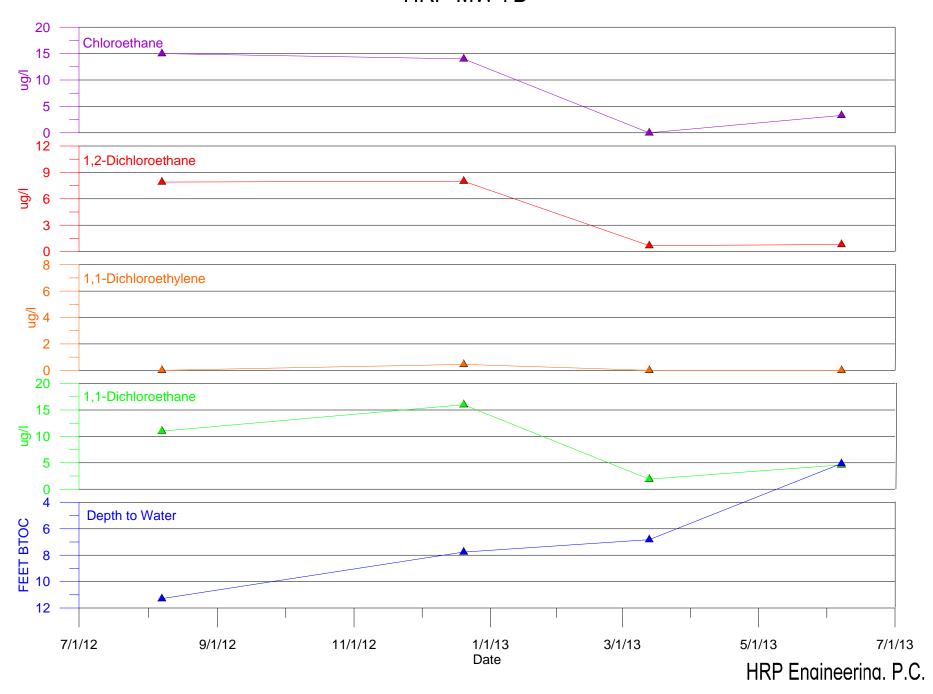
# Monroe Electronics Groundwater Trends HRP-MW-6



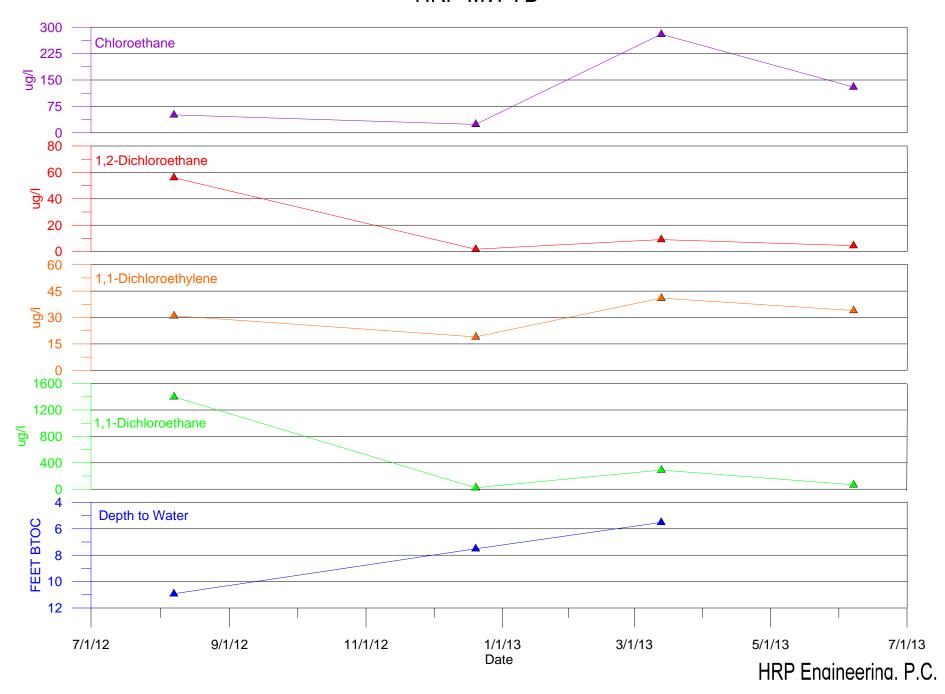
# Monroe Electronics Groundwater Trends HRP-MW-6B



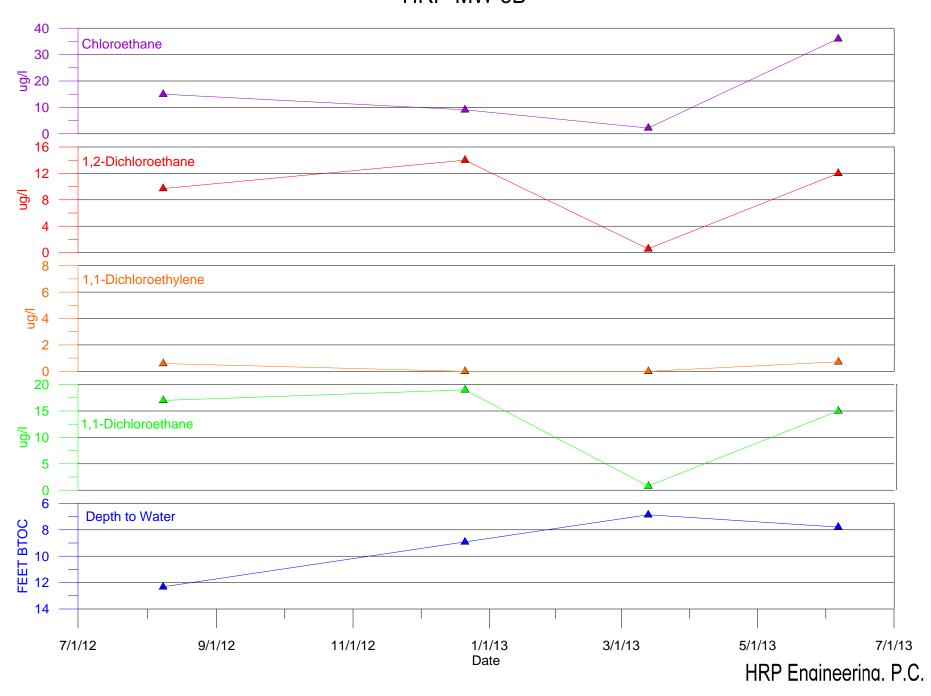
# Monroe Electronics Groundwater Trends HRP-MW-7B



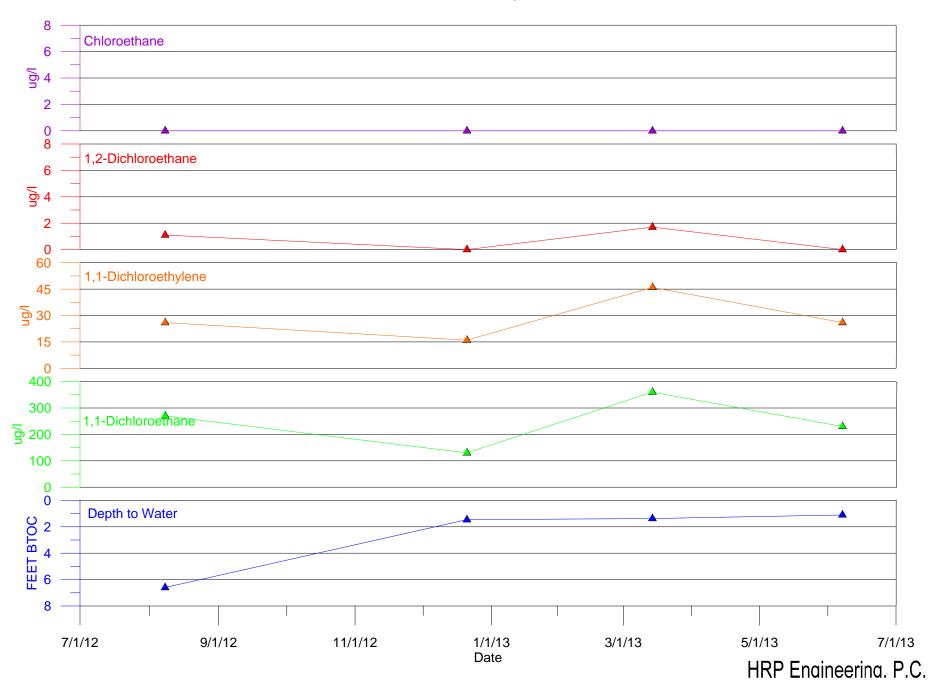
# Monroe Electronics Groundwater Trends HRP-MW-7D



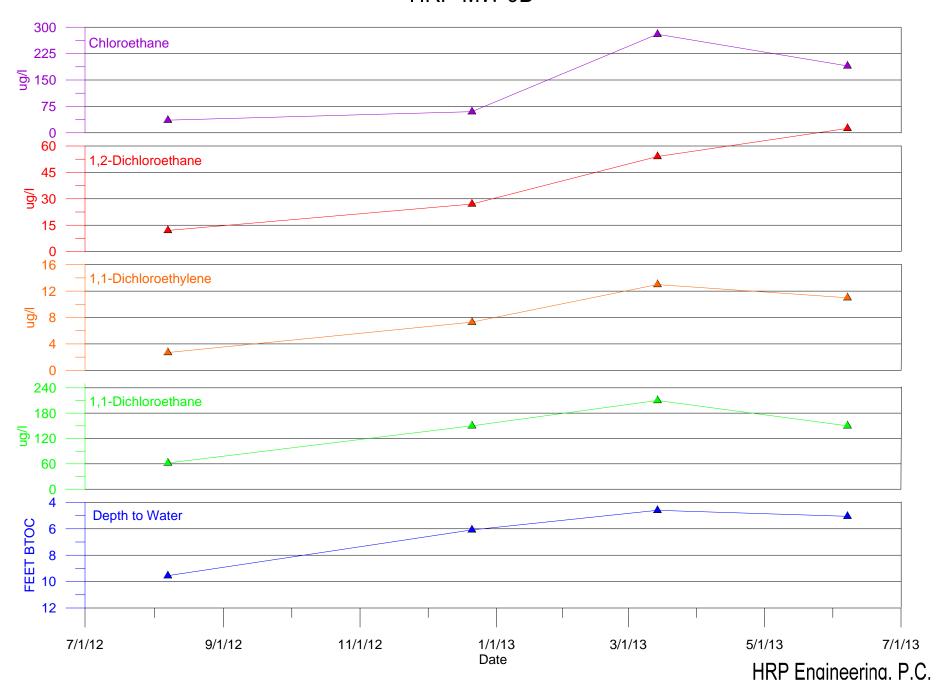
# Monroe Electronics Groundwater Trends HRP-MW-8B



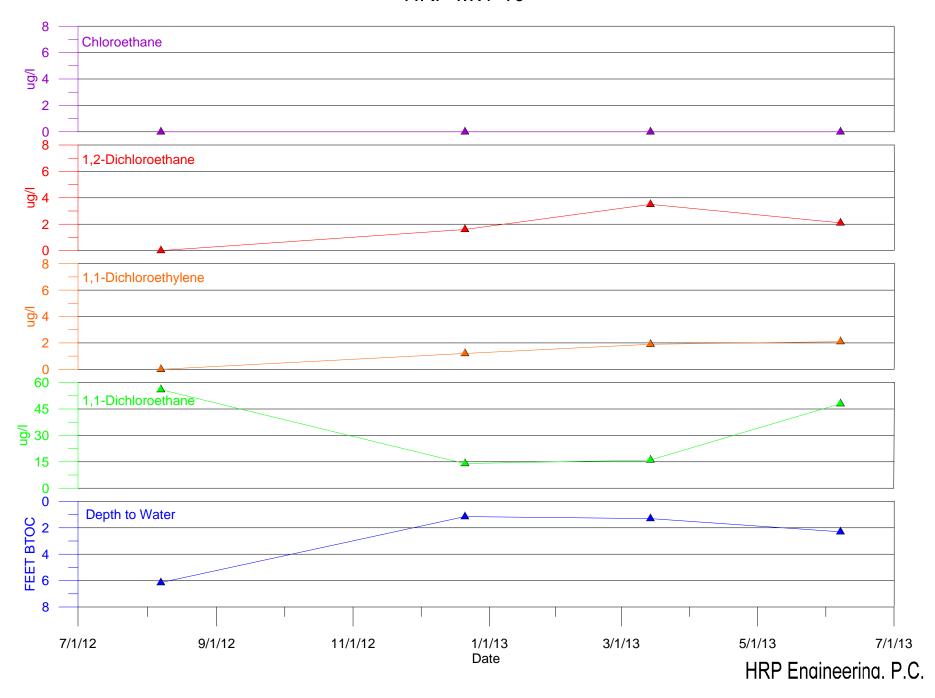
# Monroe Electronics Groundwater Trends HRP-MW-9



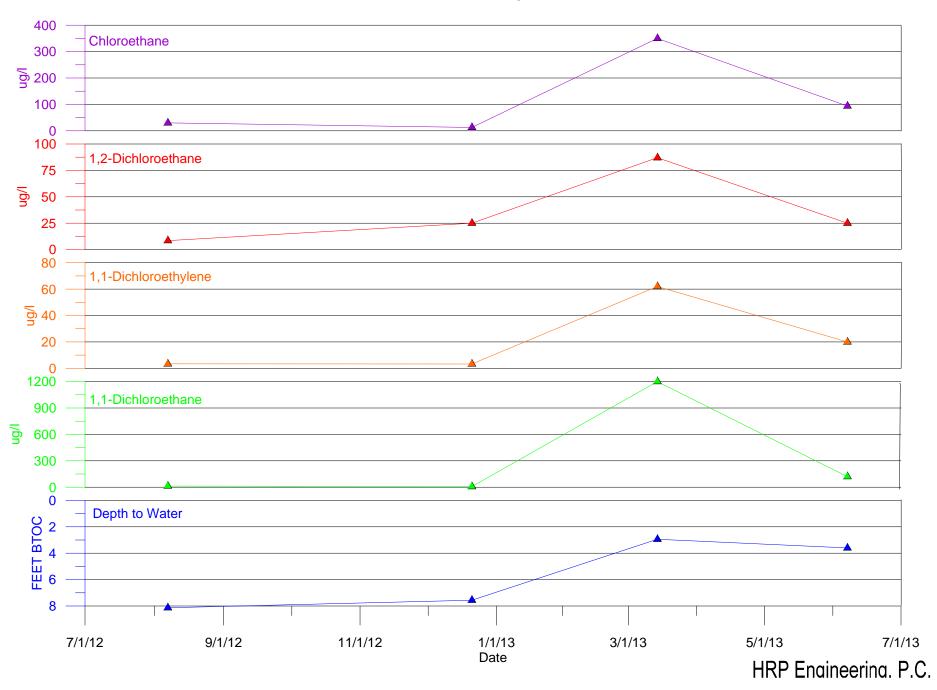
# Monroe Electronics Groundwater Trends HRP-MW-9B



# Monroe Electronics Groundwater Trends HRP-MW-10



# Monroe Electronics Groundwater Trends HRP-MW-10B



# Monroe Electronics Groundwater Trends HRP-MW-10D

