

REMEDIAL INVESTIGATION (RI) REPORT

**FORMER A&A METALS SITE
(NYSDEC No. 961011)
90 WASHINGTON BOULEVARD
VILLAGE OF PERRY, WYOMING COUNTY, NEW YORK**

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ENGINEERING • LAND SURVEY • MAPPING • ENVIRONMENTAL

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1.0 INTRODUCTION

1.1 Purpose

The Wyoming County Business Center Washington, LLC (WCBC) entered into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) to complete a Remedial Investigation (RI) program at the Former A&A Metals Site located at 90 Washington Boulevard, Perry, New York (project site). The WCBC was working in conjunction with Wyoming County and the Wyoming County Industrial Development Agency (WCIDA) so that the WCBC could acquire title to the site through a mortgage foreclosure. However, as a result of private interest in redeveloping the site, the WCBC recently decided that it is no longer financially prudent to remain in the BCP and has opted out. Remedial investigations at the site have therefore ceased.

The RI was completed in general accordance to the NYSDEC approved Remedial Investigation (RI) Work Plan, dated October 2010 and the NYSDEC document entitled DER-10/Technical Guidance for Site Investigation and Remediation, dated May 2010 (DER-10). The purpose of the RI program described herein was to characterize the nature and extent of contamination occurring on, and emanating from, the project site. While substantially complete, the exit from the BCP has limited the full characterization of the nature and extent of contamination at the site. Specifically, surface soil sampling has not been performed and the complete extent of subsurface soil and groundwater contamination had not been determined.

TVGA Consultants (TVGA) has prepared this report on behalf of the WCBC to provide a detailed description of the RI program implemented at the Former A&A Metals site. In addition to summarizing and documenting the methods used to investigate the project site, this RI Report describes the physical characteristics of the site and defines the nature, magnitude and extent of contamination encountered during the remedial investigation completed to date.

1.2 Site Background

1.2.1 Site Description

The A&A Metals site is located at 90 Washington Boulevard in the Village of Perry. The property is bounded on the north by the Silver Lake Outlet and an abandoned railroad grade; to the south and west by agricultural and undeveloped woodlots, and on the east by both commercial and residential properties. While the overall size of the property is 19.1 acres, the area within the BCP is approximately 12 acres. The location and layout of the project site are shown on Figure 1 and 2, respectively.

There are six buildings on the property in various states of disrepair. They include:

Building #1 – Truck Garage

The truck garage is an approximately 2,300-square-foot brick building that was used as an equipment service garage. It has two high bay doors, a concrete floor slab with floor drains and a vehicle lift.

Building #2 – Office/Industrial Shop

The office portion of this wood/brick framed building encompasses approximately 2,200-square-feet. The shop area, which was used for metal fabricating activities, is a 35,000-square-foot steel-framed structure with a concrete floor. Large portions of the walls and roof have collapsed and the floor has been removed. A partial basement exists in a portion of the building.

Building #3 – Industrial Shop

The 42,000-square-foot, industrial shop building contained the main metal fabricating activities. It is a steel-framed building with both concrete and wood block floors. Significant portions of the walls have collapsed, portions of the floor have been removed, and fire damage has occurred.

Building #4 – Warehouse

This approximate 24,000-square-foot steel-framed building has a concrete floor, two loading bays, and is in relatively good structural condition.

Building #5 – Garage/Storage Building

The approximate 5,000-square-foot garage/storage building appears to be structurally sound but has no doors.

Building #6 – Paint Shop/Sandblast Booth

Painting and sandblasting activities occurred in this approximate 800-square-foot building. The roof is in very poor condition and the building has no floor.

Some of the buildings may need to be demolished while others may be reused depending upon final redevelopment plans for the site.

1.2.2 Site History

The site was originally developed in the early 1900s by Kaustine Furnace and Tank Corporation for the manufacture of large steel tanks. The most recent owner, A&A Metals, also manufactured large steel tanks and industrial smokestacks. Manufacturing processes included fabricating, machining and painting operations. The property has been abandoned since 2002.

1.2.3 Previous Environmental Investigations

1.2.3.1 Phase I ESA

In July 2009, a Phase I Environmental Site Assessment (ESA) Report was prepared by Clark Patterson Lee (CPL) to identify potential environmental conditions in connection with the property. The following conclusions were developed during the Phase I ESA:

Area of Concern (AOC) # 1 Unknown fill on the parking lot area - There appears to be several feet of fill, consisting of unknown material. Drums were observed buried within the fill, along with significant quantities of metal. The drums contained burned residue and sand blast sand residue.

AOC #2 Aboveground storage tank facility - Historical (Sanborn Map) records indicate the presence of an above ground storage tank facility on the site. The tanks appear to have been removed; however, no records were available as to whether the tanks and pad were removed appropriately.

AOC #3 Transformers - There are two transformer pads on the property. There is significant oil staining around the transformers. There are no records to the transformer oils being removed. Given the approximate age of the transformers, it is likely these transformers contained PCB-oils.

AOC #4 Wood Floor Blocks - The flooring of the buildings #2 and #3 have significant quantities of oil-stained wood floor blocks.

AOC #5 Floor Drains - The garage building had two floor drains with significant oil staining on the concrete floor. It is not known if these drains are tied into the Village sanitary sewer system.

AOC #6 Sand Blast Residue - There are significant quantities of sand blast sand containing paint residue dumped behind building #6.

1.2.3.2 Phase II ESA

In July 2009, a Phase II ESA was performed by CPL to evaluate the recognized environmental conditions (RECs) identified in the CPL Phase I Environmental Site Assessment on the project. Sampling and analysis was completed to identify levels of contaminants associated with each REC.

REC #1 Unknown fills on the parking lot area - The parking area and northeastern part of the developed portion of the site has been filled with over 10 feet of soil and miscellaneous debris. There are numerous 55-gallon drums buried within the fill, and exposed on the surface of the fill slopes. The drums contain burned residue and sand blast sand residue. The extent of the fill is not known; however the topography of the parking lot and height of the slopes would indicate several thousand cubic yards of fill exist in this location.

Soil sample results indicated levels of semi-volatile organic compounds and metals levels that exceed NYSDEC's 6 NYCRR 375-6.8(b): Restricted Use Soil Cleanup Objectives levels for Commercial and Industrial Land Uses. Groundwater seepage samples did not identify significant levels of volatile organic compounds or metals exceeding NYSDEC's Water Quality Standards for Surface Waters and Groundwater other than for Lead in Water-2 sample.

REC #2 Above ground storage tank facility - Soil samples collected from this location indicated no levels exceeding of Restricted Use Soil Cleanup Objectives for Commercial and Industrial Land Uses.

REC #3 Transformers - Soil samples collected from oil-stained soils beneath the transformers did not identify any levels of PCBs.

REC #4 Wood Floor Blocks - The flooring of the buildings #2 and #3 have significant quantities of oil-stained wood floor blocks. The blocks themselves and soils beneath the blocks identified levels of semi-volatile organic compounds exceeding of Restricted Use Soil Cleanup Objectives for Commercial and Industrial Land Uses.

REC #5 Floor drains - No samples were collected at this location and there was no evidence of any soil staining or odors.

REC #6 Sand Blast Residues - There are significant quantities of sand blast sand containing paint residue dumped behind building #6. Sampling indicated semi-volatile organic compounds and metals concentrations that exceeded Restricted Use Soil Cleanup Objectives for Commercial and Industrial Land Uses.

2.0 METHODS OF INVESTIGATION

The scope of the Remedial Investigation program was generally consistent with that outlined in the NYSDEC-approved October 2010 Remedial Investigation Work Plan (RIWP) and the May 5, 2011 Addendum Letter to the October 2010 Work Plan. Modifications made to the Work Plan during the completion of the RI were approved by NYSDEC and the WCBC and are discussed within this report.

The purpose of the Remedial Investigation program was to further characterize the site to determine the nature and extent of contamination. The RI characterized the AOCs discussed in Section 1.2.3. Specifically, the intent of the RI, as described in the RI Work Plan, is to:

- Delineate the lateral and vertical extent of contaminants in all media at, or emanating from the site;
- Determine the surface and subsurface characteristics of the site (e.g., topography, geology and hydrology);

To accomplish these goals, the following tasks were completed during the field investigation:

- Completion of a site-specific Health and Safety Plan (HASP) which was adhered to by all personnel involved in the investigation of the site. The plan was prepared by a qualified person in general conformance with the HASP provided in the Work Plan to meet the requirements of DER-10, Chapter 1.9 and all requirements of the federal Occupational Safety Health Administration (OSHA) specified in 29 CFR 1910.120. In addition to the HASP, which is prepared for the protection of site workers, an Air Monitoring Plan was also prepared to address air monitoring procedures and identify measures and/or actions to ensure the protection of the public living and working near the site as well as any visitors to the site from exposure to site contaminants during investigation or remediation activities. The CAMP included a fugitive dust/particulate monitoring program in accordance with NYS Department of Health requirements.
- Completion of a project-specific Quality Assurance Project Plan (QAPP) in general conformance with the quality assurance procedures identified in the RI Work Plan and DER-10. The following was included in the QAPP:
 - A project description
 - A project organization chart illustrating the lines of responsibility of the sampling personnel
 - Sample custody procedures
 - The type and frequency of calibration procedures for field and laboratory instruments, internal quality control checks, and quality assurance performance audits and system audits

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- Preventative maintenance procedures and schedule and corrective action procedures for the field and laboratory instruments
 - An analytical methods/quality assurance summary table that includes the required information listed in 2.4(a)(2) of DER-10
 - Quality assurance objectives for data
 - Specific procedures to assess data precision, representativeness, comparability, accuracy, and completeness of specific measurement parameters
 - Data documentation and tracking procedures
 - Completion of test pits, test borings and soil probes to enable the classification, screening, sampling and chemical characterization of subsurface soil/fill.
 - Installation, development and sampling of groundwater monitoring wells to enable the determination of the groundwater flow direction and gradient, as well as the collection and chemical analysis of groundwater samples.
 - Evaluation of floor drains identified in Building #1 to determine the discharge location of the drains.
 - Collection and chemical analysis of transformer oil from each of the ten transformers identified on the site.
 - Collection and chemical analysis of surface water and sediment samples.
 - Evaluation of the resulting data and preparation of a report to:
 - Summarize and document the activities performed during the RI
 - Describe the physical characteristics of the project site
 - Describe the nature, magnitude and extent of contamination
 - Compare the analytical data to applicable regulatory levels

The following section describes the field tasks in detail.

2.1 Field Investigation

The following subsections describe the scope of field activities implemented during the remedial investigation program. This scope reflects minor deviations and/or additions from the initial scope, as some minor modifications were necessary to account for information obtained during the field investigation. The methods employed during the execution of the field tasks were detailed in the RIWP and associated addendums, while the procedures implemented to ensure the quality of the resulting field and laboratory data were in accordance with the Quality Assurance/Quality Control (QA/QC) Plan. Table 1 summarizes the number of samples collected during the RI investigative tasks, including QA/QC samples, and target analytes. Figure 3 indicates the sampling locations.

2.1.1 Test Pit Excavations

Seventeen test pits were excavated on May 9, 2011 in accordance with the RIWP. The test pit locations are shown on Figure 3. The purposes of the test pits were

to characterize the subsurface soil/fill conditions across the project site and identify and delineate areas of subsurface contamination via the field screening and chemical analysis of soil/fill samples. Test pits allow for the efficient characterization of large areas while facilitating the detailed inspection of each particular area.

SJB Services provided a rubber-tired backhoe and operator for the excavation of the test pits. Excavation occurred in one to two-foot increments until either native soils or the top of bedrock was encountered. Excavated material was staged directly adjacent to the test pit. Following characterization and sample collection, the excavated soil/fill was returned to the test pit from which it originated. The average depth of the test pits excavated was approximately 8 feet below grade.

TVGA's on-site representative visually examined the excavation and screened subsurface soil samples collected from the test pits for total organic vapors (TOVs) using a photoionization detector (PID). For each test pit, TVGA prepared test pit logs describing the overburden stratigraphy, pertinent observations and PID measurements. Logs that detail the observations made during the test pit activities are included in Appendix A.

Soil intervals exhibiting the highest TOV measurement or exhibiting other evidence of contamination were selected for chemical analysis. One sample was collected from each test pit to be analyzed for Target Compound List (TCL) volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), and Target Analyte List (TAL) metals. In accordance with the RIWP, QA/QC samples included a field duplicate, and a matrix spike/matrix spike duplicate (MS/MSD).

2.1.2 Soil Probes

A total of twenty-six soil probes were advanced on May 10 and 11, 2011 to characterize the subsurface geology across the site. Soil probe locations included the twenty-one soil probes identified in the RIWP, four soil probes advanced in Building No. 1 to investigate soil/fill conditions adjacent to the two identified hydraulic lifts and one soil probe specified by the NYSDEC that was advanced east of Building No. 6. The soil probes were advanced at the locations shown on Figure 3 using direct-push soil sampling equipment to collect continuous samples. The soil probe activities were conducted in accordance with the RIWP. A subcontractor to TVGA, SJB Services, provided and operated the direct-push drilling rig. The depths of the soil probes ranged from 8.5 to 16 feet below grade.

Soil samples from each probe were screened with a PID upon retrieval by separating the soil column with a decontaminated stainless steel spoon and placing the PID probe tip near the void. This was recorded as a "direct" TOV reading. The direct TOV measurement and soil descriptions were recorded on Soil Probe Logs, which are included in Appendix A. Following characterization and sample collection, the excess soil/fill was placed back into the probe hole from which it originated and the upper 12-inches of the probe hole was sealed using bentonite chips.

Twenty-four soil/fill samples were collected from the soil probes for chemical analysis, which included TCL VOCs, SVOCs, and TAL metals. Additionally, two samples from the soil probes advanced in Building No. 1 were analyzed for TCL PCBs. The selected analyses, which are listed in Table 1, were based on photoionization, visual and olfactory observations.

2.1.3 Test Borings and Monitoring Well Installations

A total of eleven test borings were advanced on the project site on May 16 through 25, 2011 to characterize the subsurface soil/fill and facilitate the installation of groundwater monitoring wells and the collection of groundwater samples. Test borings and monitoring wells were installed to further characterize subsurface and groundwater conditions and evaluate groundwater flow across the site. The test boring/monitoring well locations and resulting groundwater contours are shown on Figure 3 and 4.

The drilling, split-spoon sampling, and monitoring well installation procedures were completed in accordance with the RIWP. A rubber-tire rotary drilling rig equipped with hollow-stem augers was used to advance the test borings into the overburden materials. Split-spoon sampling for the eleven test borings were advanced to depth from 10.8 to 22.8 feet. The depths of the monitoring wells ranged from 13 to 24.7 feet below grade and the wells were screened in the uppermost water-bearing zone within the overburden.

Retrieved soil samples from each test boring were screened for TOVs using a PID. The TOV values and soil descriptions are recorded on Test Boring Logs. These logs and Monitoring Well Completion Reports are included in Appendix A.

2.1.4 Groundwater Sampling

The eleven new groundwater monitoring wells were developed and sampled in accordance with the procedures detailed in the RIWP. Prior to the initiation of groundwater sampling, groundwater levels were measured to determine the groundwater flow direction and gradient using an electronic water interface indicator. A light non-aqueous phase liquid (LNAPL) layer was identified in MW-4.

Prior to purging of MW-4 a sample of the LNAPL was collected and analyzed by NYSDOH method 310.13 for a petroleum fingerprint analysis and total petroleum hydrocarbon determination.

Groundwater development consisted of the evacuation of a minimum of five well volumes from each of the wells or purged until dry conditions were observed. Dedicated polyethylene bailers were used for the development of the monitoring wells. After the completion of development, the monitoring wells were allowed to recharge. The samples were collected within 24 hours of completion of well development using dedicated polyethylene bailers in accordance with the RIWP. Well Development and Sampling Logs are included in Appendix A.

The groundwater samples collected from each well were submitted for analysis of TCL VOCs and SVOCs and TAL metals. Additionally, groundwater samples collected from MW-3, MW-4, MW-8, MW-9, MW-10, and MW-11 were also submitted for analysis of dissolved metals due to turbidity measurements of greater than 50 NTU at the time of sample collection.

2.1.5 Surface Water and Sediment Sampling

Four surface water and four sediment samples were collected during the RI in order to characterize seeps and stormwater discharging from a 36-inch diameter storm water pipe outlet in the vicinity of the Silver Lake outlet. Surface water and sediment sample locations are identified on Figure 3. Surface water samples were collected from two seeps located along the northern property boundary of the site, a 36-inch diameter storm water pipe discharging to the Silver Creek Outlet and at the outlet of an approximately six-inch drainage pipe discharging a drainage ditch on the south side of the abandoned railroad north to the Silver Creek outlet. Sediment samples were collected immediately upgradient of the surface water samples with the exception of the samples collected at the 36-inch storm water pipe and the six-inch drainage pipe. The sediment sample was collected immediately down gradient of the storm water pipe and from the ditch near the inlet of the drainage pipe. Each surface water sample was analyzed for TCL VOCs, SVOCs and TAL Metals. Each sediment sample was analyzed for TCL VOCs, SVOCs, total organic carbon (TOC) and TAL metals and was collected in accordance with the RIWP.

2.1.6 Transformer Oil Sampling

Two transformer banks were identified adjacent to Buildings No. 2 and No. 3 (Figure 7). Transformer Oil samples were collected from each of the ten identified transformers. The transformers were sampled using dedicated bailers via opening fill ports, drain cocks or removing lids. Each transformer was analyzed for PCBs.

2.1.7 Site Drains

Four floor drains were indentified in Building 1 as an environmental concern. Two of the floor drains were located approximately 6 feet from the western wall and approximately 14 feet apart. For discussion purposes the northern drain was labeled as drain #1 and the southern drain as #2. The remaining two drains were located centrally in Building 1 orientated east-west and approximately 11 feet apart. The western drain was labeled as #3 and the eastern drain as #4. These drains are depicted in Figure 2A. As part of the remedial investigation the objective was to determine the discharge terminus of the floor drains. Building 1 was formerly used as a truck garage for equipment repair services and contains two hydraulic lifts. In order to determine the discharge location of the floor drains, water was run from an on-site hydrant into the individual floor drains. A sanitary manhole was identified east of Building 1 in the site access road as a possible discharge location. After no discharge location could be determined, fluorescent dye was added to drain #2, then drain #1.

2.1.8 Surface Soil Samples

Surface soil samples were not collected during this remedial investigation as they were not called for in the RIWP.

2.2 Sample Analysis/Validation

2.2.1 Laboratory Analysis

Paradigm Environmental Service, Inc. (Paradigm) performed the chemical analyses of all samples collected during the RI. Paradigm is accredited under the New York State Environmental Laboratory Approval Program (ELAP) Contract Laboratory Program (CLP). All samples collected during the RI were analyzed using the applicable methods prescribed by the NYSDEC Analytical Services Protocol (ASP), June 2000. Category B deliverables were generated for these samples. The target analytes for the project are identified and summarized in Table 1.

2.2.2 Quality Assurance/Quality Control Samples

In addition to field samples, Quality Assurance/Quality Control (QA/QC) samples were collected to evaluate the effectiveness of the QA/QC procedures implemented during the field and laboratory activities associated with the project. These QA/QC samples were collected and analyzed in accordance with the April 2011 Quality Assurance Project Plan (QAPP) developed for the project site. As reflected by Table 1, QA/QC samples included matrix spike (MS), matrix

spike duplicate (MSD) and matrix duplicate (MD) samples, trip blanks and blind field duplicates.

3.0 PHYSICAL CHARACTERISTICS OF THE STUDY AREA

3.1 Site Structures

The project site includes six separate structures in various states of disrepair. Refer to Section 1.2.1 for a description of these structures.

3.2 Site Geology and Hydrology

The majority of the site is relatively flat, gently sloping toward the north and Silver Lake Outlet. Slopes increase significantly near the Outlet. There are no established natural drainage features (streams, creeks, etc.) on the parcel.

According to the United States Department of Agriculture - National Resources Conservation Service Online Web Soil Survey, the majority of the soils in the project area are classified as LaB - Langford Channery Silt Loam. These soils are generally found on slopes of 3 to 8 % and are very deep and well drained. The parent material consists of loamy till derived from siltstone, sandstone, shale, and some limestone. Soils in this classification are in the Hydrologic Group C.

The project site is in close proximity to Silver Lake Outlet. The topography of the project site is such that surface water runoff has a high potential to drain directly to the Silver Lake Outlet. Site groundwater flows generally north towards the Silver Lake Outlet, as shown on Figure 4. The project site is also in close proximity to Silver Lake. Silver Lake is on the New York State Section 303(d) List of Impaired/TMDL Waters and is also denoted as a high priority water body, scheduled for TMDL/restoration strategy development and submission for approval to USEPA within the next two years.

3.3 Geology

An evaluation of the subsurface stratigraphy of the project site was completed by integrating the data collected during the subsurface investigation with existing published information on the geology and hydrogeology of the project area.

The subsurface stratigraphy can be divided into four significant units, which are described in descending order as follows:

- Soil/fill material
- Native material
- Weathered shale bedrock
- Shale bedrock

3.3.1 Soil/Fill Material

The soil/fill material on the project site is present as the uppermost unit at the site and varies in thickness from zero to thirteen feet. The composition of this material reflects the various historical operations conducted on the project site. In general, the uppermost soil/fill material primarily consists of six types of material that included topsoil; gravel; slag and metal fill; sand; construction and demolition debris; and a mixture of soil/fill materials. Topsoil was encountered throughout the property, away from buildings and asphalt and concrete covered portions of the property. The topsoil encountered consisted of dark brown silty sand with various amounts of gravel and organic material. In portions of the property with concrete or asphalt surfaces, the uppermost soil/fill material consisted of angular gray gravel varying in size. The uppermost soil/fill material in Building 3 generally consisted of a dark rusty color, coarse sand containing rusty metal pieces lens immediately under the wood block or brick floor. The soil/fill material under the sand lens generally consisted of a light brown sand and gravel fill. A light brown fine sand fill was encountered as the uppermost soil/fill material in the area to the west of Building 6. Red and black staining was observed on sand and rock material in this soil/fill material in this area. The uppermost soil/fill material, near the top of bank, in the northeastern portion of the property consisted of a brown sandy silt with various fill materials including slag; rusty metal pieces and strapping; brick; concrete; glass; black fiber material; wood; and plastics. This material was encountered at the surface and to a depth of 13.5 feet, the maximum limit of the excavator.

3.3.2 Native Material

Native material was encountered immediately below the soil/fill material in test pits, geoprobes and test borings throughout the site. The native overburden material was encountered in two layers across the property. This material was identified as native material based on comparisons to subsurface soil encountered at greater depths and across the site. This material ranges in thickness from 3.5 to 14 feet and consists of brown, clayey silt with little sand and weathered rock, slight to nonplastic, gray and orange mottling and moist to wet moisture. The lower native layer is similar to the overlying layer consisting of gray-brown clayey silt with some sand and weathered rock, generally nonplastic, moist to wet. As depth increases the presence of gray silty soil and weathered rock becomes more prevalent.

3.3.3 Weathered Shale Bedrock

Weathered shale was encountered at the majority of the subsurface investigation points across the site. The weathered shale is likely a mixture of the upper Nunda Formation and West Hill and Gardeau Formation Shales, which are the

uppermost bedrock layer that underlies the entire project site. This layer is friable, and ranges in color from gray to dark gray. The layer thickness varied from 2.3 to 7.5 feet across the site. A review of the subsurface investigation logs indicate that the weathered shale generally slopes to the north towards the Silver Lake Outlet from the southern portion of the property.

3.3.4 Shale Bedrock

The competent shale bedrock encountered beneath the project site is also part of the Nunda Formation or West Hill and Gardeau Formation Shale. The color of the shale ranged from gray to dark gray and it was very competent with few apparent discontinuities. The depth to competent bedrock varied across the site, with the shallowest occurrence in the southern portion of the site at approximately 12 feet below ground surface and the deepest occurrence in the northern portion of the site at approximately 24 feet below ground surface.

3.4 Hydrogeology

3.4.1 Groundwater

Hydrogeologic conditions across the project site were evaluated through the installation, development and sampling of eleven new wells (MW-1 through MW-11). The Monitoring Well Construction Reports completed as part of this investigation as well as Development and Sampling Logs are included in Appendix A.

Although perched water was encountered in the permeable fill in a few locations across the site saturated conditions were not consistently observed in the fill layer. As such, the upper-most water-bearing zone defined on the project site occurs within the glacial till and weathered shale bedrock. This water-bearing zone was encountered in all of the wells and well screens were set across the interface of the bedrock.

Static water levels were measured on June 1, 2011, and Table 2 summarizes the groundwater elevation measurements. These measurements and resulting groundwater contours are shown on Figure 4. The depths to groundwater generally ranged from 1 to 13 feet below grade. The groundwater contour map indicates that the groundwater flow direction is generally to the north towards the Silver Lake Outlet.

3.4.2 Surface Water

No surface water bodies occur on the project site. However, the Silver Creek Outlet is located approximately 25' north of the project site where it flows in an easterly direction. Surface water samples were collected from four locations

along the northern property boundary. Two samples were collected from seeps in the northern slope of the property where the site's grade drops to meet the Silver Creek Outlet. A surface water sample was collected from the outlet of a 30-inch diameter stormwater pipe that collects water from ditches on either side of the site access road, travels under the eastern portion of the property and discharges north into the Silver Lake Outlet. The last surface water sample was collected from a 6-inch diameter drainage pipe. The drainage pipe discharges water from a ditch along the northern property boundary into the Silver Lake Outlet.

Storm water runoff on the site that does not enter the two known catch basins located centrally in the asphalt parking area on the eastern portion of the property and at the northwestern end of the site access road, or percolate into the subsurface, generally flows to the north towards the Silver Lake Outlet.

3.5 Site Drains

The on-site storm water and wastewater systems are abandoned and not well understood. Site utility maps were not available and historical information is limited; however, on site drains were identified in Building 1 to be a concern. As part of the remedial investigation the objective was to determine the discharge terminus of the four floor drains.

The floor drains were observed to be 1-foot by 1-foot, with covers and approximately 15-inches to solid bottom. Two inches of sediment was observed in drains #1 and #2 and approximately four inches of sediment was observed in drains #3 and #4. Discharge directions for each floor drain were identified to be to the south for drain #1 one and to the north for drains #2, #3 and #4.

As described in Section 2.1.7 water was run into each drain, followed by fluorescent dye into drain #1. Water from drain #2 appeared in drain #3, indicating that the drains are inter connected. Dye from drain #2 appeared in two seeps east of Building 1. The seeps were located approximately 30 feet east and 10 feet north and 50 feet east and 15 feet north of the northeast corner of Building 1. Water and dye from the seep flowed northeast into a drainage ditch along the site access road. The ditch flowed north into a drainage inlet at the end of the access road. The dye was observed in the outlet of the 30-inch storm water pipe, which discharges into the Silver Lake Outlet, north of the property. No water or dye was observed in the manhole east of Building 1. It is suspected that the pipe from the building to the manhole is crushed causing the seeps. After the dye from drain #2 was flushed out, dye was put in drain #1 and appeared in the same locations.

4.0 NATURE AND EXTENT OF CONTAMINATION

The following sections summarize and discuss the analytical results generated during the RI. Subsurface soil/fill, groundwater, surface water, sediment, and transformer samples were collected for chemical analysis to determine the magnitude and extent of potential contamination occurring in various media at the site. A summary of the RI sampling program, including the number and type of QA/QC samples is presented in Table 1.

For discussion purposes, this data is compared with the Standards Criteria and Guidance values (SCGs) applicable to each medium sampled, and include:

- Soil/Fill/Sediment: NYSDEC's 6NYCRR Part 375 Environmental Remediation Programs: Part 375-6.8: Residential, Commercial and Industrial Use Soil Cleanup Objectives (SCOs)
- Groundwater: NYSDEC's June 1998 Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations in the Technical and Operational Guidance Series (TOGS) 1.1.1
- Transformer Oil: 6NYCRR Part 371.4(e) Wastes containing polychlorinated biphenyls (PCBs), NYS Hazardous Waste Characterization

A series of summary tables (Tables 3 through 7) comparing the data to the applicable SCGs has been integrated into the following discussions. The analytical laboratory reports are included in Appendix B.

4.1 Subsurface Soil/Fill

Forty-one subsurface soil/fill samples were collected from test pits and soil probes from across the project site to characterize the subsurface soil/fill material. The subsurface soil/fill samples collected from the site were analyzed for TCL VOCs, TCL SVOCs and TAL metals. Additionally, two samples were also analyzed for TCL PCBs. Because PCBs were not detected in either of the two samples, PCBs are not discussed in the following paragraphs. The analytical results for the subsurface soil/fill samples are summarized in Table 3, and the locations of subsurface investigation points are depicted on Figure 3.

Solvent or petroleum odors and elevated PID readings were observed in SP-4, SP-5, SP-7, SP-9, SP-13, SP-15, SP-16, SP-20, SP-22, SP-23, SP-25, TP-6, TP-7, TP-13 and TP-14. Although VOCs were detected in most of the subsurface soil/fill samples, only one of the samples contained VOCs at concentrations exceeding the Residential Use SCOs. 1,2,4-trichlorobenzene was detected at a concentration exceeding the residential SCO in SP-25.

SVOCs were detected in 22 of the 41 subsurface soil/fill samples. Ten samples (SP-10, SP-26, TP-3, TP-4, TP-5, TP-9, TP-10, TP-11, TP-12 and TP-15) contained one or more SVOCs at concentrations exceeding the Industrial Use SCOs. Additionally, these samples contained SVOC concentrations that exceeded the Commercial and Residential Use SCOs. Remaining locations contained concentrations below the Residential Use SCOs.

Arsenic was detected at concentrations exceeding the Industrial Use SCOs in seven (SP-6, SP-14, SP-20, SP-21, TP-4, TP-9 and TP-14) subsurface soil/fill sample. Additionally, lead in SP-21 and manganese and nickel in TP-9 were detected at concentrations exceeding the Industrial Use SCOs. No other metals concentrations exceeded Industrial Use SCOs in the subsurface soil/fill samples. Concentrations exceeding the Commercial Use SCO included barium, copper and nickel in TP-4 and copper in TP-9. Additionally, concentrations of barium, cadmium, chromium, lead, manganese and mercury in one or more locations exceeded Residential Use SCOs.

Figure 5 indicates contaminants of concern in the subsurface soil/fill samples with concentrations which exceed Industrial Use SCOs and Commercial Use SCOs.

4.2 Groundwater

Groundwater samples were collected from the eleven newly installed monitoring wells (MW-1 through MW-11). The monitoring wells were analyzed for TCL VOCs and SVOCs and TAL metals. Due to turbidity measurements at the time of sampling exceeding 50 NTUs, six monitoring wells (MW-3, MW-4, MW-8, MW-9, MW-10 and MW-11) were sampled and analyzed for dissolved metals in addition to total metals. The analytical results for the groundwater samples are summarized in Table 4 and the locations of monitoring wells are depicted on Figure 3.

Prior to the initiation of groundwater sampling a LNAPL layer was identified in MW-4. Prior to purging of the well a sample of the LNAPL was collected and analyzed by NYSDOH method 310.13 for a petroleum fingerprint analysis and total petroleum hydrocarbon determination. The results of this analysis indicated that the LNAPL had a petroleum fingerprint of diesel fuel and a total petroleum hydrocarbon concentration of 4,860 ug/L.

One or more VOCs were detected in five of the eleven groundwater samples. However, only four monitoring wells (MW-1, MW-3, MW-10 and MW-11) contained VOC concentrations exceeding the SCGs. SVOCs were detected in three monitoring wells; however, only bis(2-ethylhexyl)phthalate was detected in MW-6

at a concentration exceeding the SCGs. The remaining detected parameters were at concentrations below the SCGs.

One or more metals were detected in each of the eleven groundwater samples at concentrations exceeding the SCGs. Aluminum, iron, manganese and sodium were detected in many of the groundwater samples at concentrations exceeding the SCGs. However, these parameters are commonly encountered in uncontaminated, natural environments and are associated more with the groundwater aesthetics than toxicity.

Figure 6 indicates contaminants of concern in the groundwater samples that exceed groundwater SCGs.

4.3 Sediment

Four sediment samples were collected during the RI from seeps, a drainage ditch and at the outlet of the 36-inch storm water pipe. Each sediment sample was analyzed for TCL VOCs and SVOCs, TAL metals and TOC. The analytical results for the sediment samples are summarized in Table 5, while the locations of these samples are depicted on Figure 3.

VOCs were detected in two of the four sample locations. None of the detected concentrations of VOCs exceeded the Residential Use SCOs.

SVOCs were detected in SED-1 and SED-3. Benzo(a)pyrene in SED-3 was the only parameter to exceed the Industrial Use SCOs. Benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene in SED-3 were detected at concentrations exceeding the Residential Use SCOs. The remaining parameter concentrations were detected at concentrations below the Residential Use SCOs.

Arsenic in SED-4 is the only metal detected at a concentration exceeding the Industrial Use SCOs. Chromium in SED-3 is the only metal detected at a concentration exceeding the Residential SCOs. The remaining detections were at concentrations below the Residential SCOs.

Figure 5 indicates contaminants of concern in the sediment samples with concentrations which exceed Industrial Use SCOs and Commercial Use SCOs

4.4 Surface Water

Four surface water samples were collected during the RI from locations immediately downgradient of the sediment sample locations. Surface water sample locations are depicted on Figure 3, while the analytical results are

summarized in Table 6.

VOCs detected in surface water samples were limited to cis-1,2-dichloroethene in SW-3 and SW-4. The concentrations detected for both locations exceeded the SCG. No VOCs were detected in SW-1 or SW-2 samples and no other VOCs were detected in SW-3 and SW-4 samples.

No SVOCs were detected in any of the surface water samples.

Metals exceeding their SCGs were detected in all four surface water samples. However, metals exceeding their SCGs were limited to iron and sodium. Iron was detected at a concentration exceeding the SCG in SW-1, SW-3 and SW-4. Sodium was detected in SW-1 and SW-2 at concentrations exceeding the SCG.

Figure 6 indicates contaminants of concern in the surface water samples that exceed groundwater standards.

4.5 Transformers

Samples were collected from the ten transformers identified on-site for PCBs. Six of the ten sampled transformers had detectable levels of PCBs. PCBs detected in the transformer oil were limited to aroclor-1254 and aroclor-1260. Transformer oil sample locations are depicted on Figure 7, while the analytical results are summarized in Table 7.

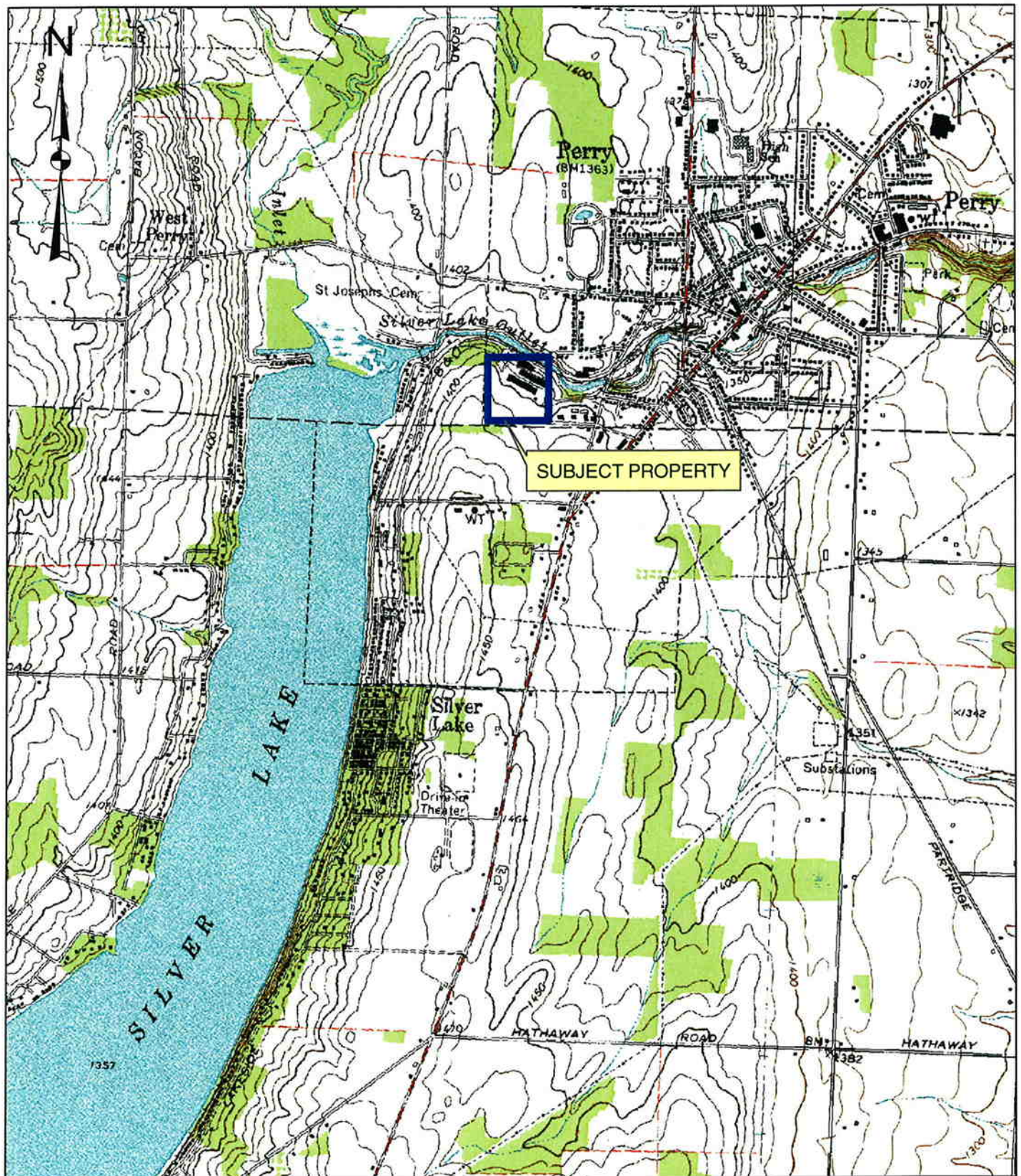
New York State Hazardous Waste Characterization 6NYCRR part 371.4(e) indicates for wastes containing PCBs at concentrations of 50 parts per million by weight or greater of PCBs are listed as a hazardous waste. Only one transformer of the six with detectable concentrations of PCBs exceeded the 50 ppm criteria. Aroclor-1260 was detected in transformer sample BLDG2-T4 at a concentration of 53.9 ppm.

5.0 CLOSING

The WCBC entered into the NYSDEC BCP to complete a RI program at the Former A&A Metals Site. The WCBC was working in conjunction with Wyoming County and the WCIDA so the WCBC could acquire title to the site through a mortgage foreclosure. After the RI program commenced at the site, a private company has shown interest in redeveloping the property. As a result of this interest in redevelopment and the NYSDEC requirement to perform additional investigations at the site, the WCBC has recently decided that it is no longer financially prudent to remain in the BCP and has opted out of the program. Prior to the exit from the program the NYSDEC requested additional investigatory work at the project site that included the collection of surface soil

samples, the advancement of additional subsurface soil probes and installation of additional groundwater monitoring wells to further delineate subsurface soil and groundwater contamination identified during the initial field program. These additional investigations were not completed due to the exit from the BCP.

FIGURES



Castile and Mount Morris Quadrangles

Site Location Map



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www.tvga.com

Former A & A Metals Site
90 Washington Boulevard
Village of Perry, Wyoming County

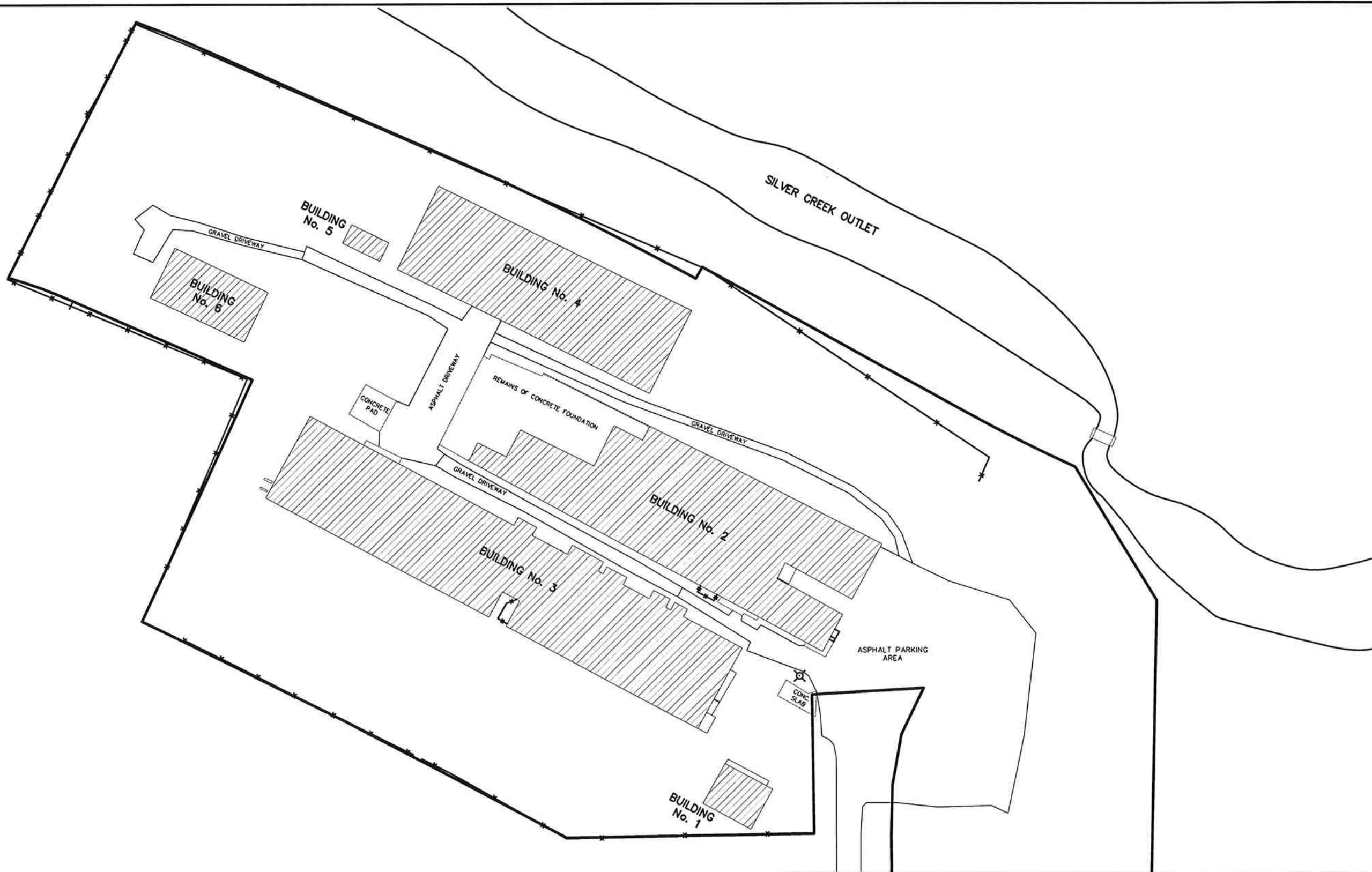
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NOT TO SCALE

DATE: SEPTEMBER 2011

FIGURE NO. 1

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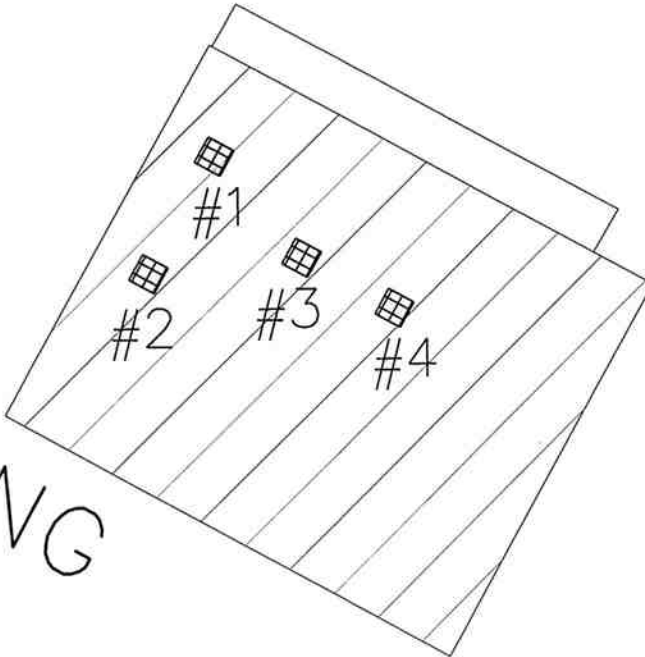
LEGEND	
	BROWN FIELD AREA BOUNDARY

SITE PLAN			
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			FIGURE NO. 2

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BUILDING
No. 1



LEGEND



FLOOR DRAIN

BUILDING No. 1 SITE PLAN



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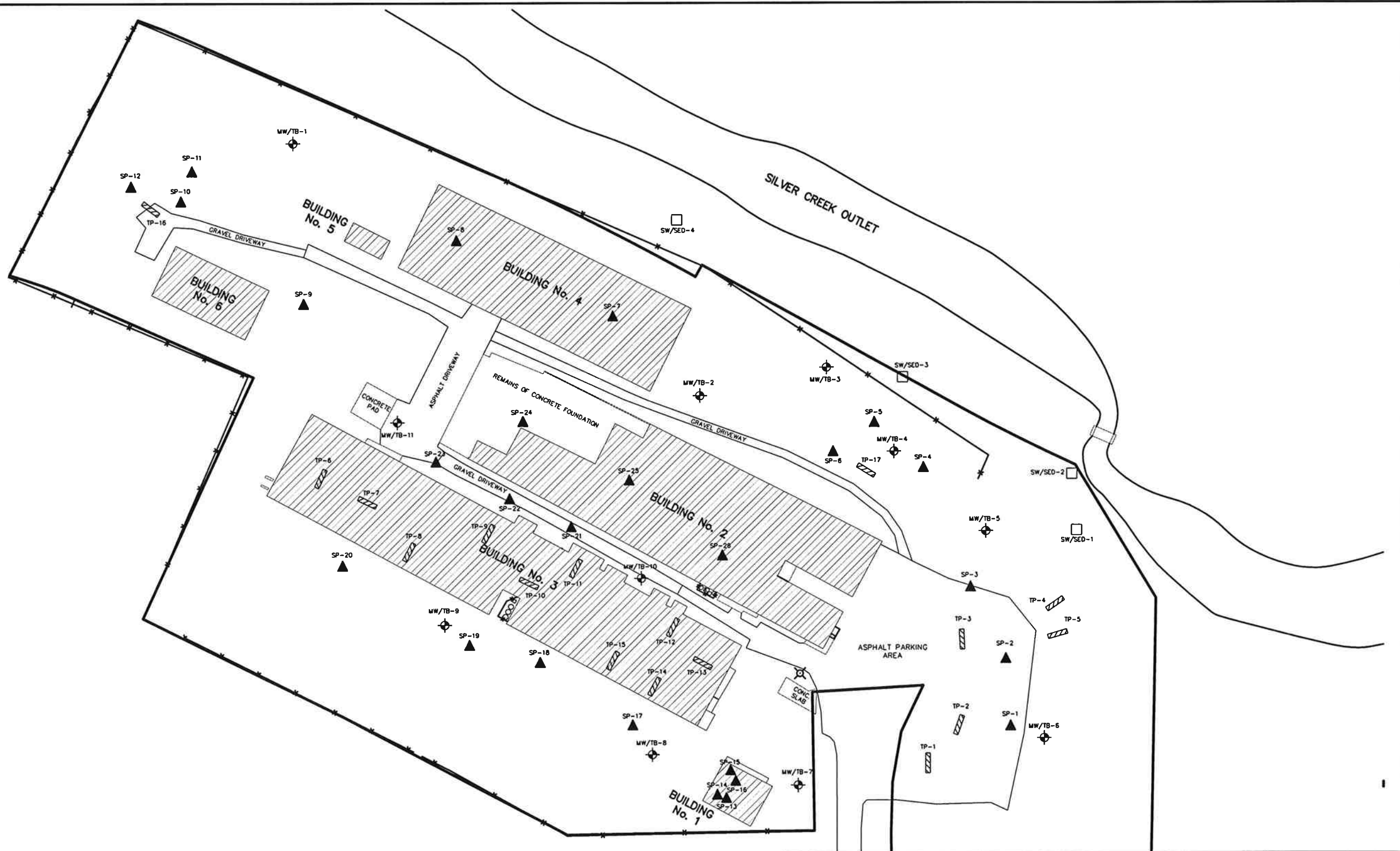
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SCALE: 1" = 20'

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FIGURE NO. 2A

File: N:\2011 Projects\2011.0066.00 A&A Metals BOA\Engineering\CADD\Sample Location Figure 3 and 7.dwg, Plot Date: 9/22/2011, By: BENKLEMAN ANDREW T., Plot Style: FULL-BLACK.CTB



LEGEND

- SP-1 SOIL PROBE LOCATION
- MW/TB-2 MONITORING WELL/TEST BORING LOCATION
- TP-3 TEST PIT LOCATION
- SW/SED-4 SURFACE WATER/SEDIMENT SAMPLE LOCATION

SAMPLE LOCATION MAP

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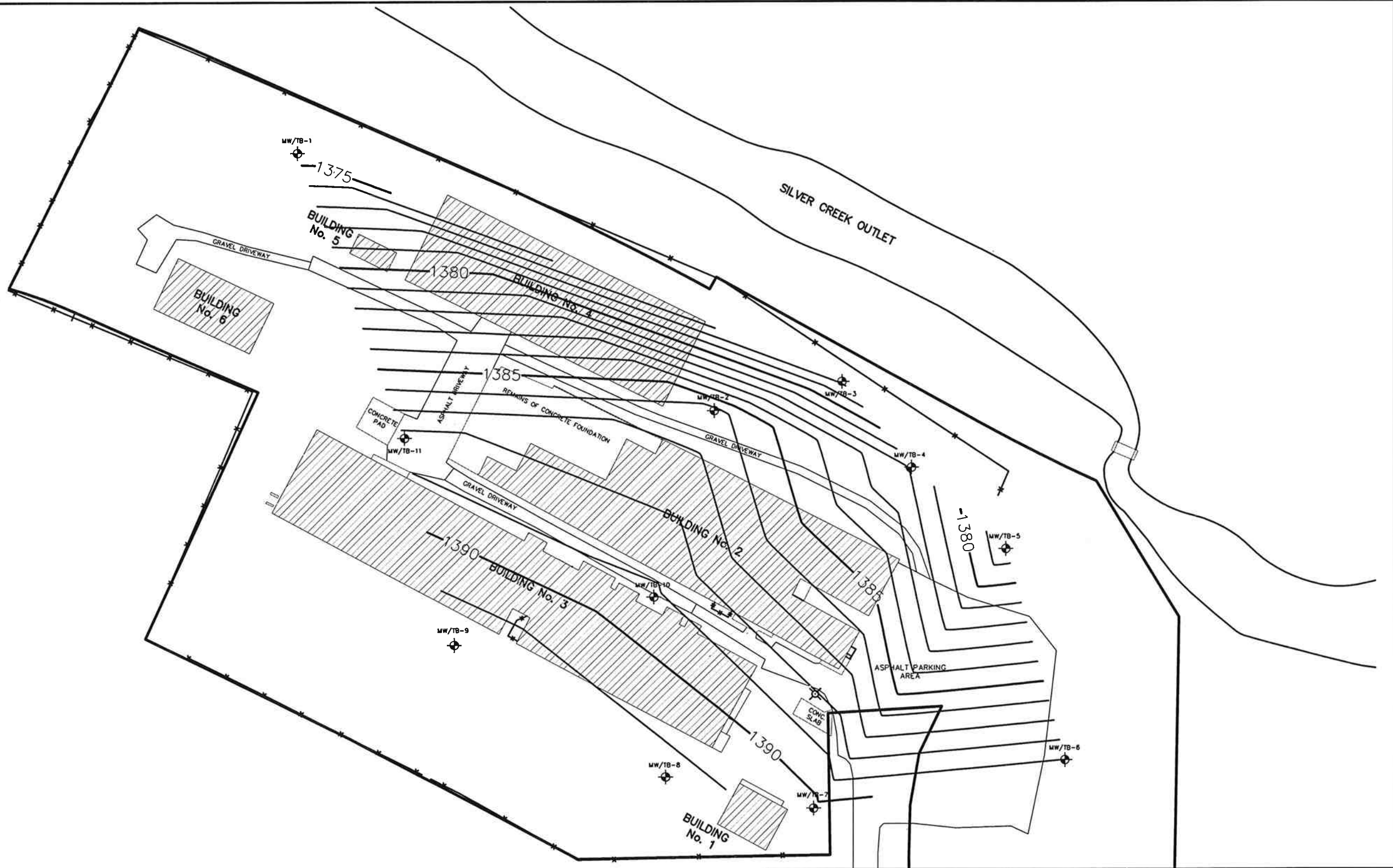
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FIGURE NO. 3

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GROUNDWATER CONTOUR MAP

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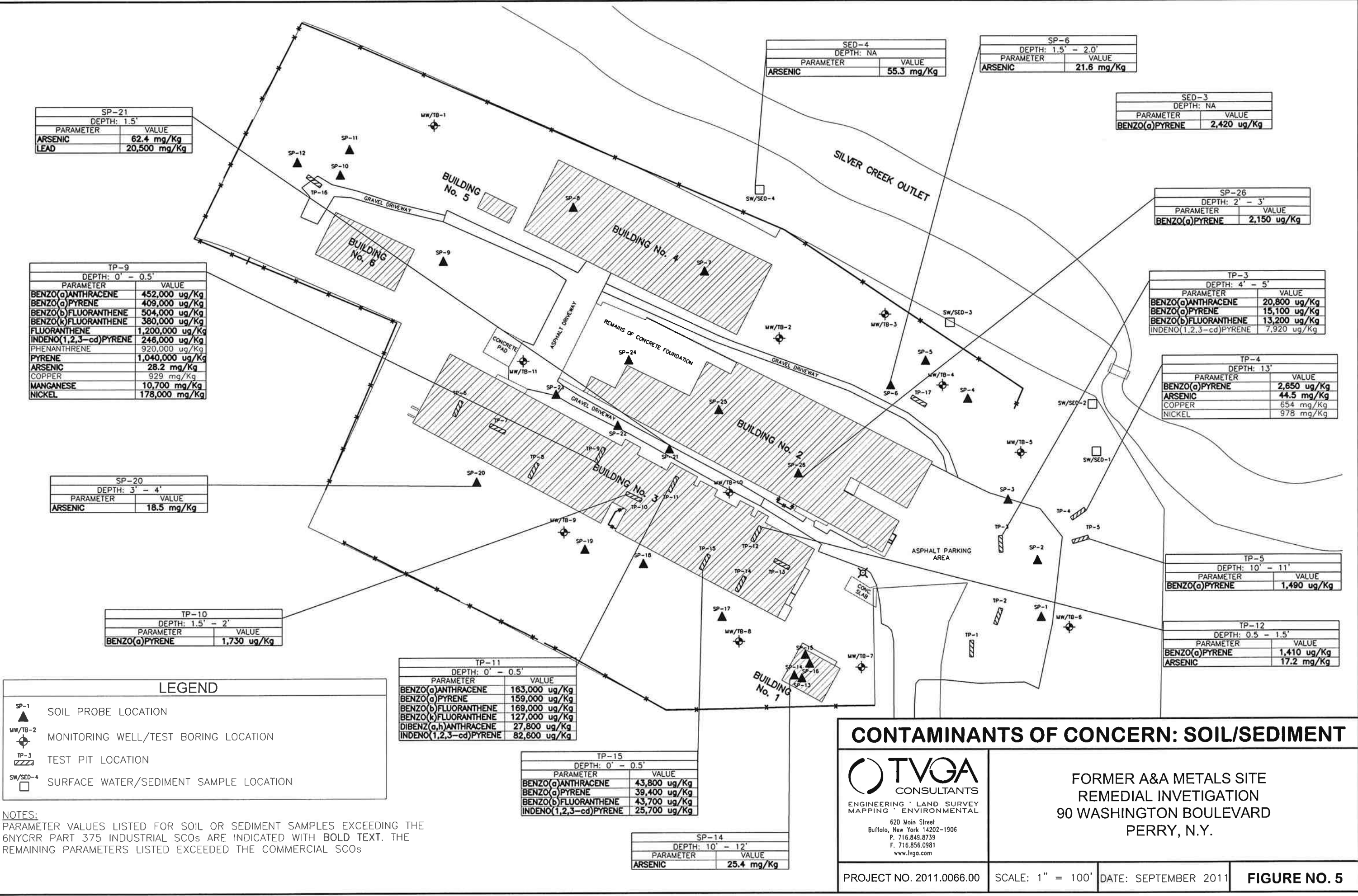
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FIGURE NO. 4



File: N:\2011 Projects\2011.0066.00 A&A Metals BOA\Engineering\CADD\Contam of Concern_Figure 5 and 6.dwg, Plot Date: 9/22/2011, By: BENKLEMAN ANDREW T., Plot Style: FULL-BLACK.CTB



MW-1		
DEPTH: NA		
PARAMETER		VALUE
cis-1,2-DICHLOROETHENE		6.14 ug/L
TRICHLOROETHENE		43 ug/L
1,1,1-TRICHLOROETHANE		6.78 ug/L
ALUMINUM		2.18 mg/L
IRON		3.19 mg/L
MANGANESE		3.1 mg/L

SW-4		
DEPTH: NA		
PARAMETER		VALUE
cis-1,2-DICHLOROETHENE		9.21 ug/L
IRON		2.12 mg/L

MW-2		
DEPTH: NA		
PARAMETER		VALUE
ALUMINUM		3.53 mg/L
IRON		7.75 mg/L
MANGANESE		5.16 mg/L

MW-3		
DEPTH: NA		
PARAMETER		VALUE
TRICHLOROETHENE		10.9 ug/L
1,1,1-TRICHLOROETHANE		10.4 ug/L
ALUMINUM		7.04 mg/L
IRON		9.94 mg/L
MANGANESE		0.736 mg/L
DISSOLVED MANGANESE		0.61 mg/L

SW-3		
DEPTH: NA		
PARAMETER		VALUE
IRON		1.43 mg/L

MW-4		
DEPTH: NA		
PARAMETER		VALUE
IRON		2.07 mg/L
MANGANESE		0.527 mg/L
DISSOLVED MANGANESE		0.484 mg/L
SODIUM		31.4 mg/L
DISSOLVED SODIUM		29.9 mg/L

MW-5		
DEPTH: NA		
PARAMETER		VALUE
IRON		10.8 mg/L
MANGANESE		8.83 mg/L
SODIUM		41.8 mg/L

SW-2		
DEPTH: NA		
PARAMETER		VALUE
SODIUM		63.4 mg/L

SW-1		
DEPTH: NA		
PARAMETER		VALUE
IRON		2.38 mg/L
SODIUM		25.2 mg/L

MW-6		
DEPTH: NA		
PARAMETER		VALUE
BIS(2-ETHYLHEXYL)PHTHALATE		5.69 ug/L
IRON		0.336 mg/L
SODIUM		23 mg/L

MW-7		
DEPTH: NA		
PARAMETER		VALUE
ALUMINUM		2.69 mg/L
CADMIUM		0.015 mg/L
IRON		3.25 mg/L
MANGANESE		0.373 mg/L

MW-10		
DEPTH: NA		
PARAMETER		VALUE
cis-1,2-DICHLOROETHENE		7.62 ug/L
ALUMINUM		3.45 mg/L
IRON		5.05 mg/L
MANGANESE		1.82 mg/L
DISSOLVED MANGANESE		1.62 mg/L

MW-8		
DEPTH: NA		
PARAMETER		VALUE
ALUMINUM		22.6 mg/L
IRON		34.5 mg/L
MANGANESE		0.934 mg/L
DISSOLVED MANGANESE		0.465 mg/L

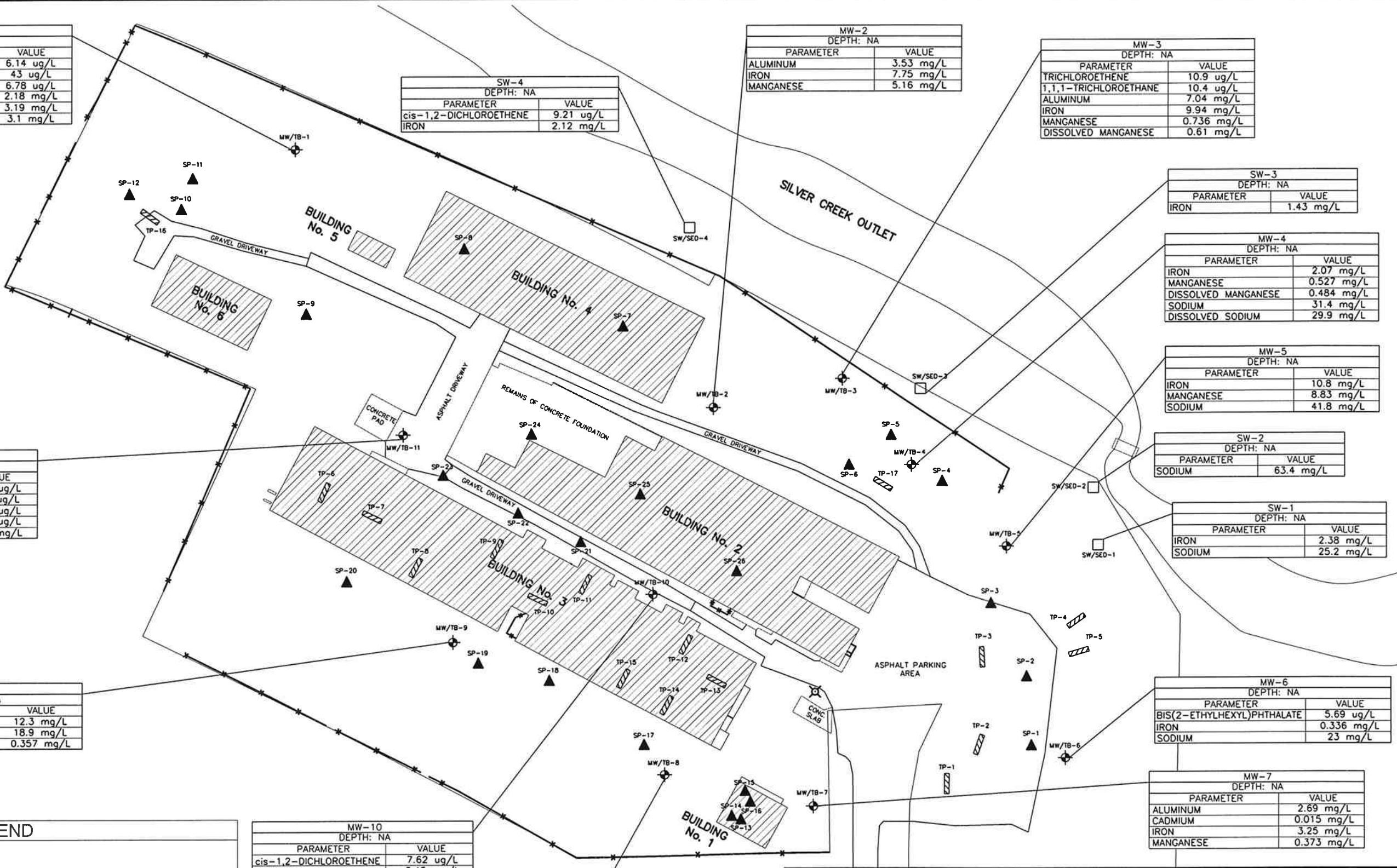
MW-11		
DEPTH: NA		
PARAMETER		VALUE
cis-1,2-DICHLOROETHENE		50.4 ug/L
TRICHLOROETHENE		576 ug/L
VINYL CHLORIDE		23.2 ug/L
1,1,1-TRICHLOROETHANE		6.93 ug/L
IRON		1.98 mg/L

MW-9		
DEPTH: NA		
PARAMETER		VALUE
ALUMINUM		12.3 mg/L
IRON		18.9 mg/L
MANGANESE		0.357 mg/L

LEGEND

- SP-1 SOIL PROBE LOCATION
- MW/TB-2 MONITORING WELL/TEST BORING LOCATION
- TP-3 TEST PIT LOCATION
- SW/SED-4 SURFACE WATER/SEDIMENT SAMPLE LOCATION

NOTES:
PARAMETER VALUES LISTED FOR GROUNDWATER AND SURFACE WATER SAMPLES EXCEEDED THE TOGS 1.1.1 REGULATORY STANDARDS FOR SOURCE OF DRINKING WATER, GROUNDWATER.



CONTAMINANTS OF CONCERN: GROUNDWATER/ SURFACE WATER

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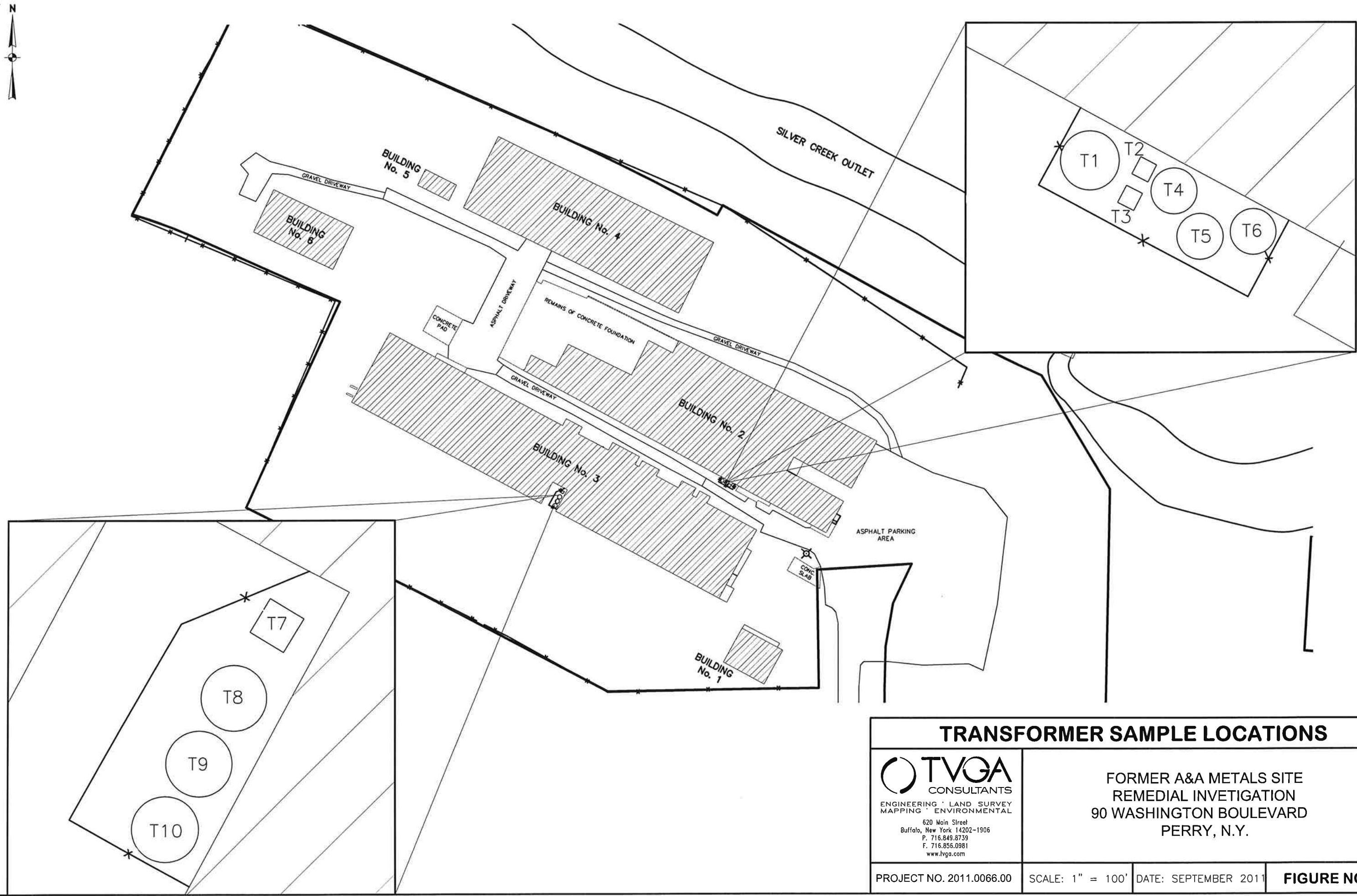
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FIGURE NO. 6

File: N:\2011 Projects\2011.0066.00 A&A Metals BOA\Engineering\CADD\Sample Location Figure 3 and 7.dwg, Plot Date: 10/6/2011, By: BENKLEMAN ANDREW T., Plot Style: FULL-BLACK.CTB



TABLES

Table 1
Former A&A Metals Site Remedial Investigation

Sampling/Analysis Summary

Sample Identifier	Source	Depth Sampled / Screened (feet bgs)	Analysis							Date Sampled	Comments
			TCL VOCs	TCL SVOCs	TAL Metals	Dissolved Metals	Total Organic Carbon	TCL PCBs	petroleum footprint: 310.13		
Sediment											
FAM SED 1	Sediment/Surface Water Location 1		X	X	X		X			5/12/2011	
FAM SED 2	Sediment/Surface Water Location 2		X	X	X		X			5/12/2011	
FAM SED 3	Sediment/Surface Water Location 3		X	X	X		X			5/12/2011	MS/MSD
FAM SED 4	Sediment/Surface Water Location 4		X	X	X		X			5/12/2011	
Subsurface Soil/ Fill											
FAM TP 1 D67	Test Pit 1	6-7	X	X	X					5/9/2011	
FAM TP 2 D23	Test Pit 2	2-3	X	X	X					5/9/2011	
FAM TP 3 D45	Test Pit 3	4-5	X	X	X					5/9/2011	
FAM TP 4 D13	Test Pit 4	13	X	X	X					5/9/2011	
FAM TP 5 D1011	Test Pit 5	10-11	X	X	X					5/9/2011	
FAM TP 6 D67	Test Pit 6	6-7	X	X	X					5/9/2011	
FAM TP 7 D67	Test Pit 7	6-7	X	X	X					5/9/2011	
FAM TP 8 D01	Test Pit 8	0-1	X	X	X					5/9/2011	
FAM TP 9 D00.5	Test Pit 9	0-0.5	X	X	X					5/9/2011	
FAM TP 10 D1.52	Test Pit 10	1.5-2	X	X	X					5/9/2011	
FAM TP 11 D00.5	Test Pit 11	0-0.5	X	X	X					5/9/2011	MS/MSD
FAM TP 12 D0.51.5	Test Pit 12	0.5-1.5	X	X	X					5/9/2011	
FAM TP 13 D23	Test Pit 13	2-3	X	X	X					5/9/2011	
FAM TP 14 D23	Test Pit 14	2-3	X	X	X					5/9/2011	
FAM TP 15 D00.5	Test Pit 15	0-0.5	X	X	X					5/9/2011	
FAM TP 16 D11.5	Test Pit 16	1-1.5	X	X	X					5/9/2011	
FAM TP 17 D3	Test Pit 17	3	X	X	X					5/9/2011	
FAM SP 1 D7	Soil Probe 1	7	X	X	X					5/10/2011	
FAM SP 2 D4	Soil Probe 2	4	X	X	X					5/10/2011	
FAM SP 3 D1112	Soil Probe 3	11-12	X	X	X					5/10/2011	
FAM SP 4 D5	Soil Probe 4	5	X	X	X					5/10/2011	
FAM SP 5 D78	Soil Probe 5	7-8	X	X	X					5/10/2011	
FAM SP 6 D1.52	Soil Probe 6	1.5-2	X	X	X					5/10/2011	
FAM SP 7 D1314	Soil Probe 7	13-14	X	X	X					5/10/2011	MS/MSD
FAM SP 8 D23	Soil Probe 8	2-3	X	X	X					5/10/2011	
FAM SP 9 D34	Soil Probe 9	3-4	X	X	X					5/10/2011	
FAM SP 10 D34	Soil Probe 10	3-4	X	X	X					5/10/2011	
FAM SP 11 D78	Soil Probe 11	7-8	X	X	X					5/10/2011	
FAM SP 12 D1011	Soil Probe 12	10-11	X	X	X					5/10/2011	
FAM SP 14 D1012	Soil Probe 14	10-12	X	X	X			X		5/11/2011	
FAM SP 16 D34	Soil Probe 16	3-4	X	X	X			X		5/11/2011	
FAM SP 17 D78	Soil Probe 17	7-8	X	X	X					5/11/2011	
FAM SP 18 D23	Soil Probe 18	2-3	X	X	X					5/11/2011	
FAM SP 19 D1.5	Soil Probe 19	1.5	X	X	X					5/11/2011	
FAM SP 20 D34	Soil Probe 20	3-4	X	X	X					5/11/2011	
FAM SP 21 D1.5	Soil Probe 21	1.5	X	X	X					5/11/2011	
FAM SP 22 D23	Soil Probe 22	2-3	X	X	X					5/11/2011	
FAM SP 23 D78	Soil Probe 23	7-8	X	X	X					5/11/2011	MS/MSD
FAM SP 24 D8	Soil Probe 24	8	X	X	X					5/11/2011	
FAM SP 25 D910	Soil Probe 25	9-10	X	X	X					5/11/2011	
FAM SP 26 D23	Soil Probe 26	2-3	X	X	X					5/11/2011	
Surface Water											
FAM SW 1	Sediment/Surface Water Location 1		X	X	X					5/12/2011	
FAM SW 2	Sediment/Surface Water Location 2		X	X	X					5/12/2011	MS/MSD
FAM SW 3	Sediment/Surface Water Location 3		X	X	X					5/12/2011	
FAM SW 4	Sediment/Surface Water Location 4		X	X	X					5/12/2011	DUP: FAM-SWDUP
Groundwater											
FAM MW 1	Monitoring Well 1	14-24	X	X	X					6/1/2011	MS/MSD
FAM MW 2	Monitoring Well 2	9-19	X	X	X					6/1/2011	
FAM MW 3	Monitoring Well 3	9-19	X	X	X	X				6/1/2011	
FAM MW 4	Monitoring Well 4	13.5-18.5	X	X	X	X		X		6/1/2011	310.13 Sample was collected from an LNAPL in this well
FAM MW 5	Monitoring Well 5	13.5-18.5	X	X	X					6/1/2011	
FAM MW 6	Monitoring Well 6	7.5-12.5	X	X	X					6/1/2011	DUP: FAM-GWDUP
FAM MW 7	Monitoring Well 7	5.5-15.5	X	X	X					6/1/2011	
FAM MW 8	Monitoring Well 8	4-14	X	X	X	X				6/1/2011	
FAM MW 9	Monitoring Well 9	11.3-16.3	X	X	X	X				6/1/2011	
FAM MW 10	Monitoring Well 10	6-16	X	X	X	X				6/1/2011	
FAM MW 11	Monitoring Well 11	8-18	X	X	X	X				6/1/2011	
Transformers											
FAM BLDG2 T1	Transformer 1							X		5/12/2011	
FAM BLDG2 T2	Transformer 2							X		5/12/2011	
FAM BLDG2 T3	Transformer 3							X		5/12/2011	
FAM BLDG2 T4	Transformer 4							X		5/12/2011	DUP: FAM-BLDG2-DUP
FAM BLDG2 T5	Transformer 5							X		5/12/2011	
FAM BLDG2 T6	Transformer 6							X		5/12/2011	
FAM BLDG3 T7	Transformer 7							X		5/12/2011	
FAM BLDG3 T8	Transformer 8							X		5/12/2011	MS/MSD
FAM BLDG3 T9	Transformer 9							X		5/12/2011	
FAM BLDG3 T10	Transformer 10							X		5/12/2011	

Table 2
Former A&A Metals Site RI
Groundwater Elevation Summary

Monitoring Well I.D.	Top of PVC Casing (TOC) Elevation	Well Depth		Depth to Groundwater from TOC	Groundwater Elevation
		Depth to Bottom from TOC	Bottom Elevation		
FAM-MW-1	1389.544	26.56	1362.98	15.12	1374.42
FAM-MW-2	1390.609	21.41	1369.20	4.28	1386.33
FAM-MW-3	1388.402	19.62	1368.78	10.61	1377.79
FAM-MW-4	1388.96	21.22	1367.74	7.09	1381.87
FAM-MW-5	1388.77	19.31	1369.46	10.52	1378.25
FAM-MW-6	1393.72	14.79	1378.93	4.71	1389.01
FAM-MW-7	1393.506	17.59	1375.92	3.21	1390.30
FAM-MW-8	1394.489	13.05	1381.44	3.02	1391.47
FAM-MW-9	1394.526	18.42	1376.11	2.60	1391.93
FAM-MW-10	1394.359	18.38	1375.98	5.15	1389.21
FAM-MW-11	1392.198	20.00	1372.20	3.8	1388.40

Notes:

1. All measurements and elevations are in feet above mean sea level.
2. TOC = Top of PVC casing
3. Elevations Datum in NAVD 86
4. Groundwater measurements recorded on June 1, 2011

Table 3
Former A & A Metals Site RI

Summary of Analytical Results
Subsurface Soil/Fill Samples

	SOIL CLEANUP OBJECTIVE RESIDENTIAL USE	SOIL CLEANUP OBJECTIVE COMMERCIAL USE	SOIL CLEANUP OBJECTIVE INDUSTRIAL USE	FAM-SP1-D7-S- O	FAM-SP2-D4-S- O	FAM-SP3- D1112-S-O	FAM-SP4-D5-S- O	FAM-SP5-D78- S-O	FAM-SP6- D1.52-S-O	FAM-SP7- D1314-S-O	FAM-SP8-D2-S- O	FAM-SP9-D34- S-O	FAM-SP10-D34- S-O	FAM-SP11-D78- S-O	FAM-SP12- D1011-S-O	FAM-SP14- D1012-S-O	FAM-SP16- D34-S-O	FAM-SP17-D78- S-O	FAM-SP18-D23- S-O	FAM-SP19- D1.5-S-O
Date Collected				5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/10/2011	5/11/2011	5/11/2011	5/11/2011	5/11/2011	5/11/2011
Interval Sampled (feet below grade)				7	4	11-12	5	7-8	1.5-2	13-14	2	3-4	3-4	7-8	10-11	10-12	3-4	7-8	2-3	1.5
Volatile Organic Compounds (ug/Kg)																				
Acetone	100,000	500,000	1,000,000	27.1	23.1	95.2		756	28.4	49.1	56.4	266	293	346	41.4	51.7	141	33	31.5	18.4
2-Butanone (MEK)	100,000	500,000*	1,000,000*	15.9	27.3	86.3			42	37.6	163	82.5	206	217	40.3	181	154	57.9	45.3	
Cyclohexane	100,000*	500,000*	1,000,000*									209					50.9			20.1
Ethylbenzene	30,000	390,000	780,000					271				64.1	2.34				120			
Isopropylbenzene	100,000*	500,000*	1,000,000*					232				229					18.5			
Methylcyclohexane	100,000*	500,000*	1,000,000*					289				603					122			
Methylene Chloride	51,000	500,000	1,000,000	6.02		5.58	4.79	144	17.5	25.2	13.5	20.7		18.8	13.4	26	21.9	14.6	11.0	8.45
Toluene	100,000	500,000	1,000,000										4.43	4.98						
Trichloroethene	10,000	200,000	400,000							232			2.75							
p-xylene / m-xylene	100,000	500,000	1,000,000					264				74.1	5.25				146			
o-xylene	100,000	500,000	1,000,000									14					5.32			
Total VOCs	-	-	-	49	50	187	5	1,956	88	369	233	1,562	517	587	95	259	780	106	88	47
Semi-Volatile Organic Compounds (ug/Kg)																				
Benzo(a)anthracene	1,000	5,600	11,000										2,340							428
Benzo(a)pyrene	1,000	1,000	1,100										2,170							397
Benzo(b)fluoranthene	1,000	5,600	11,000										3,010							477
Benzo(g,h,i)perylene	100,000*	500,000	1,000,000										1,200							
Benzo(k)fluoranthene	1,000	56,000	110,000										2,470							
1,1'-biphenyl	100,000*	500,000*	1,000,000*					1,530				580								
Chrysene	1,000	56,000	110,000						171				3,880							512
Dibenzofuran	100,000*	500,000*	1,000,000*					859												
Fluoranthene	100,000	500,000	1,000,000						221				9,560							860
Fluorene	100,000	500,000	1,000,000					1,500				583								
Indeno(1,2,3-cd)pyrene	500	5,600	11,000										1,090							
2-methylnaphthalene	100,000*	500,000*	1,000,000*					20,700				5,700								
Naphthalene	100,000	500,000	1,000,000					3,840				947	4,760							
Phenanthrene	100,000	500,000	1,000,000					2,640				1,300	5,610							633
Phenol	100,000	500,000	1,000,000						201											
Pyrene	100,000	500,000	1,000,000										7,950							840
TOTAL SVOCs	-	-	-					31,069	593			9,110	44,040							4,147
Metals (mg/Kg)																				
Aluminum	-	-	-	126,000	12,400	9,630	10,900	10,200	8,130	15,800	10,500	11,600	9,190	13,600	16,200	13,900	11,500	18,200	11,600	4,920
Antimony	10,000*	10,000*	10,000*										4.81							
Arsenic	16	16	16	13.4	13.2	7.35	10.9	7.4	21.6	9.4	10.5	5.06	15.5	8.32	5.68	25.4	7.11	8.77	12.7	13.8
Barium	350	400	10,000	28.2	31.6	39	35.1	33.5	231	32.7	31	38.6	392	54.7	25.1	23.5	37.2	60.7	32.6	72.5
Beryllium	14	590	2,700	0.725	0.562	0.446	0.463	0.420	0.806	0.679	0.432	0.364	0.476	0.395	0.543	0.651	0.475	0.875	0.520	0.388
Cadmium	2.5	9.3	60										0.529							
Calcium	-	-	-	1,830	1,640	1,740	2,230	3,770	3,090	3,490	12,900	1,460	9,740	1,020	1,810	4,950	8,840	3,870	12,200	3,400
Chromium	22	400	800	18.1	15.7	13.4	13.9	13.4	16.2	20.5	13.7	12.2	43	13.9	21.2	18.5	15.7	23.1	14.9	24.8
Cobalt	-	-	-	13.5	10.9	8.96	9.32	8.11	9.84	13.8	8.73	7.06	9.61	5.9	12	21	8.89	14.9	10.7	
Copper	270	270	10,000	33	35.2	23.4	28.7	26.7	50.8	30.2	28.7	13.5	62.7	11.8	37.6	27.8	29	25.9	26.6	28.2
Iron	-	-	-	28,800	26,200	18,200	21,300	18,300	43,100	30,300	21,300	16,500	35,100	16,600	31,200	37,500	22,130	33,000	24,300	22,100
Lead	400	1,000	3,900	17.2	9.61	13.8	12.4	13.1	157	7.7	10.1	6.79	241	9.66	2.9	30.8	12.1	9.94	10.5	574
Magnesium	-	-	-	5,480	4170	3010	3450	3850	1400	5,980.0	5,390	2,500	2,960	2,420	6,340	7,290	4,540	7,330	6,650	1,850
Manganese	2,000	10,000	10,000	311	425	365	462	264	264	508	434	803	501	256	455	299	400	455	374	499
Mercury	0.81	2.8	5.7	0.0152	0.0185	0.0254	0.0305	0.0227	0.0390	0.015	0.0198	0.0376	0.077	0.0161	0.0073	0.0087	0.0227	0.0125	0.0140	0.119
Nickel	140	310	10,000	31.7	26.2	22.4	22.8	20.3	23.9	37.6	21.6	14.7	27.1	14.9	32	42.2	24.5	36.6	26.7	36.6
Potassium	-	-	-	1,490	1150	986	861	853	625	1,620.0	1,170	508	849	514	1,250	1,530	1,100	1,920	1,530	715
Selenium	36	1,500	6,800	0.472									0.973							0.950
Vandium	-	-	-	19.2	20	20	19.8	22	23.7	23	20.1	19.3	20.3	22.8	21.5	19	19.3	24.1	18	12.8
Zinc	2,200	10,000	10,000	70.8	72.6	69.6	76.6	77.6	216	72.1	76.9	63.3	325	71	63.4	66.3	74.9	70.5	68.9	110

- Notes:
1. Soil Cleanup Objectives source is 6NYCRR Part 375 Environmental Remediation Programs December 2006 Edition (Part 375)
 2. Only compounds with one or more detections are shown.
 3. ug/Kg = micrograms per Kilogram (equivalent to parts per billion or ppb)
 4. mg/Kg = milligrams per Kilogram (equivalent to parts per million or ppm)
 5. Blank spaces indicate that the analyte was not detected.
 6. PCBs were analyzed for in SP14 and SP16, but were not detected in either location.
 7. (*) = The cap for individual VOCs and SVOCs that do not have an SCO is 100,000 ug/Kg for residential use, 500,000 ug/Kg for commercial use and 1,000,000 ug/Kg for industrial use.
 8. (-) = No regulatory value is associated with this parameter
 9. NA = parameter not analyzed
 10. Analytes that were detected at concentrations exceeding Residential Soil Cleanup Objectives are depicted in *italics* and are underlined
 11. Analytes that were detected at concentrations exceeding Commercial Soil Cleanup Objectives are depicted in **bold** and are underlined
 12. Analytes that were detected at concentrations exceeding Industrial Soil Cleanup Objectives are depicted in **bold** and are shaded

Table 3
Former A & A Metals Site RI

Summary of Analytical Results
Subsurface Soil/Fill Samples

	SOIL CLEANUP OBJECTIVE RESIDENTIAL USE	SOIL CLEANUP OBJECTIVE COMMERCIAL USE	SOIL CLEANUP OBJECTIVE INDUSTRIAL USE	FAM-SP20-D34 S-O	FAM-SP21-D1.5 S-O	FAM-SP22-D23 S-O	FAM-SP23-D78 S-O	FAM-SP24-D8- S-O	FAM-SP25- D910-S-O	FAM-SP26-D23- S-O
Date Collected				5/11/2011	5/11/2011	5/11/2011	5/11/2011	5/11/2011	5/11/2011	5/11/2011
Interval Sampled (feet below grade)				3-4	1.5	2-3	7-8	8	9-10	2-3
Volatile Organic Compounds (ug/Kg)										
Acetone	100,000	500,000	1,000,000	320	36.7	43	63	36.4		
2-Butanone (MEK)	100,000	500,000*	1,000,000*		36.3	101	391	114		26.2
cis-1,2-Dichloroethene	59,000	500,000*	1,000,000			15				
Ethylbenzene	30,000	390,000	780,000	385						
Isopropylbenzene	100,000*	500,000*	1,000,000*	335						
Methylcyclohexane	100,000*	500,000*	1,000,000*	385						
Methylene Chloride	51,000	500,000	1,000,000	79.9	16.4	17.7	12.2	9.94		8.81
Tetrachloroethene	5,500	150,000	300,000			3.57				
1,2,3-trichlorobenzene	100,000*	500,000*	1,000,000*						13,900	
1,2,4-Trichlorobenzene	100,000*	500,000*	380,000						<u>101,000</u>	
Trichloroethene	10,000	200,000	400,000			609	52.9	2.18		
p-xylene / m-xylene	100,000**	500,000**	1,000,000*	41.4			2.51			
o-xylene	100,000**	500,000**	1,000,000*	41.1						
Total VOCs	-	-	-	1,587	89	786	525	163	114,900	35
Semi-Volatile Organic Compounds (ug/Kg)										
Acenaphthene	100,000*	500,000	1,000,000	1,860						1,040
Anthracene	100,000*	500,000	1,000,000							2,810
Benzo(a)anthracene	1,000	5,600	11,000							3,100
Benzo(a)pyrene	1,000	1,000	1,100							<u>2,150</u>
Benzo(b)fluoranthene	1,000	5,600	11,000							<u>1,970</u>
Benzo(g,h,i)perylene	100,000*	500,000	1,000,000							1,330
Benzo(k)fluoranthene	1,000	56,000	110,000							<u>1,580</u>
1,1'-biphenyl	100,000*	500,000*	1,000,000*	3,310						376
Carbazole	100,000*	500,000*	1,000,000*							483
Chrysene	1,000	56,000	110,000							<u>3,080</u>
Dibenzofuran	100,000*	500,000*	1,000,000*	1,750						868
Fluoranthene	100,000	500,000	1,000,000	3,550						6,670
Fluorene	100,000	500,000	1,000,000							1,450
Indeno(1,2,3-cd)pyrene	500	5,600	11,000							<u>1,070</u>
2-methylnaphthalene	100,000*	500,000*	1,000,000*	47,800						2,160
Naphthalene	100,000	500,000	1,000,000	11,300						2,130
Phenanthrene	100,000	500,000	1,000,000	8,350						11,000
Pyrene	100,000	500,000	1,000,000							6,950
1,2,4-trichlorobenzene	100,000*	500,000*	1,000,000*						48,500	
1,2,4,5-tetrachlorobenzene	100,000*	500,000*	1,000,000*						7740	
TOTAL SVOCs	-	-	-	77,920					56,240	50,217
Metals (mg/Kg)										
Aluminum	-	-	-	12,700	4,970	9,900	11,800	8,160	9,170	11,600
Antimony	-	-	-		7260					
Arsenic	16	16	16	18.5	62.4	9.59	7.98	9.48	11.2	4.83
Barium	350	400	10,000	29.2	101	42.2	21.6	23.8	39.1	40.8
Beryllium	14	590	2,700	0.580	0.4	0.446	0.509	0.357	0.443	0.389
Cadmium	2.5	9.3	60		0.353	0.294			0.373	0.322
Calcium	-	-	-	2,930	90,500	16,400	6,770	20,600	17,000	1,270
Chromium	22	400	800	16.9	25.9	12.9	15	11.1	17.3	12.5
Cobalt	-	-	-	11.5	4.88	8.51	11.4	8.02	9.72	7.05
Copper	270	270	10,000	26.8	200	29.9	28.6	26.2	35.7	11.2
Iron	-	-	-	31,200	29,800	20,000	23,200	19,100	23,600	14,700
Lead	400	1,000	3,900	11.9	20,500	15.3	18.5	7.1	17.8	10
Magnesium	-	-	-	5,560	3,250	4,180	5,570	6,700	6,110	2,100
Manganese	2,000	10,000	10,000	276	263	314	289	327	463	648
Mercury	0.81	2.8	5.7	0.0225	0.476	0.0217	0.00097	0.0131	0.0988	0.0659
Nickel	140	310	10,000	29.1	19.9	22.3	24.8	19.6	25.2	13.4
Potassium	-	-	-	1,260	413	908	1,060	925	13,600	593
Selenium	36	1,500	6,800					0.675		
Silver	36	1,500	6,800		1.56					
Vandium	-	-	-	18.5	13.6	18.2	16.3	15.2	17.2	20.2
Zinc	2,200	10,000	10,000	67.1	274	85.4	69.3	64.6	106	53.7

Notes:

1. Soil Cleanup Objectives source is 6NYCRR Part 375 Environmental Remediation Programs December 2006 Edition (Part 375)
2. Only compounds with one or more detections are shown.
3. ug/Kg = micrograms per Kilogram (equivalent to parts per billion or ppb)
4. mg/Kg = milligrams per Kilogram (equivalent to parts per million or ppm)
5. Blank spaces indicate that the analyte was not detected.
6. (*) = The cap for individual VOCs and SVOCs that do not have an SCO is 100,000 ug/Kg for residential use, 500,000 ug/Kg for commercial use and 1,000,000 ug/Kg for industrial use.
7. (-) = No regulatory value is associated with this parameter
8. NA = parameter not analyzed
9. Analytes that were detected at concentrations exceeding Residential Soil Cleanup Objectives are depicted in *italics* and are underlined
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Table 3
Former A & A Metals Site RI

Summary of Analytical Results
Subsurface Soil/Fill Samples

	SOIL CLEANUP OBJECTIVE RESIDENTIAL USE	SOIL CLEANUP OBJECTIVE COMMERCIAL USE	SOIL CLEANUP OBJECTIVE INDUSTRIAL USE	FAM-TP1-D67- S-O	FAM-TP2-D23- S-O	FAM-TP3-D45-S- O	FAM-TP4-D13- S-O	FAM-TP5- D1011-S-O	FAM-TP6-D67- S-O	FAM-TP7-D67- S-O	FAM-TP8-D01- S-O	FAM-TP9-D005- S-O	FAM-TP10- D1.52-S-O	FAM-TP11-D005- S-O	FAM-TP12- D0.51.5-S-O	FAM-TP13-D23- S-O	FAM-TP14-D2- S-O	FAM-TP15- D005-S-O	FAM-TP16- D115-S-O	FAM-TP17-D3- S-O
Date Collected				5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011	5/9/2011
Interval Sampled (feet below grade)				6-7	2-3	4-5	13	10-11	6-7	6-7	0-1	0-0.5	1.5-2	0-0.5	0.5-1.5	2-3	2	0-0.5	1-1.5	3
Volatile Organic Compounds (ug/Kg)																				
Acetone	100,000	500,000	1,000,000	27.3	132	671	31.4		28.1	291	34.3		18		36.5	59	58.70		59.10	46
2-Butanone (MEK)	100,000	500,000*	1,000,000*	65.3	157	321	62		27.8		198		31.2	14.2	85.2	173	92.50		197	44.4
Isopropylbenzene	100,000*	500,000*	1,000,000*						5.56	147										
Methylcyclohexane	100,000*	500,000*	1,000,000*						46.9	473										
Methylene Chloride	51,000	500,000	1,000,000		8	51.6	17.5				12.6	11.6			18.5	13.3	15.40	12.60	9.83	14.1
Trichloroethene	10,000	200,000	400,000				43.1													
Total VOCs	-	-	-	93	297	1,044	61		108	911	245	12	49	14	140	245	167	13	266	105
Semi-Volatile Organic Compounds (ug/Kg)																				
Acenaphthene	100,000*	500,000	1,000,000									89,000	348	31,100	255			8,960		
Acenaphthylene	100,000*	500,000	1,000,000			5,850									159					
Acetophenone	100,000*	500,000*	1,000,000*																	
Anthracene	100,000*	500,000	1,000,000			8,560						162,000	745	63,000	373			18,800		
Benzo(a)anthracene	1,000	5,600	11,000			20,800	2,540	1,910				452,000	1,960	163,000	1,250			43,800		
Benzo(a)pyrene	1,000	1,000	1,100			15,100	2,650	1,490				409,000	1,730	159,000	1,410			39,400		
Benzo(b)fluoranthene	1,000	5,600	11,000			13,200	2,930	1,710			168	504,000	2,040	169,000	1,510			43,700		
Benzo(g,h,i)perylene	100,000*	500,000	1,000,000			6,130	2,250	960				290,000	1,240	117,000	1,450			27,700		
Benzo(k)fluoranthene	1,000	56,000	110,000			15,000	2,140	1,440				380,000	1,250	127,000	1,200			30,400		
1,1'-biphenyl	100,000*	500,000*	1,000,000*						2,140											
Carbazole	100,000*	500,000*	1,000,000*											21,700						
Chrysene	1,000	56,000	110,000			18,700	2,890	1,990			163	480,000	2,030	173,000	1,440			46,400		
Dibenz(a,h)anthracene	330	560	1,100										358	27,800	341					
Dibenzofuran	100,000*	500,000*	1,000,000*						882					18,200	171					
Di-n-octyl phthalate	100,000*	500,000*	1,000,000*															324		
Fluoranthene	100,000	500,000	1,000,000			36,900	5,880	4,450				1,200,000	5,010	444,000	2,970		173	113,000		253
Fluorene	100,000	500,000	1,000,000						288	1,860		85,100	374	36,500	304			9,980		
Indeno(1,2,3-cd)pyrene	500	5,600	11,000			7,920	1,420	936				246,000		82,600	1,060			25,700		
2-methylnaphthalene	100,000*	500,000*	1,000,000*							15,700					294					
Naphthalene	100,000	500,000	1,000,000							2,630					470					
Phenanthrene	100,000	500,000	1,000,000			23,000	3,730	2,030	705	4,100		920,000	3,770	365,000	2,120			86,600		202
Pyrene	100,000	500,000	1,000,000			28,500	5,090	3,640			161	1,040,000	4,220	382,000	2,780			97,800		245
TOTAL SVOCs	-	-	-			199,660	31,520	20,556	993	27,312	492	6,257,100	25,075	2,379,900	19,557		173	592,240	324	700
Metals (mg/Kg)																				
Aluminum	-	-	-	8,050	15,200	11,800	7,840	13,000	12,600	12,100	5,360	2,560	13,700	5,960	7,630	9,750	9,030	5,280	4,970	10,900
Antimony	-	-	-				19.5					16								
Arsenic	16	16	16	13.3	9.51	13.7	44.5	8.51	8.99	20.9	6.62	28.2	5.44	7.75	17.2	10.2	11	3	5	13.9
Barium	350	400	10,000	22	41.4	215	798	62	43.4	38.8	25.2	56	39	31.6	31.7	52.6	39.6	34.7	42	101
Beryllium	14	590	2,700	0.465	0.626		0.514	0.602	0.521	0.671	0.312	0.439	0.564		0.411	0.408	0.375		0.538	
Cadmium	2.5	9.3	60			0.34	5.26					4.18								
Calcium	-	-	-	2,400	1,440	2,600	50,000	29,500	2,000	2860	31,900	10,100	7,130	37,200	32,400	1,800	2,040	135,000	11,500	2,620
Chromium	22	400	800	12.5	18.6	15	380	17.9	16.4	17.4	7.03	337	18.3	45.2	17.2	12.5	12.2	12.6	14.5	14.2
Cobalt	-	-	-	7.23	12.2	19.9	48	9.61	11.9	15.1		56.1	11.1	7.04	7.31	9.35	10			6.9
Copper	270	270	10,000	33.8	19.5	29.8	654	29.5	39.1	31.5	16.9	929	27.7	241	51.7	31.5	29.1	22.7	20.3	25.1
Iron	-	-	-	25,100	29,600	21,000	329,000	23,500	26,300	28,300	13,400	458,000	25,900	41,726	31,300	19,900	20,746	8,603	14,900	25,202
Lead	400	1,000	3,900	21	4.64	110	647	21.4	15.9	37.3	7.98	88.9	4.36	83.3	68	10.8	42.1	5.93	15	36.8
Magnesium	-	-	-	2,310	5,340	2,070	4,660	4,980	5,070	5050	5,400	3,990	6,200	4,520	6,100	3,160	3,370	48,600	3,390	1,730
Manganese	2,000	10,000	10,000	433	406	266	7,330	1,470	424	487	335	10,700	440	625	432	1100	910	362	252	377
Mercury	0.81	2.8	5.7	0.027	0.0218	0.0643	2.76	0.0914	0.0153	0.0144	0.0055	2.12	0.0066	0.0138				0.0555	0.0107	0.0410
Nickel	140	310	10,000	20.2	30.1	19.6	978	26.9	29.4	35.8	13.2	178,000	35.3	219	31.2	24.5	26.8	11.8	17.2	15.5
Potassium	-	-	-	806	1,010	695	877	1,460	1,150	1210	1,060	803	1,190	654	966	1,170	1,030	2,210	662	689
Selenium	36	1,500	6,800					1			0.809								0.74	
Silver	36	1,500	6,800		0.551	1.02	2.81					9.17								
Sodium	-	-	-				1,360					1,010				565				
Vandium	-	-	-	18.6	21.0	21.7	28.8	21.8	18.3	18.2	12.4	48.8	18.6	11.4	15.6	18.7	16.9	12.1	10.2	25.1
Zinc	2,200	10,000	10,000	83.1	102	302	1,662	88.4	70.9	82.8	44.9	255	59.1	131	108	80.1	71.6	62.6	625	79.9

Notes:

1. Soil Cleanup Objectives source is 6NYCRR Part 375 Environmental Remediation Programs December 2006 Edition (Part 375)
2. Only compounds with one or more detections are shown.
3. ug/Kg = micrograms per Kilogram (equivalent to parts per billion or ppb)
4. mg/Kg = milligrams per Kilogram (equivalent to parts per million or ppm)
5. Blank spaces indicate that the analyte was not detected.
6. (*) = The cap for individual VOCs and SVOCs that do not have an SCO is 100,000 ug/Kg for residential use, 500,000 ug/Kg for commercial use and 1,000,000 ug/Kg for industrial use.
7. (-) = No regulatory value is associated with this parameter
8. NA = parameter not analyzed
9. Analytes that were detected at concentrations exceeding Residential Soil Cleanup Objectives are depicted in *italics* and are underlined
10. Analytes that were detected at concentrations exceeding Commercial Soil Cleanup Objectives are depicted in **bold** and are underlined
11. Analytes that were detected at concentrations exceeding Industrial Soil Cleanup Objectives are depicted in **bold** and are shaded

Table 4
Former A & A Metals Site RI

Summary of Analytical Results
Groundwater Samples - Organics

	REGULATORY VALUE	FAM-MW1-GW-O	FAM-MW2-GW-O	FAM-MW3-GW-O	FAM-MW4-GW-O	FAM-MW5-GW-O	FAM-MW6-GW-O	FAM-MW7-GW-O	FAM-MW8-GW-O	FAM-MW9-GW-O	FAM-MW10-GW-O	FAM-MW11-GW-O
Date Collected		6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011	6/1/2011
Volatile Organic Compounds (ug/L)												
Acetone	50**											
Benzene	1				0.429							
cis-1,2-Dichloroethene	5	6.14									7.62	50.4
Isopropylbenzene	5				1.27							
Methylcyclohexane	-	3.67			2.45						1.15	
Trichloroethene	5	43		10.9								576
Vinyl Chloride	2											23.2
1,1,1-Trichloroethane	5	6.78		10.4								6.93
1,1-Dichloroethene	5	2.02										
Total VOCs	-				4						9	657
Semi-Volatile Organic Compounds (ug/L)												
Caprolactam	-											
Bis(2-ethylhexyl)phthalate	5						5.69					
2-Methylnaphthalene	-	15.6			108							
Naphthalene	10**	5.26										
Phenanthrene	50				34.7							
TPHCs	-	NA	NA	NA	4,860	NA	NA	NA	NA	NA	NA	NA
TOTAL SVOCs	-											

- Notes:
1. Class GA regulatory values are derived from NYS Ambient Water Quality Standards TOGS 1.1.1 (Source of Drinking Water, groundwater), June 1998
 2. Only compounds with one or more detections are shown.
 3. ug/L= micrograms per Liter (equivalent to parts per billion or ppb)
 4. Blank spaces indicate that the analyte was not detected.
 5. TPHCs = Petroleum Fingerprint and Total Petroleum Hydrocarbons by NYSDOH Method 310.13
 6. NA = parameter not analyzed
 7. (-) indicates that a regulatory value is not associated with this parameter
 8. (**) = New York state guidance value was used where no groundwater standard was available
 9. Shaded values represents concentration exceeded the Regulatory Value

Table 4
Former A & A Metals Site RI

Summary of Analytical Results
Groundwater Samples - Metals

	REGULATORY VALUE	FAM-MW1-GW-O	FAM-MW2-GW-O	FAM-MW3-GW-O		FAM-MW4-GW-O		FAM-MW5-GW-O	FAM-MW6-GW-O	FAM-MW7-GW-O	FAM-MW8-GW-O		FAM-MW9-GW-O		FAM-MW10-GW-O		FAM-MW11-GW-O	
Date Collected		6/1/2011	6/1/2011	6/1/2011		6/1/2011		6/1/2011	6/1/2011	6/1/2011	6/1/2011		6/1/2011		6/1/2011		6/1/2011	
Sample Type		Total	Total	Total	Dissolved	Total	Dissolved	Total	Total	Total	Total	Dissolved	Total	Dissolved	Total	Dissolved	Total	Dissolved
Metals (mg/L)																		
Aluminum	2	2.18	3.53	7.04		1.29		1.55	0.314	2.69	22.6		12.3		3.45		1.76	
Arsenic	0.025	0.006		0.008		0.007	0.005	0.019		0.007	0.021	0.009	0.011	0.009	0.007		0.006	
Barium	1										0.132		0.151	0.086				
Cadmium	0.005									0.015								
Calcium	-	122	166	51.8	51	88.9	85	120	71.7	77.7	98.1	82.9	97	80.2	72	66.5	86.8	85.2
Chromium	0.05			0.008				0.03			0.027		0.013					
Copper	0.2				0.069						0.027		0.016			0.029		
Iron	0.3	3.19	7.75	9.94		2.07	0.068	10.8	0.336	3.25	34.5		18.9		5.05		1.98	
Lead	0.025										0.01							
Magnesium	35**	19.4	20.5	12.5	10.7	17.2	16.1	14.2	15.4	15.9	26.3	17.5	25.9	19.7	20	17.7	21	20.3
Manganese	0.3	3.1	5.16	0.736	0.61	0.527	0.484	8.83	0.065	0.373	0.934	0.465	0.357	0.062	1.82	1.62	0.159	0.134
Nickel	100	0.021									0.039		0.024					
Potassium	-	2.7	2.38	5.5	3.54	7.38	6.6	2.56	2.47	2.98	9.82	4.8	9.35	5.8	4.95	3.89	2.86	2.14
Selenium	10							0.008	0.008									
Sodium	20	6.76	8.6	7.97	8.29	31.4	29.9	41.8	23	6.17	11.4	11.1	7.8	7.47	8.71	8.98	12.1	11.7
Vandium	-										0.034		0.02					
Zinc	2**				0.345						0.071		0.041			0.153		

- Notes:
1. Class GA regulatory values are derived from NYS Ambient Water Quality Standards TOGS 1.1.1 (Source of Drinking Water, groundwater), June 1998
 2. Only compounds with one or more detections are shown.
 3. mg/L = milligrams per Liter (equivalent to parts per million or ppm)
 4. Blank spaces indicate that the analyte was not detected.
 5. (-) indicates that a regulatory value is not associated with this parameter
 6. (**) = New York state guidance value was used where no groundwater standard was available
 7. Shaded values represents concentration exceeded the Regulatory Value
 8. Remedial Investigation sample data qualifiers were applied by Jim Baldwin, Dataval Inc.
 9. Definitions of data qualifiers are presented in Table X.
 10. The groundwater samples analyzed for dissolved metals were run through a 0.45 micron filter by the laboratory prior to analysis.

Table 5
Former A & A Metals Site RI

Summary of Analytical Results
Sediment Samples

	<u>SOIL CLEANUP OBJECTIVE RESIDENTIAL USE</u>	<u>SOIL CLEANUP OBJECTIVE COMMERCIAL USE</u>	<u>SOIL CLEANUP OBJECTIVE INDUSTRIAL USE</u>	FAM-SED-1	FAM-SED-2	FAM-SED-3	FAM-SED-4
Date Collected				5/12/2011	5/12/2011	5/12/2011	5/12/2011
Volatile Organic Compounds (ug/Kg)							
cis-1,2-Dichloroethene	59,000	500,000*	1,000,000				24.3
Methylene Chloride	51,000	500,000	1,000,000			22.6	44.2
Trichloroethene	10,000	200,000	400,000			3.03	159
Total VOCs	-	-	-			25.63	227.5
Semi-Volatile Organic Compounds (ug/Kg)							
Acenaphthylene	100,000*	500,000	1,000,000			573	
Acetophenone	100,000*	500,000*	1,000,000*				
Anthracene	100,000*	500,000	1,000,000			1,080	
Benzo(a)anthracene	1,000	5,600	11,000	627		3,030	
Benzo(a)pyrene	1,000	1,000	1,100	630		2,420	
Benzo(b)fluoranthene	1,000	5,600	11,000	674		2,300	
Benzo(g,h,i)perylene	100,000*	500,000	1,000,000			1,340	
Benzo(k)fluoranthene	1,000	56,000	110,000	701		2,220	
Chrysene	1,000	56,000	110,000	838		2,950	
Fluoranthene	100,000	500,000	1,000,000	1,510		6,130	
Indeno(1,2,3-cd)pyrene	500	5,600	11,000			1,070	
Phenanthrene	100,000	500,000	1,000,000	798		4,580	
Pyrene	100,000	500,000	1,000,000	1,310		5,510	
TOTAL SVOCs	-	-	-	7,088		33,203	
Total Organic Carbon (TOC) (ug/Kg)							
TOC (ug/Kg)	-	-	-	25,900	17,300	12,200	49,300
TOC (%)		1 - 10%		0.00259	0.00173	0.00122	0.00493
Metals (mg/Kg)							
Aluminum	-	-	-	6,600	14,800	9,890	8,830
Arsenic	16	16	16	13.6	7.78	14.6	55.3
Barium	350	400	10,000	122	64	55	63.5
Beryllium	14	590	2,700		0.577	0.747	
Cadmium	2.5	9.3	60	0.397	0.362	1.26	
Calcium	-	-	-	56,700	17,400	2,270	8,170
Chromium	22	400	800	22.9	18.5	59.9	15.8
Cobalt	-	-	-	8.23	10.1	10.3	
Copper	270	270	10,000	28.6	24.7	48.3	33.9
Iron	-	-	-	28,000	24,300	34,300	26,700
Lead	400	1,000	3,900	40.3	32.4	58.1	25.3
Magnesium	-	-	-	6,460	11,000	3,070	3,250
Manganese	2,000	10,000	10,000	4,620	812	647	761
Mercury	0.81	2.8	5.7		0.0604	0.218	0.0538
Nickel	140	310	10,000	90.2	26.6	32.3	21
Potassium	-	-	-	571	1,160	591	1,160
Selenium	36	1,500	6,800	1.13			3.22
Silver	36	1,500	6,800	1.43		1.66	
Thallium	-	-	-	3.98			
Vandium	-	-	-	15.1	21.8	23.5	16.6
Zinc	2,200	10,000	10,000	107	101	581	102

Notes:

1. Soil Cleanup Objectives source is 6NYCRR Part 375 Environmental Remediation Programs December 2006 Edition (Part 375)
2. Only compounds with one or more detections are shown.
3. ug/Kg = micrograms per Kilogram (equivalent to parts per billion or ppb)
4. mg/Kg = milligrams per Kilogram (equivalent to parts per million or ppm)
5. Blank spaces indicate that the analyte was not detected.
6. (*) = The cap for individual VOCs and SVOCs that do not have an SCO is 100,000 ug/Kg for residential use, 500,000 ug/Kg for commercial use and 1,000,000 ug/Kg for industrial use.
7. (-) = No regulatory value is associated with this parameter
8. Analytes that were detected at concentrations exceeding Residential Soil Cleanup Objectives are depicted in **bold**.
9. Analytes that were detected at concentrations exceeding Commercial Soil Cleanup Objectives are depicted in **bold**.
10. Analytes that were detected at concentrations exceeding Industrial Soil Cleanup Objectives are depicted in **bold** and are shaded.
11. Regulatory value for TOC derived from NYSDEC Technical Guidance for Screening Contaminated Sediments January 1999
12. Concentrations less than the effect range are considered acceptable, concentrations within the effect range are considered contaminated with moderate impact to the environment, and concentrations greater than the effect range are considered to be contaminated with significant harm to the environment.

Table 6
Former A & A Metals Site RI

**Summary of Analytical Results
Surface Water Samples**

	REGULATORY VALUE	FAM-SW-1	FAM-SW-2	FAM-SW-3	FAM-SW-4	FAM-SWDUP
Date Collected		5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011
Volatile Organic Compounds (ug/L)						
Acetone	50	14.9	19.6	13.6	18.1	18.5
cis-1,2-Dichloroethene	5.0				9.21	8.93
Metals (mg/L)						
Aluminum	2.0	1.42		0.506		
Arsenic	0.25				0.011	0.01
Calcium	-	79.2	90.9	61.3	28.1	27.6
Chromium	0.05	0.010		0.010		
Iron	0.3	2.38	0.097	1.43	2.12	2.05
Lead	0.025	0.005				
Magnesium	35**	13.3	18.2	10.4	5.34	5.23
Manganese	0.3	0.258	0.04	0.264	0.288	0.283
Potassium	-	2.29	2.14	1.54		
Selenium	10			0.009		
Sodium	20	25.2	63.4	4.85	3.16	3.18

Notes:

1. Regulatory values are derived from NYS Ambient Water Quality Standards TOGS 1.1.1 (Source of Drinking Water, groundwater), June 1998.
2. Based on the subsurface origin of the surface water samples, the groundwater regulatory values were used.
3. Only compounds with one or more detections are shown.
4. mg/L = milligrams per Liter (equivalent to parts per million or ppm)
5. ug/L = micrograms per Liter (equivalent to parts per billion or ppb)
6. (-) = No regulatory value is associated with this parameter.
7. Blank spaces indicate that the analyte was not detected.
8. (**) = New York state guidance value was used where no groundwater standard was available
9. Shaded values represents concentration exceeded the Regulatory Value

Table 7
Former A & A Metals Site RI

Summary of Analytical Results
Transformer Oil Samples

	NYS Hazardous Waste Characterization	FAM-BLDG2- T1-OIL-O	FAM-BLDG2- T2-OIL-O	FAM-BLDG2- T3-OIL-O	FAM-BLDG2- T4-OIL-O	FAM-BLDG2- T5-OIL-O	FAM-BLDG2- T6-OIL-O	FAM-BLDG3- T7-OIL-O	FAM-BLDG3-T8- OIL-O	FAM-BLDG3-T9- OIL-O	FAM-BLDG3- T10-OIL-O
Date Collected		5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011	5/12/2011
PCBs (mg/Kg)											
Aroclor-1254			1.88	2.62							
Aroclor- 1260					53.9	48.6	47.5		2.35		
Total	50		1.88	2.62	53.9	48.6	47.5		2.35		

- Notes:
- 1. NYS Harzardous Waste Characterization source is 6NYCRR Part 371.4(e), which indicates wastes containing 50 parts per million by weight or greater of PCBs are listed as hazardous waste in New York State.
 - 2. Storage, handling and disposal of PCB containing oil and associated electrical equipment must be done so in accordance with 40 CFR part 761
 - 3. Only compounds with one or more detections are shown.
 - 4. mg/Kg = milligrams per Kilogram (equivalent to parts per million or ppm)
 - 5. Blank spaces indicate that the analyte was not detected.
 - 6. (-) = No regulatory value is associated with this parameter
 - 7. NA = parameter not analyzed

APPENDIX A

FIELD LOGS

TEST PIT LOG

PIT NO: TP-1

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

Description

orientation: NS

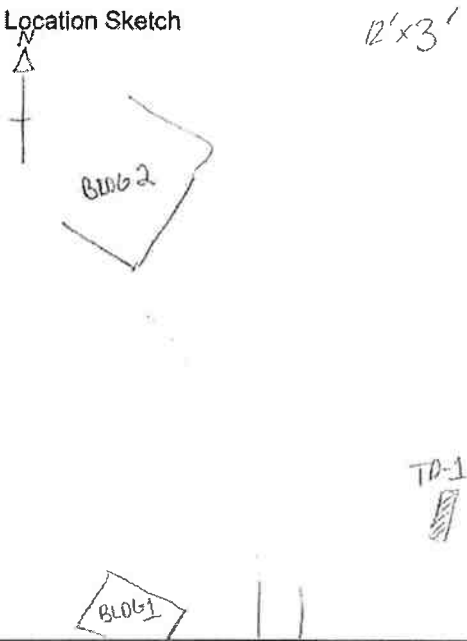
Depth

0	Surface: Gravel	Gray	
0-1	1	Gravel Fill	Gray Moist
1-2	2	Brown clayey silt w/ g. red t. gray	Mottling Moist
2-3	3	As above	w/ Rock + boulders
3-4	4	Brown sandy silt w/ Rock	wet / SAMPLE TP-1 D67
7-8.5	5	Weathered Rock	wet - SAT
6			Water Entering Pit

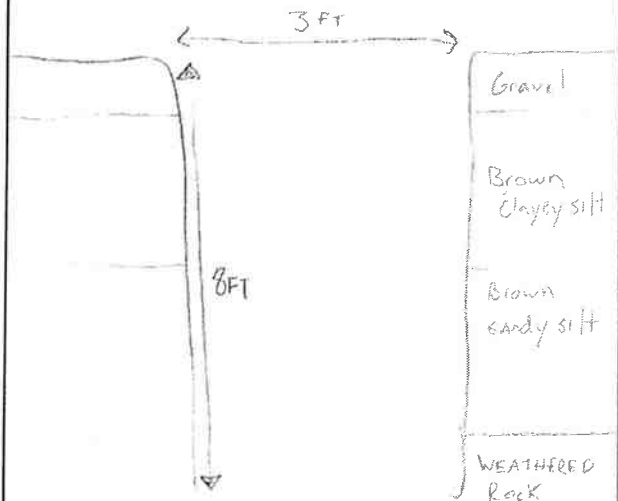
2.3m
Deep

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-2

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

Description

NS

Depth 2.2 m 7.2'

Surface Gravel + Blacktop

0-1' Gravel Fill various size Gray

1-3' Clayey silt Brown w/ gray + G Mottling w/ Rock + boulders

3-7' Sandy silt Brown w/ Rock + boulders Gray Mottling
w/ some clay weathered

10'

SAMPLE COLLECTED @ 2-3'

11'

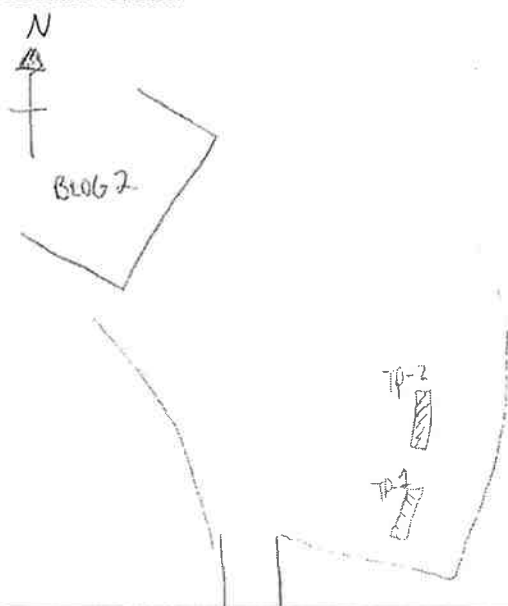
No visual or olfactory evidence

12'

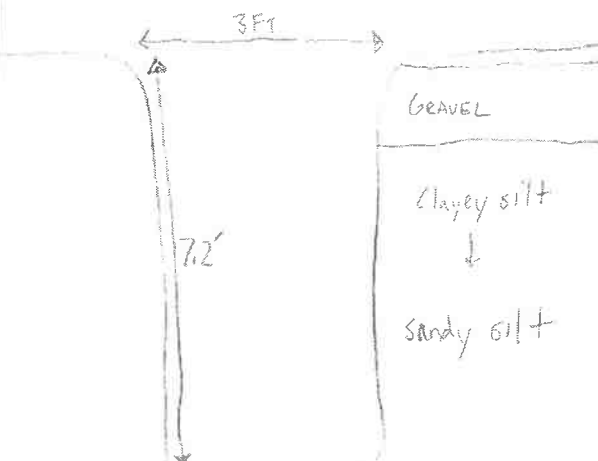
No PID

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-3

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/4/11

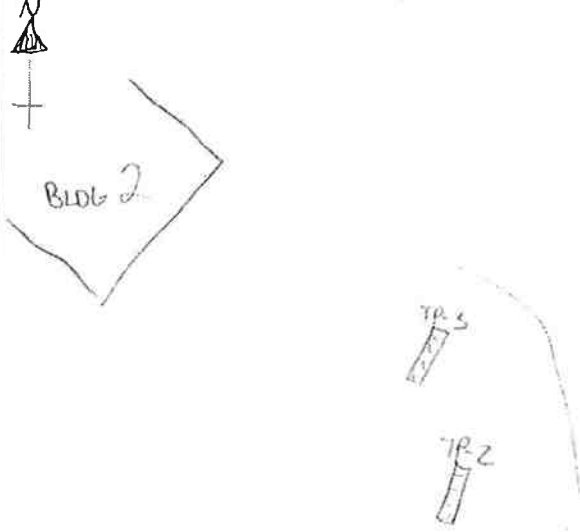
Description NS North Eastern portion

Depth 8 ft 12' x 3'

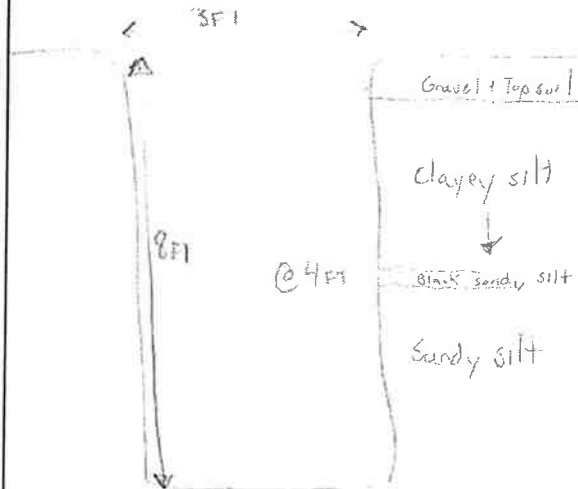
0	Surface: <u>Gravel + Grass</u>
0-5	<u>Gravel + Topsoil Brown</u>
1	
0.5-2	<u>Brown clayey silt w/ gray mottling Rock</u>
2	
3-6	<u>Blk sandy silt w/ organic material fractured Rock WET 0: Pit</u>
3	<u>lenses</u>
2-8	<u>Brown sandy silt w/ clay</u>
4	<u>SAMPLE Blk mottling @ 4'</u>
5	
6	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TVGA CONSULTANTS	TEST PIT LOG	PIT NO: <u>TP-41</u>
Project Name: <u>Former A&A Metals Site</u>		Project No: <u>2011.0066.00</u>
Project Location: <u>Village of Perry, NY</u>		Date: <u>5/9/11</u>
Description <u>NS</u>		
Depth <u>4.1m 13.45'</u>		
0	Surface: <u>Tall grass + weeds</u>	
0 → 1	<u>Gravel Topsoil, slag fill, wood, glass, brick, Metal pieces, concrete pieces</u> <u>13.45' sand silt Brown w/ 5 Brown Red Rusty color</u>	
2	<u>Green color under Metal Fill</u> <u>BLK Fiber Mat.</u>	
3	<u>large piece of slag @ ~ 7.5'</u> <u>free of Metal Pipe @ ~ 4.5'</u>	
4	<u>SAMPLE @ 13'</u> <u>Rusty color</u> <u>sandy silt w/ metal + gravel</u> <u>Red, BLK staining</u>	
5		
6		
Comments:		
Location Sketch 	Cross Section: 	
Geologist: <u>A. Benkleman</u>		Operator: _____

TEST PIT LOG

PIT NO: TP-6

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

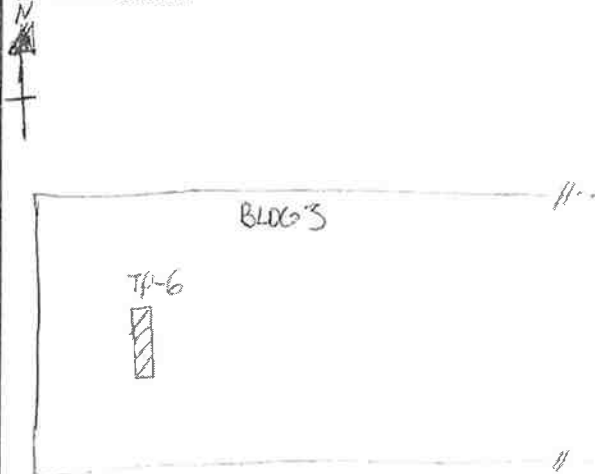
Description

Depth 2.2m 7.22'

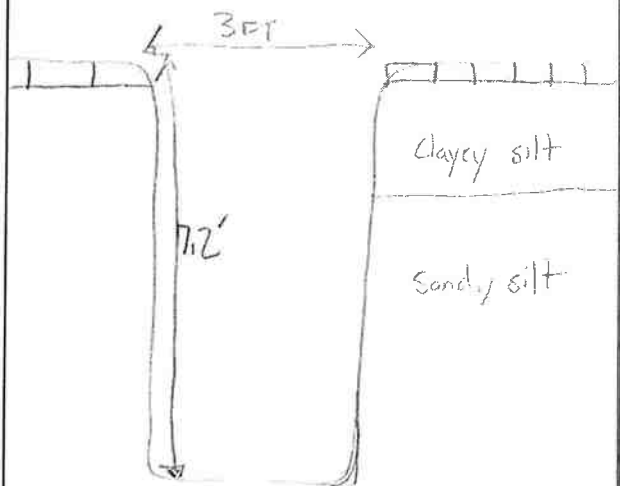
0	Surface: <u>Brick</u>
0-2	<u>Brown clayey silt w/gray mottling wet</u>
1	
2-7.2	<u>Brown gray sandy silt w/ clay</u> PI0 = 125 @ 25'
2	<u>weathered Rock shale</u> WET-SAT 225 percK
	<u>SAMPLE @ 6.5'</u> →
3	
	<u>Concrete @ 1.5m</u>
4	
5	
6	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-17

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

Description

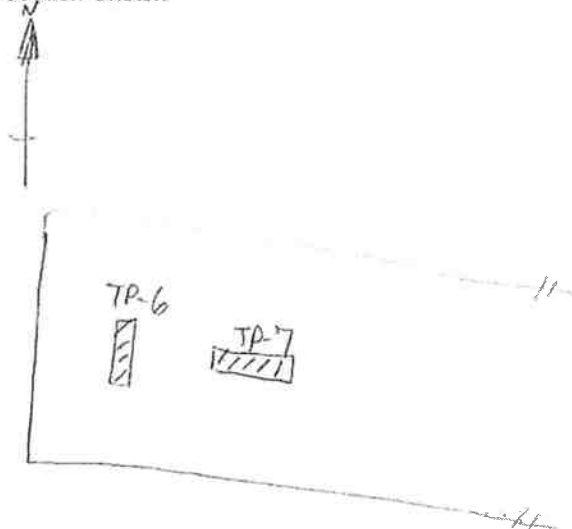
Similar to TP-6

Depth 2.2m 7.22'

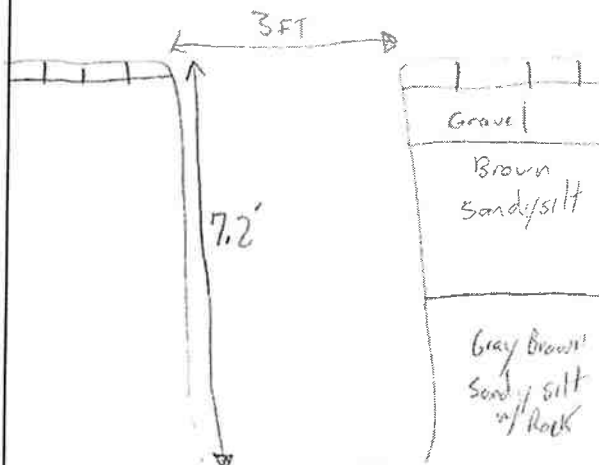
0	Surface: <u>Wood Block</u>
0-1.5	<u>Blk to gray Gravel w/ slag + Metal pieces moist</u>
1	
1.5-3	<u>Brown sandy silt w/ clay + rock moist</u>
2	
3-7.2'	<u>Brown gray sandy silt + weathered Rock shale</u> <u>PID = 214</u> <u>moist</u>
3	<u>WET</u> <u>SAMPLE @ 6-7'</u>
4	
5	
6	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TEST PIT LOG

PIT NO: TP-8

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

Description

Depth 2.0m 6.56'

Surface 8 Wet Black

Pipe Below surface ~1"

0-0.5 Sand Brown

SAMPLE @ 0-1'

0.5-1 Rock rounded + Sand Moist

1-3 Brown sandy silt w/ Rock moist

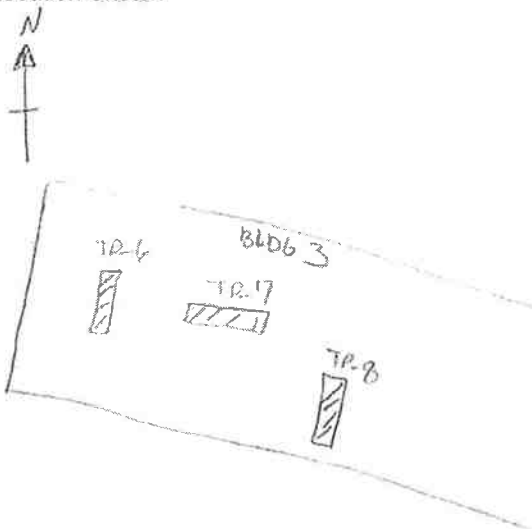
3-6.5 Gray Brown sandy silt + Rock wet
similar to TP-7, 6

1A

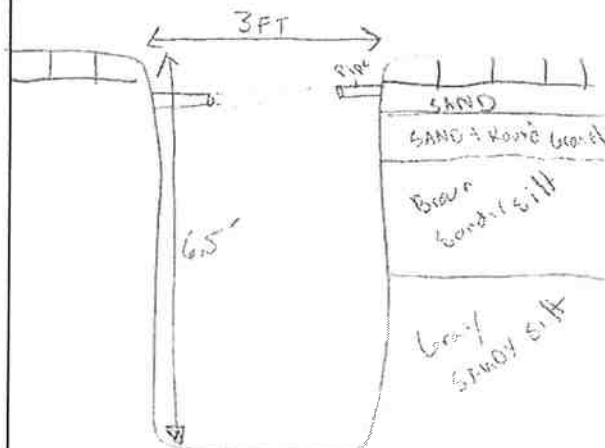
1B

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-9

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

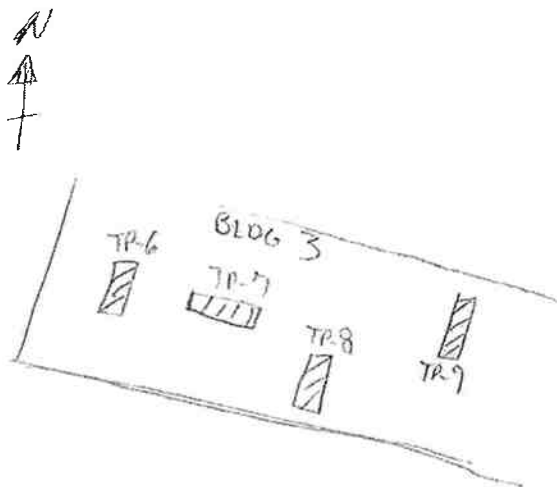
Date: 5/9/11

Description

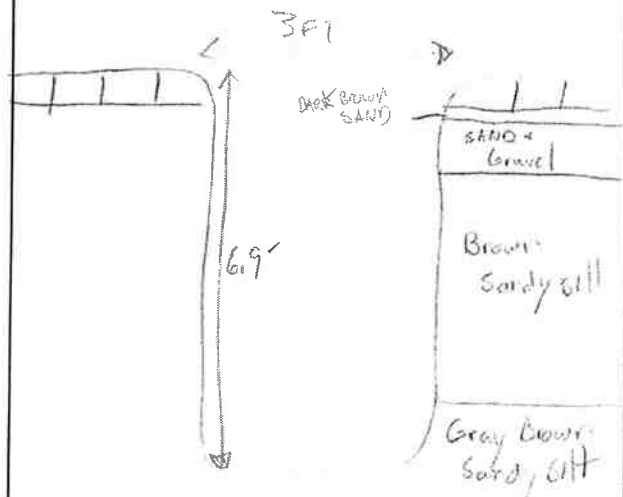
Depth	2.1m 6.89'
Surface	Wood Block SAMPLE @ 0-0.5'
0-1.3	Dark Brown Red sand loose
1.3-1.5	Sand coarse + gravel Brown
1.5-6.6	Brown sandy silt like previous
6-7.4	Gray Brown sandy silt w/ rock like previous O-P 10
10	
11	
12	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TEST PIT LOG

PIT NO:

TR-10

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

Description

Same as TR-9

Depth

1.8m ~ 6'

Surface

Wood Block

0-1.5'

1.5-1.5'

Sand + gravel Brown

SAMPLE @ 1.5-2'

1.5-5'

Brown sandy silt w/ Rock

5-6'

Gray Brown sandy silt w/ Rock

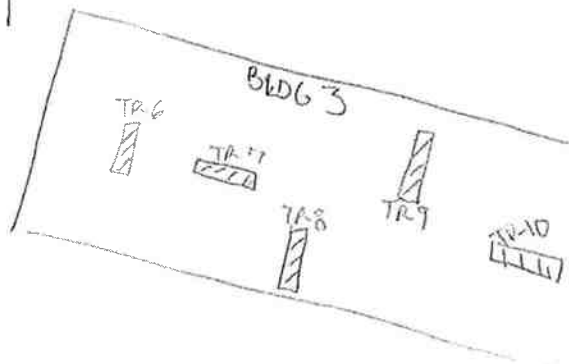
10

11

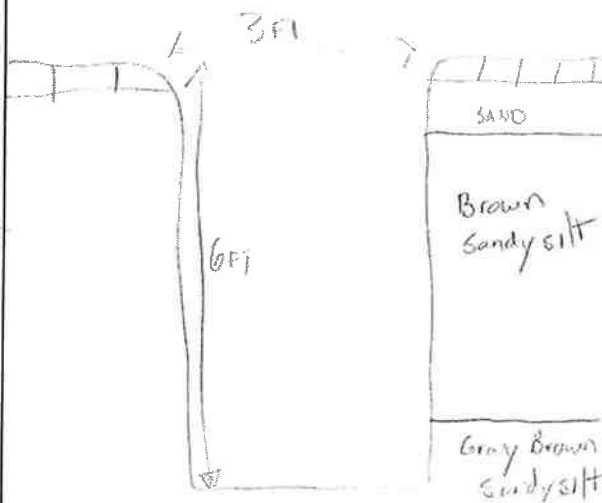
12

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TEST PIT LOG

PIT NO: TP-11

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

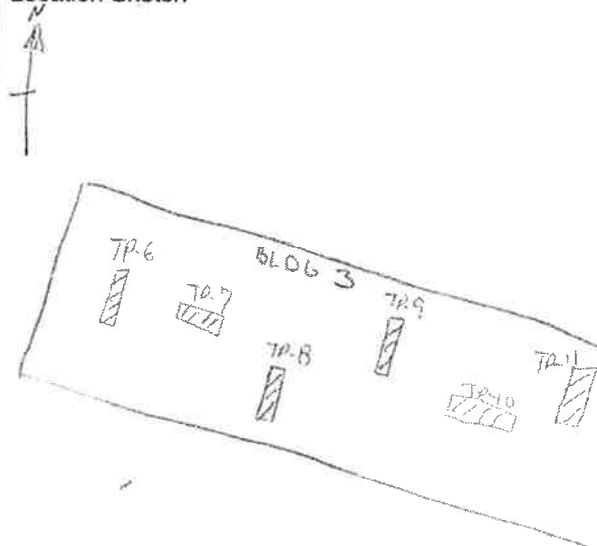
Description: Same as previous

Depth: 1.6m 5.25'

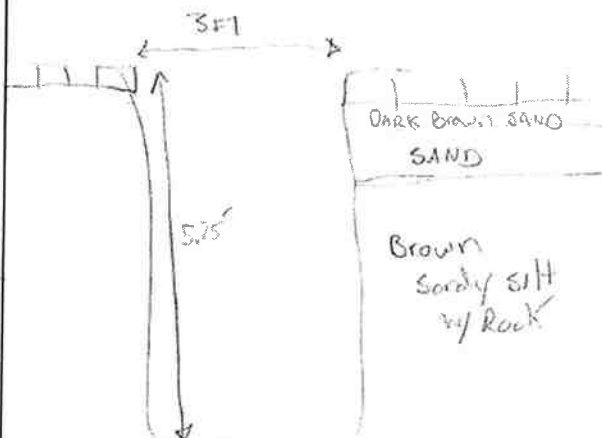
0	Surface: <u>Wood Block</u>	
0-0.2	<u>Dark Brown Red sand</u>	<u>MS/MSD</u>
0.2-1.51	<u>Brown Sand + gravel</u>	<u>SAMPLE @ 0-0.5'</u>
1.5-5.25'	<u>Sandy silt w/ Rock</u>	
3	<u>Large Rocks @ 5.25'</u>	
4		
5		
6		

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TEST PIT LOG

PIT NO: TP-12

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

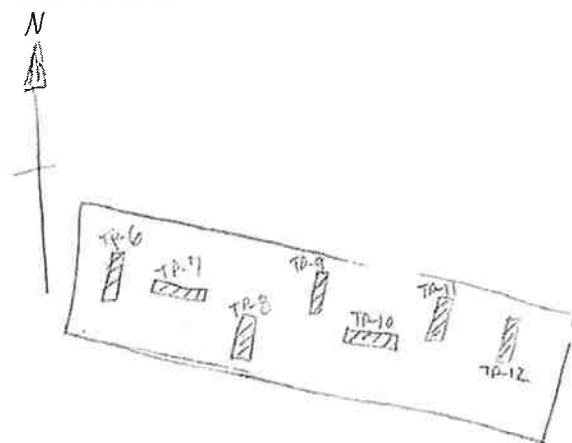
Description

Depth 2.1m 6.9' *As previous*

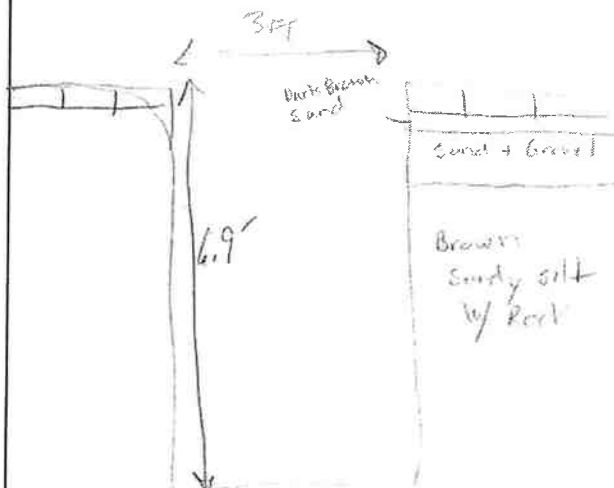
0	Surface: <u>Wood Blocks</u>
0-0.21	<u>Dark Brown Red Sand</u>
0.2-1.52	<u>Sand + Gravel Brown wetst</u> <i>SAMPLE @ 0.5 - 1.5</i>
1.5-7.3	<u>Brown Sandy silt w/ Rocks wet</u>
4	<u>Water in pit</u>
5	
6	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TEST PIT LOG

PIT NO: TP-13

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

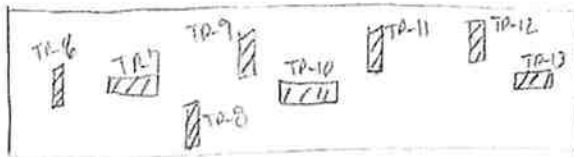
Description

Depth 2.2m 7.22'

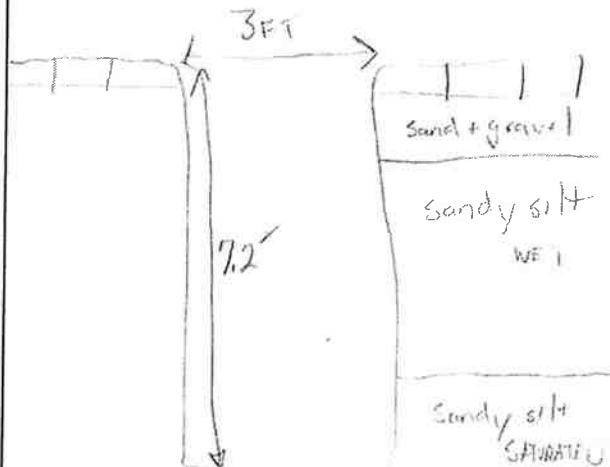
0	Surface: <u>Wood Block</u>
0-1.5	<u>Sand + gravel Brown moist</u>
1	
1.5-5	<u>Brown sandy silt w/ Rock wet SAMPLE @ 2-3'</u>
2	<u>Gray Mottling</u>
5-7.22'	<u>As above SAT</u>
3	
4	
5	
6	

Comments:

Location Sketch



Cross Section:

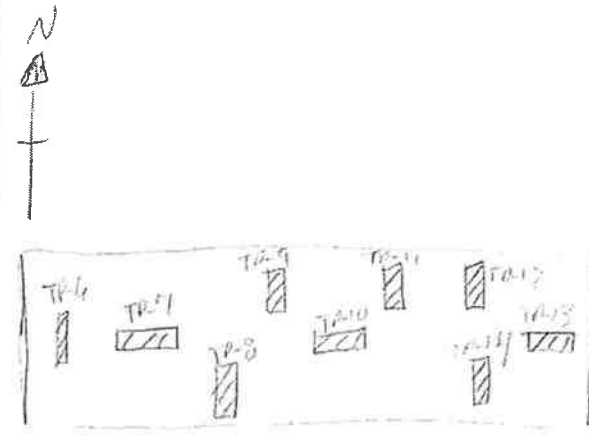
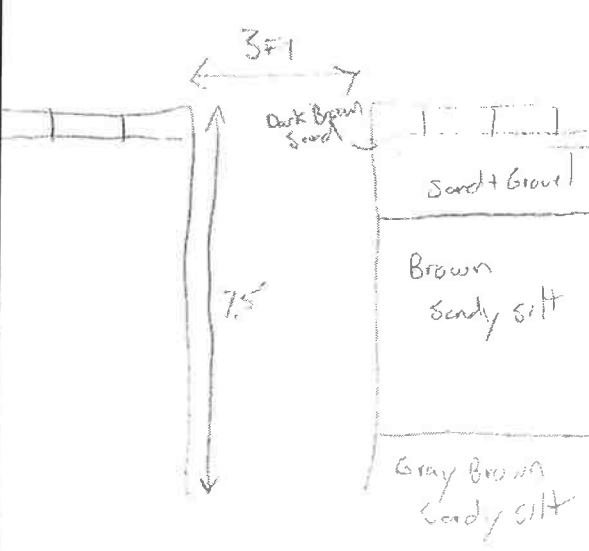


Geologist: A. Benkleman

Operator:

TVGA CONSULTANTS	TEST PIT LOG	PIT NO: <u>TP-14</u>
Project Name: <u>Former A&A Metals Site</u>		Project No: <u>2011.0066.00</u>
Project Location: <u>Village of Perry, NY</u>		Date: <u>5/9/11</u>

Description	<u>Same as Previous</u>	
Depth	<u>2.3m</u>	<u>7.5</u>
0	Surface: <u>Wood Block</u>	
0-0.21	<u>Dark Brown sand</u>	
0.2-1.5	<u>Brown Sand + Gravel</u>	PID = 0
2		
1.5-6	<u>Brown sandy silt w/ Rock</u>	SAMPLE @ 2'
3	<u>gray Mottling</u>	PID = 114
6-7.5	<u>Gray Brown sandy silt w/ Rock</u>	PID = 9
4		
5		
6		

Comments:	
Location Sketch 	Cross Section: 
Geologist: <u>A. Benkleman</u>	Operator: _____

TEST PIT LOG

PIT NO: TP-15

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

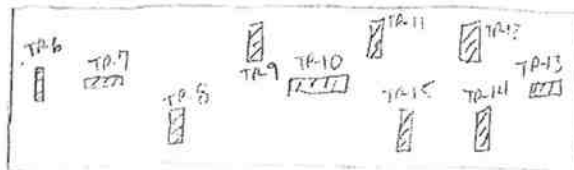
Description: AS PREVIOUS

Depth: 1.6m 5.25

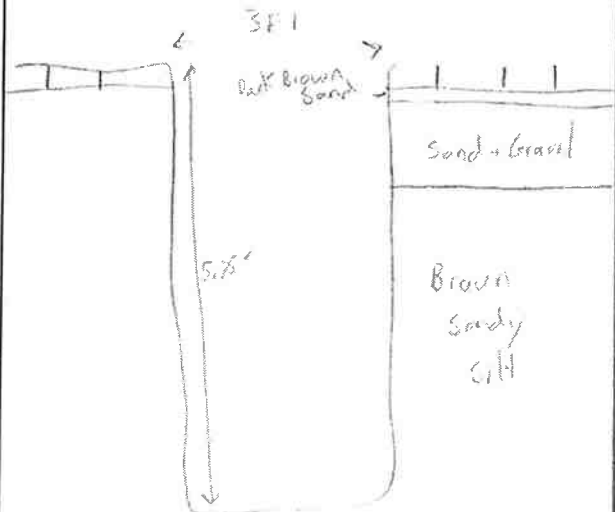
0	Surface: <u>Wood Block</u>	
0-0.7	<u>Dark Brown Sand</u>	<u>SAMPLE @</u>
1		<u>0-0.5</u>
0.2-1.5	<u>Brown Sand + Gravel</u>	<u>Dark Brown Red Sand</u>
2		
1.5-5	<u>Brown sandy silt w/ Rocks, gray Matting</u>	
3		
4		
5		
6		

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-16

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

Date: 5/9/11

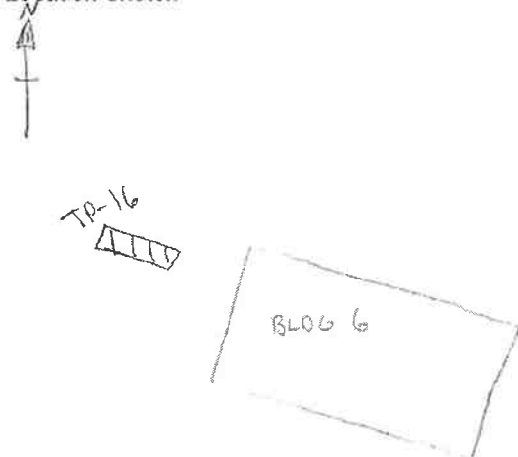
Description 18:06

Depth 2.3m 7.5' SAMPLE @ 1.5'

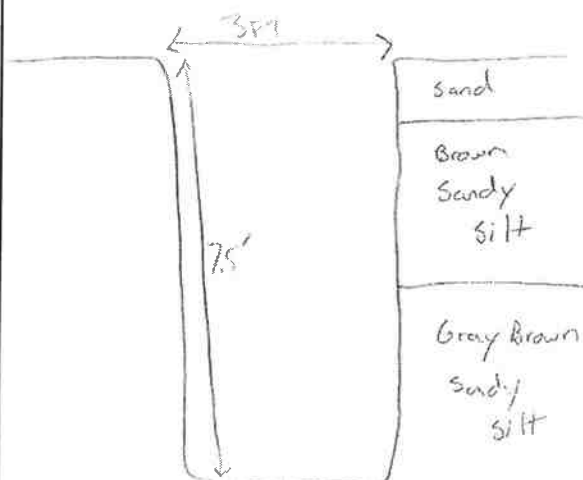
	<u>Surface: Sand + gravel</u>	
<u>0-1.5m</u>	<u>Sand brown moist w/ gravel</u>	<u>O = P10</u>
<u>1.5-3.0</u>	<u>Sandy silt Brown WET</u>	
	<u>w/ Rock</u>	
<u>3-7.5</u>	<u>Gray Brown Sandy silt</u>	
	<u>w/ Rock WET - SAT</u>	
<u>10</u>		
<u>11</u>		
<u>12</u>		

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator: _____

TEST PIT LOG

PIT NO: TP-17

Project Name: Former A&A Metals Site

Project No: 2011.0066.00

Project Location: Village of Perry, NY

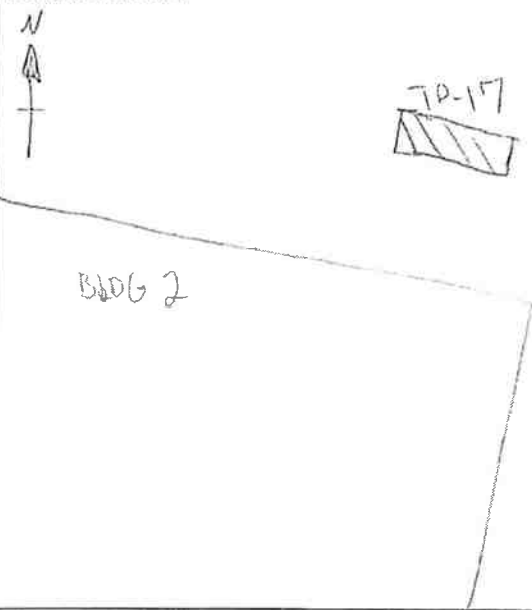
Date: 5/9/11

Description

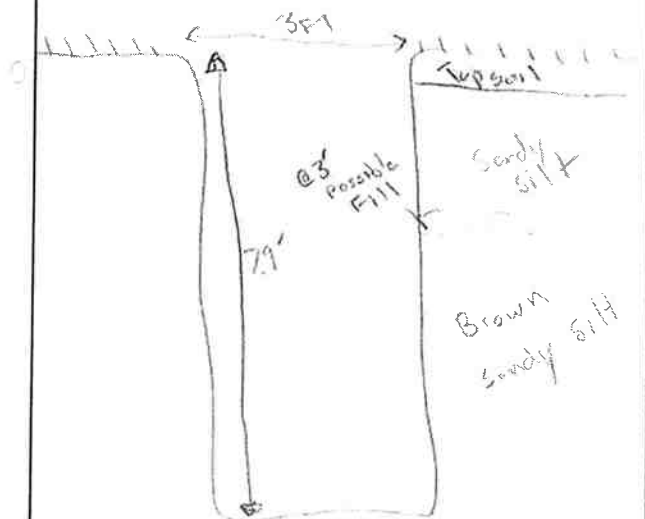
Depth	Description
0	Surface: Grass
0-0.5'	Topsoil Moist
0.5-8'	Brown sandy silt w/ clay + Rock Gray + OJ Mottling wet → SAT
3'	lense possible FILL Brown Red sandy silt w/ Red + OJ Flakes
10	water in pit SAMPLE @
11	
12	

Comments:

Location Sketch



Cross Section:



Geologist: A. Benkleman

Operator:

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-2	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.							Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				36			0-0.5 Asphalt		
							0.5-1 Gravel subbase		
	4						1-3 Brown sandy silt w/ Red + Gray Mottling w/ Gravel		
	5.1			48			0-1 Brown sandy silt w/ Rock S&T		
	8						1-4 Brown sandy silt w/ Red, S&T Gray Mottling w/ Rock		
							As above and Rock		
							Refusal @ 8.5		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-2	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4	SS-2 @ 4'		48			0-0.5 Gravel + Sand		
							0.5-1.5 Brown sandy silt w/ Rock		
							1.5-2 Dark Brown ↑		
				48			2-4 Brown sandy silt w/ Rock Red + gray Mottling Moist		
	8						0-1.5 As above		
	10						1.5-4 Gray Brown sandy silt w/ Red + QZ Mottling Moist		
							0-2 As above weathered Rock in Tip		
							Refusal @ 10'		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. 0153	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	Acetate	Macro Core			
				Weight	1.75"	2.0"			
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4			42			Gravel + Grass Surface 0-0.5 Gravel + Topsoil		
				36			6.5-3.5 Brown sandy silt w/ Rock OS + Gray Mottling @ 2' Dark Brown loose sand silt w/ organics		
	8			42			0-3' Brown Gray sand silt w/ Rock OS + Gray Mottling @ 2' White Rock + sand		
	12	SS-3 @ 11-12'		42			0-0.5 As above wet 0.5-2 As above SAT 2-3.5 As above wet		
	16			42			0-2.5 As above SAT 2.5-3.5 As above + Rock wet weathered Rock in Tip Refusal @ 16'		



SOIL PROBE LOG

PROBE NO. *SP-4*

Project: Former A&A Metals Site
Client: WCBC Washington, LLC
Contractor: SJB Inc.

Project No. 2011.0066.00
GS Elev
WS Ref Elev
N-S Coord
E-W Coord
Start Date *5/10/11*
Finish Date
Driller
Geologist A. Benkleman

Groundwater Data (feet)				Equipment Data			
Date	Time	Depth	Elev		Casing	Sampler	Core
				Type Diameter Weight Fall	Acetate 1.75"	Macro Core 2.0"	

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4	<i>3-4</i>		<i>18"</i>			<i>0-0.3 Top soil Brown</i>		
		<i>5</i>					<i>0.3-1.0 Brown sandy silt w/ rock</i>	<i>0</i>	
							<i>0.5 Gray Mottling Holst</i>		
				<i>36</i>			<i>10-1.5 As above WET</i>		
							<i>0-1' As above WET</i>	<i>0</i>	
							<i>1-3' As above SAT</i>	<i>0</i>	
				<i>24</i>			<i>0-1 As above SAT</i>	<i>10</i>	
							<i>1-2 Gray Brown sandy silt SAT</i>	<i>87</i>	
							<i>w/rock 0.5 Mottling</i>		
							<i>Refusal @ 11.5'</i>		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-5	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Acetate	Macro Core				
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				30			Grass surface		
							0-0.2 Topsoil		
	4						0.2-2.5' Brown sandy silt w/rock		
							Gray 100 Mottling Moist		
				36			0-2 As above WET		
	8						2-3 Gray Brown sandy silt w/		
							Rock 05 Mottling WET	208	
				48			0-4 As above SAT @ 0.5	151	
	12						@ 1	100	
				36			@ 1.5	250	
	15						@ 2	102	
							@ 3	380	
							@ 4	154	
							0-3 As above	@ 1	156
								@ 1.5	54
								@ 2	20
								@ 3	10
							Refusal @ 15'		



SOIL PROBE LOG

PROBE NO. SP-6

Project: Former A&A Metals Site
Client: WCBC Washington, LLC
Contractor: SJB Inc.

Project No. 2011.0066.00
GS Elev
WS Ref Elev
N-S Coord
E-W Coord
Start Date 5/10/11
Finish Date
Driller
Geologist A. Benkleman

Groundwater Data (feet)				Equipment Data				N-S Coord	
Date	Time	Depth	Elev		Casing	Sampler	Core	E-W Coord	
				Type	Acetate	Macro Core		Start Date	5/10/11
				Diameter	1.75"	2.0"		Finish Date	
				Weight				Driller	
				Fall				Geologist	A. Benkleman
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4	556		42			Grass Surface 0-0.3 Topsoil Brown Moist 0.3-1.5 Brown sandy silt w/rock Gray + 0.5 Matting 1.5-2 Bk sandy + silt w/rock Moist 2-3.5 Brown sandy silt w/rock Gray + 0.5 Matting WET	0	
	8			46			As above Moist	0	
	12			48			0-2 As above Moist 2-4 As above WET	2.2	
	14.5			48			0-2 SAT Fall Back 2-4 As above SAT WATER IN TUBE	0	
							14.5' Refusal	0	



SOIL PROBE LOG

PROBE NO. SP-7

Project: Former A&A Metals Site
Client: WCBC Washington, LLC
Contractor: SJB Inc.

Project No. 2011.0066.00
GS Elev
WS Ref Elev
N-S Coord
E-W Coord
Start Date 5/10/11
Finish Date
Driller
Geologist A. Benkleman

Groundwater Data (feet)				Equipment Data		
Date	Time	Depth	Elev	Casing	Sampler	Core
				Type	Acetate	Macro Core
				Diameter	1.75"	2.0"
				Weight		
				Fall		

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				42			Concrete Surface		
							0-0.2 Gravel		
	4						0.2-3.5' Brown sandy silt w/rock Gray + OJ Mottling Moist	0	
				42			0-1 As above Moist	0	
	8						1-3.5 As above wet	0	
				48			3' Red Brown silt + Rock lense	0	
							0-2 As above SAT	0.8	
	12	33-7					2-4 As above wet	1.6	
	14	33-7		42			0-1.5 Fall Back	2.7	
							1.5-3.5 As above wet	4.8	
							Weathered Rock in TID		
							Refusal @ 14'		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. <i>SP-8</i>	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date <i>5/10/11</i> Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
							Surface i Concrete		
							0-0.5 Gravel + sandy silt DRY		
	4	<i>55-8</i> <i>@ 2'</i>		36			0.5-3' Brown sandy silt w/ Rock Moist Gray + 0.5 Mottling	0.8	
				24			0-0.5 Full Back Gravel		
	8						0.5-2 As above	0	
				36			0-1 Full Back Gravel	0.5	
							1-3 As above WET	0	
	12						0-1.5 Full Back As above WET	0.4	
				48			1.5-3.5 As above SAT		
							3.5-4.0 As above WET		
							Refusal @ 14.4'		
							Rock in Tip		

TVGA CONSULTANTS		SOIL PROBE LOG								PROBE NO. SP-9	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)				Equipment Data							
Date	Time	Depth	Elev		Casing	Sampler	Core				
				Type	Acetate	Macro Core					
				Diameter	1.75"	2.0"					
				Weight							
				Fall							
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)			
								Direct	Head		
	4	53-9 3-4		42			Grass surface 0-0.2 Gravel				
				48			0.2-2 Brown sandy silt w/ Rock Gray + OS Matting Moist	98			
							2-3.5 as above WET	368	147		
	8			48			0-2 Gray Brown SANDY silt w/ Rock OS Matting SAT @1	187			
	12						2-4 As above WET				
	14			48			@2 316				
							@4 134				
							As above SAT				
							0-4 @1 241				
							@2 132				
							@3 56				
							@4 18				
							0-8 Full Back				
							2-4 As above WET-SAT	188			
							Refusal @ 13.10"	24			

TVGA CONSULTANTS		SOIL PROBE LOG										PROBE NO. SP-10	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.										Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)					Equipment Data								
Date	Time	Depth	Elev		Casing	Sampler	Core						
					Type	Acetate	Macro Core						
					Diameter	1.75"	2.0"						
					Weight								
					Fall								
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description				Remarks PID Reading (ppm)		
											Direct	Head	
				36			Surface: Sand						
		SS-102					0-0.5 Sand lt. Brown				0		
	4	3-4'					0.5-1.5 Brown sandy silt w/rock						
				36			1.5-2.5 Dark Brown sandy silt w/ gravel + B/K Rock				1.3		
	8						2.5-3 Brown sandy silt w/rock Gray Mottling				0.5		
				48			0-1 Fall Back						
	12						1-3 Brown Gray sandy silt w/ Rock WET → SAT				0.6		
	14			48			0-2.5 Brown sandy silt w/rock Gray + OJ Mottling SAT				0		
							2.5-4 Gray Brown sandy silt w/ OJ Mottling w/rock WET				0		
							0-2 Fall Back				0		
							2-4 As above WET				0		
							WATER IN TUBE						
							Refusal @ 14.2'						
							Rock in TUB						

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-11	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.							Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/10/11 Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	Acetate	Macro Core			
				Weight	1.75"	2.0"			
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
							Grass surface		
							0-0.2 Topsoil	0	
							@ 0.3 Red Rock lense		
							0.3-0.8 Blk stained sand + silt	0	
							0.8-2 Brown sandy silt w/ Rock	0.4	
							gray Matting		
							0-0.3 Fall Back		
							0.3-3' As above WET	0	
							3-4 Gray Brown sandy silt w/ Rock as Matting	0	
							0-1 Brown sandy silt w/ Rock		
							Gray Matting WET-SAT	0	
							1-3.5 Gray Brown sandy silt w/ Rock WET		
							@ 3' Red Rock + silt	0	
							@ 2 Fall Back SAT	0	
							2-4 As above WET	0	
							WATER IN TUBE		
							Refusal @ 14.5'		
							Rock in Tip		



SOIL PROBE LOG

PROBE NO. *SP-1Z*

Project: Former A&A Metals Site
Client: WCBC Washington, LLC
Contractor: SJB Inc.

Project No. 2011.0066.00
GS Elev
WS Ref Elev
N-S Coord
E-W Coord
Start Date
Finish Date
Driller
Geologist A. Benkleman

Groundwater Data (feet)				Equipment Data				N-S Coord	
Date	Time	Depth	Elev		Casing	Sampler	Core	E-W Coord	
				Type	Acetate	Macro Core	Start Date		
				Diameter	1.75"	2.0"	Finish Date		
				Weight			Driller		
				Fall			Geologist A. Benkleman		
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks	
								PID Reading (ppm)	
								Direct	Head
	4			30			0-0.5 Sand Brown lt.	0	
							0.5-2.5 Brown sandy silt w/ Rock Gray + 0.5		
				48			@ 1 Red + Bk Mottling Rock + silt	0	
	8						0-3 Gray Brown Sand + silt w/rock SAT	0	
		SS-120 10-11"		36			3-4 Brown sandy silt w/ Rock Gray + 0.5 Mottling Moist	0	
	11						0-3 As above	0	
							Water in Tube		
							Rock in Tip		
							Refusal @ 11"		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-13	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.							Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	Acetate 1.75"	Macro Core 2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
							In side bldg, #1 EAST of LIFT ^{southern}	Direct	Head
				36			Concrete surface	0	
	4						0-0.5 Concrete + Gravel	0	
				42			0.5-3' Brown sandy silt w/ Rock Gray Mottling Moist	0	
	8						0-0.5 Gravel SAT	0	
				30			0.5-3.5 Gray Brown sandy silt w/ Rock 0.5 Mottling WET	0	
	12						0-1 Gravel SAT	0	
	13			42			1-2.5 Gray clayey silt w/ Rock WET	0	
							0-2.5 SAT Fall Back		
							2.5-3.5 As above + Rock SAT	5.6	
							WATER IN TUBE		
							Refusal @ 13'		

TVGA CONSULTANTS		SOIL PROBE LOG										PROBE NO. SP-14	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.										Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)					Equipment Data								
Date	Time	Depth	Elev		Casing	Sampler	Core						
					Type Diameter Weight Fall	Acetate 1.75"	Macro Core 2.0"						
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description				Remarks PID Reading (ppm)		
											Direct	Head	
				32			Inside Bldg 1 west of southern Lift						
							0-0.5 Concrete Gravel DRY				0		
							0.5 Gravel SAT				1.2		
	4						0.5-3 Brown sandy silt w/ Rock Gray Mottling WET				0		
				42			2.5 Dark Red Brown silt loose				0		
	8						0-0.5 Gravel SAT				0		
		SAMPLE 10-12		48			0.5-1 Gravel + Brown sandy silt w/ Rock SAT				0		
	12						1-3.5 Brown sandy silt w/ Rock Gray + CO Mottling				0	6.8	
	14			48			0-2 SAT Gravel				0		
							2-4 Gray silt/clay and Rock WET				0		
							0-2.5 Gravel + sandy silt SAT				0		
							2.5-4 Gray silt and Rock SAT				0		
							Refusal @ 14'						
							WATER IN TUBE						

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. <i>SP-15</i>	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date <i>5/11/11</i> Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Casing	Sampler	Core			
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
							INSIDE Bldg 1 Northeast of Northern Lift		
							Concrete surface		
							0-0.3 Gravel		
							0.3 - 3' Brown sandy silt w/ @3	5.1	
							Rock Gray mottling @3.5	32	
							Moist @4	205	
							0-3 As above w/ Gray + @5 mottling WET-SAT	3.7	
							0-2 As above SAT	3.9	
							2-4 Gray Brown silt + Rock SAT		
							0-3 Gravel + sandy silt SAT		
							3-4 As above SAT		
							WATER IN TUBE Refusa / @ 13'		

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-16	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4	SAMPLE # 3-41		30			In Bldg. 1 South west of Northern 1st		
				36			Gravel 0-0.5	3.9	
							0.5-2.5 Brown sandy silt w/ Rock Gray Matting WET @ 3	1900	970
							@ 2' Red Rock lense @ 3.5	3003	
								92	
	6						0-1 Oil Stained Silty sand + Gravel SAT	176	
							1-3 Brown sand silt w/ Rock w/ Gray Matting WET → SAT	32 @ 2	
	12			36				6 @ 2.5	
								1.8 @ 3.	
							0-1.5 Gravel SAT	72	
							1.5-3 Gray silt + Rock @ 2	08	
							@ 3	22	

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-17	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Acetate	Macro Core				
				Diameter 1.75"	2.0"				
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				36			Grass surface		
							0-0.2 - Topsoil / Brown		
	4						0.2-0.5 Gravel Gray	✓	
							0.5-2 Brown sandy silt w/ Rock Moist		
	6	SAMPLE @ 7-8'		48			2-3 Brown sandy silt w/ Rock WET → SAT	○	
							0-1 Brown sandy silt w/ Rock Gray Mottling SAT	○	
				48			1-2 Brown + Gray sandy silt w/ Rock Red Mottling WET	○	
							0-1 Gravel sand + silt sti	○	
							0-4 Brown + Gray sandy silt w/ Rocks WET	○	
							11.5' Refusal		

TVGA CONSULTANTS		SOIL PROBE LOG										PROBE NO. SP-18	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.										Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)					Equipment Data								
Date	Time	Depth	Elev		Casing	Sampler	Core						
					Type	Acetate	Macro Core						
					Diameter	1.75"	2.0"						
					Weight								
					Fall								
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description				Remarks PID Reading (ppm)		
											Direct	Head	
	4	SAMPLE 2-3		48			Grass surface				1.2		
							0-0.3 Brown Topsoil + organics				0		
							0.3-4 Brown sandy silt w/ Rock Gully + 0.5 Mottling Moist				1.2	2-3.5	
				48			0-0.5 As above				0		
	8						0.5-4 Gray Brown sandy silt + Rock				1.2		
				46			0-4 Gray silt + Rock Moist				0		
							Refusal @ 11.6						

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. SP-19	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	Acetate	Macro Core			
				Diameter	1.75"	2.0"			
				Weight					
				Fall					
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	4			46			0-0.5 Topsoil Dark Brown	0	
							0.5-0.8 Black SAND + Gravel WET		
				36			0.8-4 Brown sandy silt w/ Rock Moist	0	
	9			46			0-3 As above WET w/ Gray + 03 Mottling	0	
							0-1 SAT Dark Brown SANDY SILT	0	
	12			46			1-25 Brown sandy silt w/ Rock Gray + 03 Mottling WET	0	
							25-4 Gray Brown sandy silt w/ Rock + 03 Mottling	0	
							0-1 Gravel sand silt Brown	0	
							1-4 As above SAT WET	0	
							Refusal @ 15.9		

TVGA CONSULTANTS		SOIL PROBE LOG										PROBE NO. SP-20	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.										Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/11/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)					Equipment Data								
Date	Time	Depth	Elev		Casing	Sampler	Core						
					Type	Acetate	Macro Core						
					Diameter	1.75"	2.0"	Weight	Fall				
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description				Remarks PID Reading (ppm)		
											Direct	Head	
	4	SAMPLE 2-4'		36			Topsoil Brown 2-0.3 0.5-5 Brown sandy silt + w/ rock gray + 0.3 matting WET				5.5		
				46							910	348	
											414	25	
											384	3'	
	6						0-2 As above SAT				200		
				48			2-4 Gray Brown sandy silt + Rock 0.3 matting WET				29		
	12						0-1.5 Brown Gray sandy silt + Rock SAT				109		
				46			1.5-4 Gray Brown sand/silt + Rock 0.3 matting WET				55		
							0-2 Brown Gray SAT						
							2-4 Gray silt + Rock WET				32		
							WATER IN TUBE						
							Refusal @ 14.5'						

		SOIL PROBE LOG				PROBE NO. <i>SP-21</i>	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data			
Date	Time	Depth	Elev	Casing	Sampler	Core	
				Type	Acetate	Macro Core	
				Diameter	1.75"	2.0"	
				Weight			
				Fall			

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks	
								PID Reading (ppm)	
								Direct	Head
							0-0.5 SAND + Gravel Brown		
							0.5-1 BLK sand + Gravel		
							1-1.3 Red Rock		
							1.3-2 Gravel		
							2-3 Brown sandy silt w/ Rock wet Gray w/ mottling		
							0-3 As above WET	0.6	
							3-3.5 Rock		
							3.5-4 Gray Brown sandy silt w/ Rock	0	
							8-11.3 stuck in spoon 0' Recovered		
							Refusal @ 11.3'		

		SOIL PROBE LOG				PROBE NO. <i>SP-22</i>		
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date <i>5/11/11</i> Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data				
Date	Time	Depth	Elev		Casing	Sampler	Core	
				Type	Acetate	Macro Core		
				Diameter	1.75"	2.0"		
				Weight				
				Fall				
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm) Direct Head
	4	<i>SAMPLES 2-3'</i>		36			0-1 Sand + Gravel Brown 1-1.3 B/K Asphalt lense 1.3-3 Brown sandy silt w/Rock gray + OS Milling Moist	4.2 344 70 @ 2 34 @ 2.5 47 @ 3
	8			36			0-2.5 As above WET 2.5-3 Gray Brown sandy silt + Rock Moist	37 22
				46			0-2 Brown sand silt w/Rock gray + OS Milling WET 2-4 Gray sand silt w/Rock Moist	122 31 4.8
							<i>Refusal @ 11.3</i>	

TVGA CONSULTANTS		SOIL PROBE LOG						PROBE NO. <i>SP-23</i>		
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data						
Date	Time	Depth	Elev	Type	Casing	Sampler	Core			
				Diameter	1.75"	Macro Core	2.0"			
				Weight						
				Fall						
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)		
								Direct	Head	
	4			42			0-0.5 Brown sandy + Gravel	4.0		
							0.5-1 Gravel + sand moist	17		
							1-3.5 Brown sandy silt w/rock gray + 0.5 Mottling WET	10.2		
	8			36			0-3 As above	76		
				48			0-1.5 Brown sandy silt + Gravel SAT			
	12			48			1.5-4 Gray/Brown sandy silt + Rock WATER IN TUBE	2.0		
							0-3 SAT gravel sandy silt			
							3-4 Gray silt + Rock Moist	0		
							Refusal @ 13.5'			

		SOIL PROBE LOG				PROBE NO. <i>SP-24</i>	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date <i>5/11/11</i> Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data			
Date	Time	Depth	Elev	Casing	Sampler	Core	
				Type Diameter Weight Fall	Acetate 1.75" 	Macro Core 2.0" 	

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				42			0-0.5 Sand + gravel / Brown	0	1.4
							0.5-0.8 BIK Sand + gravel	0	
	4						0.8-3.5 Brown sandy silt w/ rock Gray Mottling WET	0	
	6			36			0-3 As above WET	0	0
				48			0-3.5 As above SAT	0	
							3.5-11 As above det ?		
							Refusal @ 11.5'		



SOIL PROBE LOG

PROBE NO. *SP-25*

Project: Former A&A Metals Site
 Client: WCBC Washington, LLC
 Contractor: SJB Inc.

Project No. 2011.0066.00
 GS Elev
 WS Ref Elev
 N-S Coord
 E-W Coord
 Start Date *5/11/11*
 Finish Date
 Driller
 Geologist A. Benkleman

Groundwater Data (feet)

Date	Time	Depth	Elev
------	------	-------	------

Equipment Data

	Casing	Sampler	Core
Type	Acetate	Macro Core	
Diameter	1.75"	2.0"	
Weight			
Fall			

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
				12			Concrete Surface		
							0-0.2 Gravel + sand		
							0.2-1 Brown sandy silt w/rock Gray + 25 Matting / WET	0	0
				1/8			0-4 As above WET	0.6	0
				36			0-3 As above WET SWEET & MEAL	26	0
		SAMPLED 7-10'							
				48			0-2 As above SAT	17	14.1
							2.4 As above WET	9	
							Refusal @ 14'		

SOIL PROBE LOG

 PROBE NO. *SP-26*

 Project: Former A&A Metals Site
 Client: WCBC Washington, LLC
 Contractor: SJB Inc.

 Project No. 2011.0066.00
 GS Elev
 WS Ref Elev
 N-S Coord
 E-W Coord
 Start Date
 Finish Date
 Driller
 Geologist A. Benkleman

Groundwater Data (feet)

Date Time Depth Elev

Equipment Data

Type	Acetate	Macro Core
Diameter	1.75"	2.0"
Weight		
Fall		

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
							concrete surface		
				36			0-0.2 Sand Brown	0	
							0.2-0.5 Blk sand + gravel	0	
	4						0.5-3 Brown sandy silt w/ Rock Gray Mottling WET Slight SWEET ODORE	0	
	8			36			0-3 As above	0	
				46			0-4 As above WET-SAT	0	
	12			48			0-3.5 As above SAT	0	
							3.5-4 As above WET	0	
							Refusal @ 12.5		

TVGA CONSULTANTS		TEST BORING LOG						BORING NO. TB-1	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/24/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	4.25"	2.0"			
				Weight		140 #			
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
			2 2	18			Top soil w/ organics		
			2 1				Brown sandy silt w/ Rock	0	
			2 2						
			2 2	14			0-1.3 Brown sandy silt w/ Rock ^{Moist}	0	
	5		2 2				Gray Mottling Moist		
			2 3	12			As above WET	0	
			3 3	16					
			3 3						
			2 1	12			0-1 As above	0	
	10		1 4				1-1.4 ^{SS} Red Brown sandy silt w/ Rock WET	0	
			5 4	12			@ 1.2 DARK Brown sandy silt	0	
			6 14				lense WET		
			4 4	16					
			3 5				Brown sandy silt w/ Rock	0	
	15		3 7	12			WET		
			11 10	14			As above Gray Mottling	0	
			7 7				WET		
			8 14	18			As above Gray + GJ Mottling	0	
	20		15 17				WET		
			10 14	18			Brown sandy silt + Rock	0	
			21 29				SATURATED		
			32 50 1/4	12					
							WATER IN SPOON	0	
	25						0-0.3 As above	151	
							0.3-1.3 Gray sandy silt w/ Rock		
							WET ODO R		
							Gray Brown sandy silt w/ Rock	1.0	
							WET		
	30						Brown Sand w/ Rock in TID	0	
							WET - SAT		

TVGA CONSULTANTS		TEST BORING LOG				BORING NO. TB-2			
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/24/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	HSA	SS			
				Weight	4.25"	2.0"			
				Fall		140 #			
						30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
			3 3	18			0-0.2 Brown Topsoil		
			5 4				0.2-1.5 Brown sandy silt w/ Rock		
			3 2	14			Gray Mottling Moist		
			3 3				Brown sandy silt w/ Rock		
	5		1 1	6			Gray + OS Mottling WET		
			1 9						
			2 3	24			0-0.2 Fall Back		
			3 7				0.2-0.5 Gray Brown sandy silt w/		
			9 50/4	6			Rock SAT ODOR		86
	10								
			25 19	18			0-1.0 As above SAT		124
			17 21				1.0-2.0 As above WET		127
			50/4	24					
							WATER IN SPOON		
			8 14	22			Gray sandy silt w/ weathered		54
	15		17 22				Rock SAT		
			9 50/3	12			STOP 5/24 Resume 5/25		
							As above WET → SAT		26
			14 15	18			0-1.7 SAT Fall Back		35
	20		10 8				1.7-2.0 WET Gray Brown sandy silt w/		5
			4 8	18			Rock		
			14 50/2				WATER IN SPOON		
							0-0.3 Gray Brown sandy silt w/ Rock		0.9
							SAT		0.1
							0.3-1.8 Gray sandy silt w/ Rock WET → SAT		
	25						0-0.2 SAT Fall Back		5.6
							0.2-1.0 Gray silt + weathered Rock		13.5
							SAT ODOR		
							As above		0.0
	30						As above WET - Moist		

TVGA CONSULTANTS		TEST BORING LOG				BORING NO. TB-3		
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/25/11 Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data				
Date	Time	Depth	Elev	Type	Casing	Sampler	Core	
				Diameter	4.25"	SS		
				Weight		140 #		
				Fall		30"		
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)
			1 1	12			0-0.3 Top Soil Brown	
			2 2				0.3-1.0 Brown SANDY SILT w/ROCK MOIST	○
			4 3	6			@ 1.0 BLK sand + Gravel w/ 3	
			2 2					
	5		5 15	12			Brown sandy silt w/ROCK, BLK Asphalt like Rock, Red Brick MOIST	○
			11 11					
			9 6	20			Brown sandy silt w/ROCK Gray Mottling MOIST	○
			12 14					
			6 10	24			As above WET	○
	10		11 17				@ 1.0 DARK Brown sand w/ 1	○
			6 35	24			@ 0.8 SAND + silt lense WET → SAT	
			29 22					
			14 16	16			Brown sandy silt w/ROCK Gray Mottling MOIST	○
			18 19					
	15		8 9	18			As above WET Near Rock @ 1.5-2.0	○
			10 12					
			13 19	24			WATER IN SPOON	○
			50/4				As above WET - SAT	○
	20		11 15	12			As above SAT	○
			40/3				WATER IN SPOON	○
							0-1.5 SAT - Rock Fall Back	○
							1.5-2 Gray silt and Rock WET-SAT	○
	25						As above SAT → WET	○
							Rock IN TIP	
	30							

TVGA CONSULTANTS		TEST BORING LOG						BORING NO. TB-4	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	HSA	SS			
				Weight	4.25"	2.0"	140 #		
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
							0-1 Brown sandy silt w/ rocks	0	
		2	3	12					
		4	8	6			0-0.5 Gray Brown, sandy silt w/ rock shale we	27.2	
	5	16	2						
		1	2	12			0-1 as above	114	
		2	1						
		2	1	6			0-0.2 As Above	25.5	
		2	2				0.2-0.5 Brown sandy silt		
	10	2	3	6					
		2	3	3			0-0.5 Gray/Brown sandy silt w/ rock we	90	
		2	3						
		3	5	12			0-0.2 As above	56	
	15	7	12				0-1 As above	186	
		4	14	18					
		27	35				0-0.5 As above w/ oil staining	257	
		39	41				oil staining on spoon		
		51	50	24			0.5-1.5 As above w/ 1-silt	56	
	20						0-1 As above silt w/ o.i	114	
							1-2 Gray Brown clayey silt w/ Rock	30	
							Moist		
	25								
	30								

TVGA CONSULTANTS		TEST BORING LOG						BORING NO. TB-5	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev		Casing	Sampler	Core		
				Type	HSA	SS			
				Diameter	4.25"	2.0"			
				Weight		140 #			
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
			3 0	12			0-0.3 Brown Topsoil		
			5 3				0.3-1.0 Brown sandy silt w/ Gray 105		
			6 4	20			Mottling		
			5 4						
	5		2 2				0-1.2 Brown sandy silt w/ Rock		
			3 4	24			Gray 105 Mottling WET		
			4 4						
			5 2	18			0-2 As above WET		
			1 1	12			0-1 Sand + Gravel Brown w/ BIK		
	10		1 1				lense		
			2 4	6			0-1.5 As above WET		
			1 1						
			2 17	18			0-1 As above wet		
	15		7 4				more saturated than previous		
			5 1	6					
			7 15	24			0-0.2 Fall back		
			28 37				0-2-0.5 As Above Saturated		3.7
			3 1/2	4			0-2 Gray Brown sandy		
	20						silt w/ Rock, saturated		
							0-0 Water in the spoon		
							block in tip		
							0-1 Silty gravel Saturated		
	25						1-2 Gray Brown sandy silt		
							w/ Rock - wet		
							0-0.4 Silty gravel Saturated		
							Augered @ 19.2"		
	30						Split Spoon @ 18.2"		

TVGA CONSULTANTS				TEST BORING LOG				BORING NO. TB-6	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.								Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	4.25"	SS	2.0"		
				Weight		140 #			
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
		7	5	12			Sandy/silt, Brown. w/ Blk gravel + sand w/ Rock, 0.3-1 gray mottling		
		6	9						
		11	10	0			Rock at tip, gravel, possible fall back, moist.	0	
	5	10	16						
		11	10						
		16	10	12					
		33	16				0-0.3 wet clayey silt, brown	0	
	10	59.3					0.3-1 Brown sandy silt w/ rock moist		
		14	5 1/4						
	10 1/2						Rock at 6.9		
							Rock gray	0	
							Rock @ 10.4		
	15								
							Rock at 6.9		
							Augered to 8		
							Spoon at		
	20						Recon at 10.4		
	25								
	30								

		TEST BORING LOG				BORING NO. TB-7			
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/23/11 Finish Date Driller DALE + MATT Geologist A. Benkleman			
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Casing	Sampler	Core			
				Type	HSA	SS			
				Diameter	4.25"	2.0"			
				Weight	140 #				
				Fall	30"				

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks	
								PID Reading (ppm)	
								Direct	Head
			4 5	18			0-0.3 Topsoil Brown Moist		
			7 6				0.3-0.5 Asphalt BLK		
			3 3	3			0.5-1.5 Brown clayey silt w/rock		
			4 3				Gray + OS Matting Moist		
	5		3 1	8			Gray Brown sandy silt w/rock	5.1	
			2 2				Moist		
			3 2				As above WET	113	
			2 3	12					
			WT 5 6	18			As above WET	199	
	10		4 9	18			w/ red Matting @ 8"		
			12 12				0-0.5 As above WET → SAT	9.4	
			15 14	24			ORGANIC Lense @ 1'		
			10 11				0.5-1.5 Gray SANDY SILT + Rock	0.3	
	15		5 3	3"			Moist		
							0-1.5 Gray SANDY SILT + Rock		
							Moist		
							0-2 As above Moist - DRY		
	20						WEATHERED ROCK spoon WET		
							Refusal @ 14.2'		
	25								
	30								

TVGA CONSULTANTS		TEST BORING LOG				BORING NO. TB-8			
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/23/11 Finish Date Driller Geologist A. Benkleman			
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Casing	Sampler	Core			
				Type	HSA	SS			
				Diameter	4.25"	2.0"			
				Weight		140 #			
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
	5	6	4	18"			Gross sample of surface		
		11	14	18"			Brown clayey silt w/ pebbles		
		1	7	12"			gray silty clay		
		2	15	12"			As above gray silty clay		
		7	12	24"					
		27	30	24"					
		59/3		3"					
							As above		
	10	16	16	12"			As above		
		16	59/4	12"					
		9	15	18"			Gray sandy silt + ^{weathered} rock	0.7	
		19	27	18"			As above MOIST		
		59/4		4"					
	15						Gray sandy silt + ^{weathered} rock		
							Saturated		
	20						Refusal @ 12.3'		
							14' Auger Refusal		
	25								
	30								

TEST BORING LOG

BORING NO. TB-9

 Project: Former A&A Metals Site
 Client: WCBC Washington, LLC
 Contractor: SJB Inc.

 Project No. 2011.0066.00
 GS Elev
 WS Ref Elev
 N-S Coord
 E-W Coord
 Start Date 5/23/11
 Finish Date 5/24/11
 Driller
 Geologist A. Benkleman

Groundwater Data (feet)

Date Time Depth Elev

Equipment Data

Type	HSA	SS
Diameter	4.25"	2.0"
Weight		140 #
Fall		30"

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
			2 9	18"			0-0.5 Brown Topsoil		
			11 9	18"			0.5-1.5 Brown silt + SAND w/rock		
			9 9	18"			Gray + OJ Mottling, Bk staining moist		
	5		9 9	18"			As above WET		
			9 12	18"			SAND + silt		
			12 12	12"					
			11 50/4	12"					
	10		21 22	12"			As above WET → SAT		
			50/3	12"			WATER IN SPOON		
			6 10	18"			SAT SAND + ROCK w/organic		
			25 24	18"			Brown sandy silt w/rock		
			50/4	18"			Gray + OJ Mottling - WET → SAT		
	15		34 22	24"			0-0.4 Brown sand SAT		
			20 34				0.4-1 Gray sandy silt w/rock		
			50/3				Weathered Rock		
							WATER IN SPOON		
	20						0-0.5 Brown sandy silt w/rock		
							SAT		
							0.5-1.5 Gray sand silt w/rock		
							WET → MOIST		
							WATER IN SPOON		
	25						0-1.2 FALL BACK		
							1.2-1.5 As Above		
							Gray silt + rock		
	30						AS ABOVE		

TVGA CONSULTANTS		TEST BORING LOG						BORING NO. TB-10	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.							Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/24/11 Finish Date Driller Geologist A. Benkleman		
Groundwater Data (feet)				Equipment Data					
Date	Time	Depth	Elev	Type	Casing	Sampler	Core		
				Diameter	4.25"	SS	2.0"		
				Weight		140 #			
				Fall		30"			
Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
			5 3	18			Topsail Organic S		
			21 4				0.2-0.5 Brown clayey silt w/ Rock WET	0	
			4 2				OS + Gray Mottling		
			2 2	12			0.5-1.2 Dark Brown Red SAND + Gravel WET	0	
	5		1 1	18			1.2-1.5 Brown sandy silt w/ Rock	0	
			1 1				Gray + OS Mottling WET		
			1 3				0-0.5 Brown sandy silt w/ Rock	0	
			5 5	24			Gray + OS Mottling, WET		
			7 12				0.5-1.0 Gray Brown sandy silt w/ Rock WET	70	
	10		9 11	3			0-0.5 Brown sand + silt w/ Rock WET	0	
			5 12	12			0.5-1.5 Gray Brown sandy silt w/ Rock SAT	152	
			17 19						
			20 3	24			0-1.7 As above SAT	87	
			9 14				1.7-2.0 As above WET	0	
	15		14 19	18			@ 1.7 Brown SAND lense	0	
			11 50/2	6			Rock in Tip	3.2	
							As above		
	20						0-0.8 Brown SAND + silt w/ Rock SAT	0	
							0.8-1.0 weathered Rock + silt SAT		
							0-2 Sandy silt and Rock (weathered) Gray Mottling SAT	0	
	25						0-1.5 Gray sandy silt w/ weathered Rock WET	0	
							As above		
	30						Water in spoon		

		TEST BORING LOG				BORING NO. TB-11	
Project: Former A&A Metals Site Client: WCBC Washington, LLC Contractor: SJB Inc.						Project No. 2011.0066.00 GS Elev WS Ref Elev N-S Coord E-W Coord Start Date 5/24/11 Finish Date Driller Geologist A. Benkleman	
Groundwater Data (feet)				Equipment Data			
Date	Time	Depth	Elev	Casing	Sampler	Core	
				Type	HSA	SS	
				Diameter	4.25"	2.0"	
				Weight		140 #	
				Fall		30"	

Well Construction	Depth (feet)	Sample No.	Blows per 6"	Recovery (in.)	Log	Unified	Field Description	Remarks PID Reading (ppm)	
								Direct	Head
			6 12	18			Top soil / Brown	0	
			15 15				0-0.5 Blk SAND + gravel Moist	112	
			11 12	12			0.5-1 Brown sandy silt + w/Rock	0	
			8 8				Gray + OS Matting Moist		
	5		3 4	6			0-1 As above WET	0	
			3 6						
			5 12				0-0.5 Gray Brown silty sand		
			11 15	12			w/Rock color WET-SAT	160	
			10 17	22			WATER IN SPOON		
	10		20 34				0-0.7 As above SAT	133	
			7 22	24			0.7-1.0 Brown silty SAND w/ Rock	42	
			28 35				Gray Matting WET		
			50/4	2			Gray Brown sandy silt w/Rock	5.9	
	15		7 26	12			OS Matting Moist		
			18 19				As above	8.4	
			14 27	18					
			21 23				As above	1.1	
			15 50/3	6			Gray SANDY silt w/ Rock weathered	6.0	
	20						Moist		
							As above	0	
							As above	0	
	25								
							16.8' Refusal		
	30								



WELL DEVELOPMENT LOG

HOLE NO: MW-1

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00
Date: _____
Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 26.56 (from TOC) (2) Depth to Water: 15.12 ft (from TOC)
(3) Column of Water: 11.44 (#1 - #2) (4) Casing Diameter: 2 in
(5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 1.83 gal
Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041 2" = 0.163 4" = 0.653 6" = 1.469 8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	1.8	3.6	5.4	7.2	9.0	Sample
Time	1225	1230	1235	1240	1245	1248	1640
ORP/EH (MV)	343	280	166	164	152	158	179
pH	3.35	4.28	6.04	5.72	6.08	6.00	5.76
Cond. (MS/CM)	0.508	0.533	0.564	0.395	0.562	0.471	0.313
Turb. (NTU)	102	101	7800	—	—	—	9.5
D.O. (mg/l)	21.68	19.27	13.14	11.55	12.81	12.07	10.13
Salinity (%)	0.3	0.3	0.3	0.2	0.3	0.2	0.2
Temp. (°C)	15.09	14.32	13.63	15.51	13.33	13.84	18.16

Total Volume Purged: _____ gal Total Purge Time: _____

Development Info:

Development Method: _____

Comments: _____

MS/MSD

Logged By: _____

Project Name: A&A Metals
 Project Location: Perry, New York

 Project No: 2011.0066.00

Date: _____

Screen Length: _____

Purge Information:

 (1) Depth to Bottom of Well: 21.41 (from TOC) (2) Depth to Water: 4.28 ft (from TOC)

 (3) Column of Water: 17.13 (#1 - #2) (4) Casing Diameter: 2 in

 (5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 2.79 gal

 Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	1.0	2.8	5.6	8.4	11.2	14.0	Sample
Time	1050	1058	1105	1115	1125	1133	11630
ORP/EH (MV)	228	123	94	105	88	106	98
pH	5.56	6.09	5.65	5.35	5.28	5.39	5.60
Cond. (MS/CM)	0.779	0.810	0.811	0.823	0.793	0.786	0.556
Turb. (NTU)	89.4	—	—	—	—	—	291
D.O. (mg/l)	11.51	13.12	13.32	11.79	12.38	12.47	10.06
Salinity (%)	0.4	0.4	0.4	0.4	0.4	0.4	0.3
Temp. (°C)	17.16	14.87	14.09	15.35	15.03	14.91	19.05

Total Volume Purged: _____ gal Total Purge Time: _____

Development Info:

Development Method: _____

 Comments: _____

Logged By: _____

Project Name: A&A Metals

Project Location: Perry, New York

Project No: 2011.0066.00

Date: _____

Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well:
(from TOC)

19.62

(2) Depth to Water: 10.61 ft
(from TOC)

(3) Column of Water:
(#1 - #2)

9.01

(4) Casing Diameter: 2 in

(5) Volume Conversion: 0.163 gal/ft

(6) 1 Vol. of Well: 1.47 gal

Method of Purging: WaTerra/Bailer Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	<u>1.5</u>	<u>3.0</u>	<u>4.5</u>	<u>6.0</u>	<u>7.5</u>	<u>Sample</u>
Time	<u>1035</u>	<u>1040</u>	<u>1045</u>	<u>1055</u>	<u>1102</u>	<u>1115</u>
ORP/EH (MV)	<u>380</u>	<u>326</u>	<u>307</u>	<u>220</u>	<u>111</u>	<u>159</u>
pH	<u>*2.01</u>	<u>3.72</u>	<u>4.08</u>	<u>5.74</u>	<u>5.44</u>	<u>5.50</u>
Cond. (MS/CM)	<u>0.160</u>	<u>0.171</u>	<u>0.308</u>	<u>0.222</u>	<u>0.220</u>	<u>0.268</u>
Turb. (NTU)	<u>150</u>	<u>*0.0</u>	<u>*0.0</u>	<u>149</u>	<u>*0.0</u>	<u>149</u>
D.O. (mg/l)	<u>21.08</u>	<u>12.70</u>	<u>14.31</u>	<u>12.06</u>	<u>11.71</u>	<u>11.94</u>
Salinity (%)	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>
Temp. (°C)	<u>17.79</u>	<u>16.73</u>	<u>14.89</u>	<u>16.68</u>	<u>16.31</u>	<u>16.78</u>

Total Volume Purged: 7.5 gal

Total Purge Time: _____

Development Info:

Development Method: _____

Comments:
Dissolved metals sample due to
high turbidity

Logged By: _____

Project Name: A&A Metals
 Project Location: Perry, New York

 Project No: 2011.0066.00
 Date: 6/1/11
 Screen Length: _____

Purge Information:

 (1) Depth to Bottom of Well: 21.22 (from TOC) (2) Depth to Water: 7.09 ft (from TOC)
 (3) Column of Water: 14.13 (#1 - #2) (4) Casing Diameter: 2" in
 (5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 2.30 gal

 Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041 2" = 0.163 4" = 0.653 6" = 1.469 8" = 2.611

Field Analysis:

Vol Purged (gal)	<u>Initial</u>	<u>2.3</u>	<u>4.6</u>	<u>dry</u>	<u>Sample</u>			
Time	<u>940</u>	<u>1005</u>	<u>1011</u>		<u>1010</u>			
ORP/EH (MV)	<u>110</u>	<u>87</u>	<u>106</u>		<u>182</u>			
pH	<u>5.02</u>	<u>5.17</u>	<u>4.07</u>	<u>5.8</u>	<u>4.49</u>			
Cond. (MS/CM)	<u>0.447</u>	<u>0.000</u>	<u>0.516</u>	<u>1.76</u>	<u>0.342</u>			
Turb. (NTU)	<u>0.0</u>	<u>0.0</u>	<u>312</u>		<u>14.9</u>			
D.O. (mg/l)	<u>11.48</u>	<u>9.63</u>	<u>12.93</u>		<u>10.31</u>			
Salinity (%)	<u>0.2</u>	<u>0.0</u>	<u>0.2</u>		<u>0.2</u>			
Temp. (°C)	<u>14.99</u>	<u>18.99</u>	<u>13.33</u>		<u>18.87</u>			

 Total Volume Purged: 5.8 gal Total Purge Time: 31 min
Development Info:

Development Method: _____

Comments: _____

took a dissolved metals sample
due to high turbidity. Took napl
sample @ 940 am

Logged By: _____

Project Name: A&A Metals
 Project Location: Perry, New York

 Project No: 2011.0066.00

 Date: 6/1/11

Screen Length: _____

Purge Information:

 (1) Depth to Bottom of Well: 19.31
 (from TOC)

 (2) Depth to Water: 10.52 ft
 (from TOC)

 (3) Column of Water: 8.79
 (#1 - #2)

 (4) Casing Diameter: 2 in

 (5) Volume Conversion: 0.163 gal/ft

 (6) 1 Vol. of Well: 1.43 gal

 Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	1.4	3.0	4.5	5.9	7.9	Sample	Sample
Time	915	920	930	935	945	955	1530	1550
ORP/EH (MV)	176	69	35	316	88	113	121	173
pH	*4.29	*3.30	*4.04	*4.75	*4.85	*3.54	6.84	1.64
Cond. (MS/CM)	0.469	0.689	0.689	0.511	0.584	0.680	0.442	0.677
Turb. (NTU)	*0.0	7800	*0.00	*0.0	*0.0	*0.0	7.8	30.6
D.O. (mg/l)	10.13	13.82	13.59	11.97	12.95	11.92	10.77	12.44
Salinity (%)	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.3
Temp. (°C)	15.85	12.67	12.19	13.93	13.19	14.84	29.10	16.45

 Total Volume Purged: 7.9 gal

Total Purge Time: _____

Development Info:

Development Method: _____

Comments:

OPP collected FAM-GW-DUP-GW gal
Loc Time 1545

Logged By: _____

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00
Date: 6/1/11
Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 14.79 (from TOC) (2) Depth to Water: 4.71 ft (from TOC)
(3) Column of Water: 10.08 (#1 - #2) (4) Casing Diameter: 2" in
(5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 1.64 gal
Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	1.7	3.3	4.3	Sample		
Time	850	455	854		1530		
ORP/EH (MV)	333	282	213	M	121		
pH	*4.47	*4.96	*5.07	+	10.94		
Cond. (MS/CM)	0.479	0.563	0.575	⊙	0.442		
Turb. (NTU)	20	575	800	⊙	7.8		
D.O. (mg/l)	12.68	13.49	13.73	J	10.77		
Salinity (%)	0.2	0.3	0.3	2	0.2		
Temp. (°C)	16.95	13.6	13.37	⊙	20.10		

Total Volume Purged: _____ gal Total Purge Time: _____

Development Info:

Development Method: _____

Comments: _____

Deep collected FAM-GW DWP-GW
COC time 1545

Logged By: _____



WELL DEVELOPMENT LOG

HOLE NO: **MW-7**

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00
Date: _____
Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 17.59 (from TOC) (2) Depth to Water: 3.21 ft (from TOC)
(3) Column of Water: 14.38 (#1 - #2) (4) Casing Diameter: 2 in
(5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 2.34 gal
Method of Purging: WaTerra Bailer Submersible/Other: _____

Volume Conversion:

1" = 0.041 2" = 0.163 4" = 0.653 6" = 1.469 8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	2.3	4.6	6.9	9.2	11.5	Sample
Time	1400	1403	1405	1408	1412	1417	1730
ORP/EH (MV)	140	135	73	83	105	68	82
pH	6.68	6.96	6.48	6.34	6.32	6.03	6.84
Cond. (MS/CM)	0.301	0.368	0.474	0.325	0.277	0.379	0.380
Turb. (NTU)	114	263	*0.0	*0.0	*0.0	*0.0	62.8*
D.O. (mg/l)	9.61	11.60	13.43	12.74	12.19	13.27	10.80
Salinity (%)	0.1	0.2	0.2	0.2	0.1	0.2	0.2
Temp. (°C)	20.89	17.50	13.77	14.10	14.40	12.30	11.58

Total Volume Purged: 11.50 gal Total Purge Time: 17 min

Development Info:

Development Method: _____

Comments: _____

* Meter malfunction with turbidity

Logged By: _____

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00

Date: 6/1/11

Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 13.05 (from TOC) (2) Depth to Water: 3.02 ft (from TOC)

(3) Column of Water: 10.03 (#1 - #2) (4) Casing Diameter: 2 in

(5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 1.6 gal

Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	1.6	3.2	4.8	6.4	8.0	Sample
Time	1428	1430	1433	1435	1438	1441	1740
ORP/EH (MV)	171	120	42	63	58	35	126
pH	5.59	6.54	6.18	5.97	5.92	6.19	6.00
Cond. (MS/CM)	0.479	0.263	0.307	0.287	0.407	0.282	0.278
Turb. (NTU)	590	*0.0	*92.3	*149	*0.0	*0.0	653
D.O. (mg/l)	9.69	11.44	13.00	12.08	12.63	11.68	9.62
Salinity (%)	0.2	0.1	0.2	0.1	0.2	0.1	0.1
Temp. (°C)	21.17	18.06	14.56	14.25	12.91	13.22	19.04

Total Volume Purged: 8.0 gal Total Purge Time: 13 min
Development Info:

Development Method: _____

Comments: 5 bottles
Collected Dissolved metals sample
due to high turbidity

Logged By: _____



WELL DEVELOPMENT LOG

HOLE NO: **MW-9**

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00
Date: 6/1/11
Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 18.42 (from TOC) (2) Depth to Water: 2.60 ft (from TOC)
(3) Column of Water: 15.82 (#1 - #2) (4) Casing Diameter: 2 in
(5) Volume Conversion: 0.1163 gal/ft (6) 1 Vol. of Well: 2.53 gal
Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041 2" = 0.163 4" = 0.653 6" = 1.469 8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	2.5	5.0	7.5	10.0	12.5	Sample
Time	1450	1455	1458	1503	1507	1511	1750
ORP/EH (MV)	106	63	62	73	93	83	97
pH	6.41	6.60	6.55	6.41	6.33	6.29	6.46
Cond. (MS/CM)	0.399	0.376	0.296	0.414	0.276	0.35	0.414
Turb. (NTU)	0.0	7800	*0.0	*0.0	*0.0	*0.00	7800
D.O. (mg/l)	8.72	12.78	11.70	13.99	11.65	12.24	789
Salinity (%)	0.2	0.2	0.1	0.2	0.1	0.2	0.2
Temp. (°C)	20.37	14.75	15.28	11.74	14.07	12.77	22.2

Total Volume Purged: 12.5 gal Total Purge Time: _____

Development Info:

Development Method: _____

Comments: _____
Collected dissolved metals sample
due to high turbidity

Logged By: _____

WELL DEVELOPMENT LOG
HOLE NO: MW-10

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00

Date: 6/1/11

Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 18.38 (2) Depth to Water: 5.15 ft
(from TOC) (from TOC)

(3) Column of Water: 13.23 (4) Casing Diameter: 2 in
(#1 - #2)

(5) Volume Conversion: 0.163 gal/ft (6) 1 Vol. of Well: 2.2 gal

Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	2.2		Sample			
Time	1335	1345	⓪	1715			
ORP/EH (MV)	142	131	⓪	192			
pH	6.44	6.61	⓪	5.88			
Cond. (MS/CM)	0.904	0.257	⓪	0.202			
Turb. (NTU)	~	~	⓪	241			
D.O. (mg/l)	11.03	12.92	⓪	11.42			
Salinity (%)	0.2	0.1	⓪	0.1			
Temp. (°C)	16.32	14.23	⓪	16.86			

Total Volume Purged: _____ gal Total Purge Time: _____

Development Info:

Development Method: _____

Comments: _____

Collected dissolved metals sample
due to high turbidity

Logged By: _____



WELL DEVELOPMENT LOG

HOLE NO: **MW-11**

Project Name: A&A Metals
Project Location: Perry, New York

Project No: 2011.0066.00

Date: 6/1/11

Screen Length: _____

Purge Information:

(1) Depth to Bottom of Well: 20.0 (from TOC) (2) Depth to Water: 3.80 ft (from TOC)

(3) Column of Water: 116.2 (#1 - #2) (4) Casing Diameter: 2 in

(5) Volume Conversion: 0.116 gal/ft (6) 1 Vol. of Well: 2.60 gal

Method of Purging: WaTerra/Bailer/Submersible/Other: _____

Volume Conversion:

1" = 0.041

2" = 0.163

4" = 0.653

6" = 1.469

8" = 2.611

Field Analysis:

Vol Purged (gal)	Initial	2.6	5.2	7.8	10.4		Sample
Time	1300	1310	1315	1317	1325	0	1700
ORP/EH (MV)	247	189	181	167	167	—	175
pH	4.82	5.168	6.35	6.11	6.20	—	6.39
Cond. (MS/CM)	0.496	0.343	0.305	0.314	0.517	2	0.458
Turb. (NTU)	0.0	*0.0	*0.0	*0.0	*0.0		88.8
D.O. (mg/l)	13.05	11.15	11.36	10.90	12.04	J	10.29
Salinity (%)	0.2	0.2	0.1	0.2	0.3	2	0.2
Temp. (°C)	20.40	17.82	16.54	16.90	14.56	A	19.38

Total Volume Purged: 10.4 gal Total Purge Time: 25 min

Development Info:

Development Method: _____

Comments: _____

Dissolved metals sample due to high
turbidity

Logged By: _____

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-1</u>
Date of Installation <u>5/24/2011</u>	Boring No. <u>TB-1</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u>of</u>

Lock No. _____		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1389.54'</u>
Ground Elevation _____		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1384.54'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
_____ Top of Seal →		Type of Backfill Around Riser	<u>Portland Cement</u>
		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
_____ Top of Sand →		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1372.98'</u>
		Type of Well Screen	<u>#10 Slot / 10 feet long</u>
		Screen Slot Size	_____
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1362.98'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>24.7 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-2</u>
Date of Installation <u>5/25/2011</u>	Boring No. <u>TB-2</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u> </u> of <u> </u>

Lock No. <u> </u>		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1390.61'</u>
Ground Elevation <u> </u>		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1385.61'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
		Type of Backfill Around Riser	<u>Portland Cement</u>
<u> </u> Top of Seal <u> </u> →		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
<u> </u> Top of Sand <u> </u> →		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1379.2'</u>
		Type of Well Screen	<u>#10 Slot / 10 feet long</u>
		Screen Slot Size	<u> </u>
		Diameter of Well Screen	<u>2 inch</u>
		Type of Backfill Around Well Screen	<u>Sand</u>
		Elevation/Depth of Bottom of Well Screen	<u>1369.2</u>
	Elevation/Depth of Bottom of Bore Hole	<u>20.0 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name A&A Metals
 Project Number 2011.0066.00
 Contractor SJB Services
 Date of Installation 5/25/2011
 Project Location 90 Washington Blvd. Perry, NY

Geologist A. Benkleman
 Driller Art
 Well No. MW-3
 Boring No. TB-3
 Sheet of

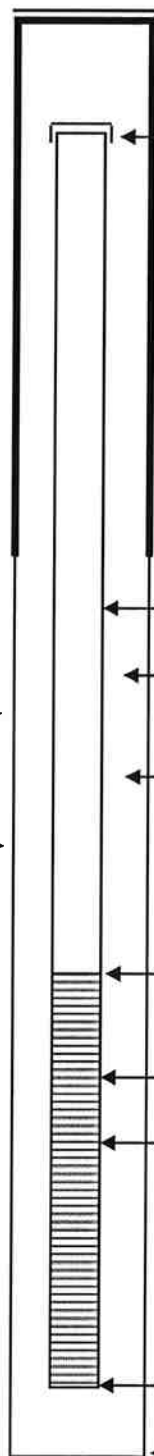
Lock No. _____

Survey Datum MSL

Ground Elevation _____

____ Top of Seal →

____ Top of Sand →



Elevation/Stick up Above/Below
 Ground Surface of Casing NA

Elevation/Stick up Above/Below
 Ground Surface of Riser Pipe 1388.40'

Thickness of Surface Seal 2 feet

Type of Surface Seal Concrete Pad

Type of Protective Casing Steel Pro-casing

Inside Diameter of Protective
 Casing 4 inch

Elevation/Depth of Bottom of
 Protective Casing 1383.4'

Inside Diameter of Riser Pipe 2 inch

Type of Backfill Around Riser Portland Cement

Diameter of Bore Hole Within
 Test Section 4 inches

Type/Thickness of Seal Bentonite / 2 feet

Type of Coupling Threaded

Elevation/Depth of Top of
 Screen 1379.2'

Type of Well Screen #10 Slot / 10 feet long

Screen Slot Size _____

Diameter of Well Screen 2 inch

Type of Backfill Around Well
 Screen Sand

Elevation/Depth of Bottom of
 Well Screen 1368.78'

Elevation/Depth of Bottom of
 Bore Hole 20.0 feet bgs

WELL INSTALLATION REPORT

Project Name A&A Metals
Project Number 2011.0066.00
Contractor SJB Services
Date of Installation 5/17/2011
Project Location 90 Washington Blvd. Perry, NY

Geologist A. Benkleman
Driller Art
Well No. MW-4
Boring No. TB-4
Sheet of

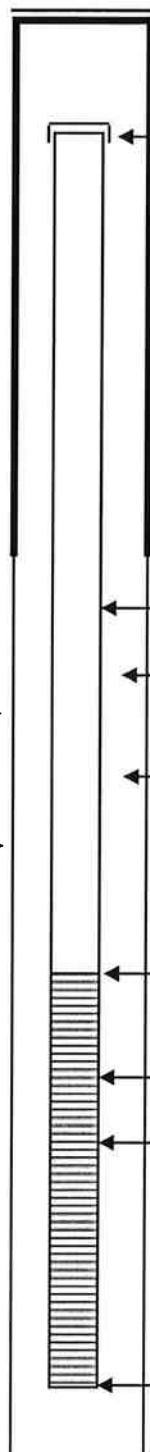
Lock No. _____

Survey Datum MSL

Ground Elevation _____

____ Top of Seal →

____ Top of Sand →



Elevation/Stick up Above/Below

Ground Surface of Casing

NA

Elevation/Stick up Above/Below

Ground Surface of Riser Pipe

1388.96'

Thickness of Surface Seal

2 feet

Type of Surface Seal

Concrete Pad

Type of Protective Casing

Steel Pro-casing

Inside Diameter of Protective Casing

4 inch

Elevation/Depth of Bottom of Protective Casing

1383.96'

Inside Diameter of Riser Pipe

2 inch

Type of Backfill Around Riser

Portland Cement

Diameter of Bore Hole Within Test Section

4 inches

Type/Thickness of Seal

Bentonite / 3 feet

Type of Coupling

Threaded

Elevation/Depth of Top of Screen

1372.74'

Type of Well Screen

#10 Slot / 5 feet long

Screen Slot Size

Diameter of Well Screen

2 inch

Type of Backfill Around Well Screen

Sand

Elevation/Depth of Bottom of Well Screen

1367.74'

Elevation/Depth of Bottom of Bore Hole

19.0 feet bgs

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-5</u>
Date of Installation <u>5/16/2011</u>	Boring No. <u>TB-5</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u> </u> of <u> </u>

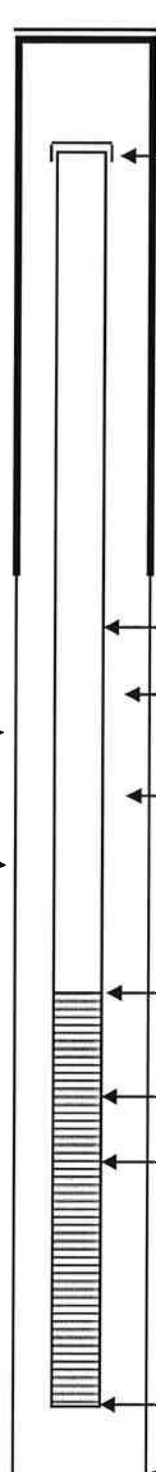
Lock No. <u> </u>		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1388.77'</u>
Ground Elevation <u> </u>		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1383.77'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
<u> </u> Top of Seal <u> </u> →		Type of Backfill Around Riser	<u>Portland Cement</u>
		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
<u> </u> Top of Sand <u> </u> →		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1374.46'</u>
		Type of Well Screen	<u>#10 Slot / 5 feet long</u>
		Screen Slot Size	<u> </u>
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1369.46'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>19.2 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-6</u>
Date of Installation <u>5/16/2011</u>	Boring No. <u>TB-6</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u> </u> of <u> </u>

 Lock No.

 Survey Datum MSL

 Ground Elevation
 Top of Seal
 Top of Sand


Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1393.72'</u>
Thickness of Surface Seal	<u>2 feet</u>
Type of Surface Seal	<u>Concrete Pad</u>
Type of Protective Casing	<u>Steel Pro-casing</u>
Inside Diameter of Protective Casing	<u>4 inch</u>
Elevation/Depth of Bottom of Protective Casing	<u>1388.72'</u>
Inside Diameter of Riser Pipe	<u>2 inch</u>
Type of Backfill Around Riser	<u>Portland Cement</u>
Diameter of Bore Hole Within Test Section	<u>4 inches</u>
Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
Type of Coupling	<u>Threaded</u>
Elevation/Depth of Top of Screen	<u>1383.93'</u>
Type of Well Screen	<u>#10 Slot / 5 feet long</u>
Screen Slot Size	<u> </u>
Diameter of Well Screen	<u>2 inch</u>
Type of Backfill Around Well Screen	<u>Sand</u>
Elevation/Depth of Bottom of Well Screen	<u>1378.93'</u>
Elevation/Depth of Bottom of Bore Hole	<u>13.0 feet bgs</u>

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-7</u>
Date of Installation <u>5/23/2011</u>	Boring No. <u>TB-7</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u>of</u>

Lock No. _____		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1393.51'</u>
Ground Elevation _____		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1388.51'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
		Type of Backfill Around Riser	<u>Portland Cement</u>
_____ Top of Seal →		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
_____ Top of Sand →		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1385.92'</u>
		Type of Well Screen	<u>#10 Slot / 10 feet long</u>
		Screen Slot Size	_____
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1375.92'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>16.5 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-8</u>
Date of Installation <u>5/23/2011</u>	Boring No. <u>TB-8</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u> </u> of <u> </u>

Lock No.

Survey Datum MSL

Ground Elevation
 Top of Seal
 Top of Sand

	← Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
	← Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1394.49'</u>
	Thickness of Surface Seal	<u>2 feet</u>
	Type of Surface Seal	<u>Concrete Pad</u>
	← Type of Protective Casing	<u>Steel Pro-casing</u>
	Inside Diameter of Protective Casing	<u>4 inch</u>
	← Elevation/Depth of Bottom of Protective Casing	<u>1389.49'</u>
	← Inside Diameter of Riser Pipe	<u>2 inch</u>
	← Type of Backfill Around Riser	<u>Portland Cement</u>
	← Diameter of Bore Hole Within Test Section	<u>4 inches</u>
	Type/Thickness of Seal	<u>Bentonite / 1 feet</u>
	Type of Coupling	<u>Threaded</u>
	← Elevation/Depth of Top of Screen	<u>1391.44'</u>
	← Type of Well Screen	<u>#10 Slot / 10 feet long</u>
	← Screen Slot Size	<u> </u>
	Diameter of Well Screen	<u>2 inch</u>
Type of Backfill Around Well Screen	<u>Sand</u>	
← Elevation/Depth of Bottom of Well Screen	<u>1381.44'</u>	
← Elevation/Depth of Bottom of Bore Hole	<u>14 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name A&A Metals Geologist A. Benkleman
 Project Number 2011.0066.00 Driller Art
 Contractor SJB Services Well No. MW-9
 Date of Installation 5/24/2011 Boring No. TB-9
 Project Location 90 Washington Blvd. Perry, NY Sheet of

Lock No. _____		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1394.53'</u>
Ground Elevation _____		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1389.53'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
		Type of Backfill Around Riser	<u>Portland Cement</u>
<u>Top of Seal</u> →		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
<u>Top of Sand</u> →		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1381.11'</u>
		Type of Well Screen	<u>#10 Slot / 5 feet long</u>
		Screen Slot Size	_____
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1376.11'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>16.8 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name <u>A&A Metals</u>	Geologist <u>A. Benkleman</u>
Project Number <u>2011.0066.00</u>	Driller <u>Art</u>
Contractor <u>SJB Services</u>	Well No. <u>MW-10</u>
Date of Installation <u>5/24/2011</u>	Boring No. <u>TB-10</u>
Project Location <u>90 Washington Blvd. Perry, NY</u>	Sheet <u> </u> of <u> </u>

Lock No. <u> </u>		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1394.36'</u>
Ground Elevation <u> </u>		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1389.36'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
<u> </u> Top of Seal <u> </u> →		Type of Backfill Around Riser	<u>Portland Cement</u>
		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
<u> </u> Top of Sand <u> </u> →		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1385.98'</u>
		Type of Well Screen	<u>#10 Slot / 10 feet long</u>
		Screen Slot Size	<u> </u>
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1375.98'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>17.0 feet bgs</u>	

WELL INSTALLATION REPORT

Project Name A&A Metals Geologist A. Benkleman
 Project Number 2011.0066.00 Driller Art
 Contractor SJB Services Well No. MW-11
 Date of Installation 5/24/2011 Boring No. TB-11
 Project Location 90 Washington Blvd. Perry, NY Sheet of

Lock No. _____		Elevation/Stick up Above/Below Ground Surface of Casing	<u>NA</u>
Survey Datum <u>MSL</u>		Elevation/Stick up Above/Below Ground Surface of Riser Pipe	<u>1392.2'</u>
Ground Elevation _____		Thickness of Surface Seal	<u>2 feet</u>
		Type of Surface Seal	<u>Concrete Pad</u>
		Type of Protective Casing	<u>Steel Pro-casing</u>
		Inside Diameter of Protective Casing	<u>4 inch</u>
		Elevation/Depth of Bottom of Protective Casing	<u>1387.2'</u>
		Inside Diameter of Riser Pipe	<u>2 inch</u>
<u>Top of Seal</u> →		Type of Backfill Around Riser	<u>Portland Cement</u>
		Diameter of Bore Hole Within Test Section	<u>4 inches</u>
<u>Top of Sand</u> →		Type/Thickness of Seal	<u>Bentonite / 2 feet</u>
		Type of Coupling	<u>Threaded</u>
		Elevation/Depth of Top of Screen	<u>1387.2'</u>
		Type of Well Screen	<u>#10 Slot / 10 feet long</u>
		Screen Slot Size	_____
	Diameter of Well Screen	<u>2 inch</u>	
	Type of Backfill Around Well Screen	<u>Sand</u>	
	Elevation/Depth of Bottom of Well Screen	<u>1372.2'</u>	
	Elevation/Depth of Bottom of Bore Hole	<u>19.5 feet bgs</u>	

APPENDIX B

LABORATORY ANALYTICAL RESULTS AND CHAINS-OF-CUSTODY



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6288

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP1-D67-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	8050
Antimony	05/26/2011	SW846 3050/6010	< 7.16
Arsenic	05/26/2011	SW846 3050/6010	13.3
Barium	05/26/2011	SW846 3050/6010	21.5
Beryllium	05/26/2011	SW846 3050/6010	0.465 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.598
Calcium	05/26/2011	SW846 3050/6010	2400
Chromium	05/26/2011	SW846 3050/6010	12.5
Cobalt	05/26/2011	SW846 3050/6010	7.23
Copper	05/26/2011	SW846 3050/6010	33.8
Iron	05/26/2011	SW846 3050/6010	25100
Lead	05/26/2011	SW846 3050/6010	21.0
Magnesium	05/26/2011	SW846 3050/6010	2310
Manganese	05/26/2011	SW846 3050/6010	433
Mercury	05/17/2011	SW846 7471	0.0270
Nickel	05/26/2011	SW846 3050/6010	20.2
Potassium	05/26/2011	SW846 3050/6010	806
Selenium	05/26/2011	SW846 3050/6010	< 1.19
Silver	05/26/2011	SW846 3050/6010	< 1.19
Sodium	05/26/2011	SW846 3050/6010	< 299
Thallium	05/26/2011	SW846 3050/6010	< 2.99
Vanadium	05/26/2011	SW846 3050/6010	18.6
Zinc	05/26/2011	SW846 3050/6010	83.1

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111868A.xls



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6289

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP2-D23-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	15200
Antimony	05/26/2011	SW846 3050/6010	< 6.02
Arsenic	05/26/2011	SW846 3050/6010	9.51
Barium	05/26/2011	SW846 3050/6010	41.4
Beryllium	05/26/2011	SW846 3050/6010	0.626
Cadmium	05/26/2011	SW846 3050/6010	< 0.501
Calcium	05/26/2011	SW846 3050/6010	1440
Chromium	05/26/2011	SW846 3050/6010	18.6
Cobalt	05/26/2011	SW846 3050/6010	12.2
Copper	05/26/2011	SW846 3050/6010	19.5
Iron	05/26/2011	SW846 3050/6010	29600
Lead	05/26/2011	SW846 3050/6010	4.64
Magnesium	05/26/2011	SW846 3050/6010	5340
Manganese	05/26/2011	SW846 3050/6010	406
Mercury	05/17/2011	SW846 7471	0.0218 DM
Nickel	05/26/2011	SW846 3050/6010	30.1
Potassium	05/26/2011	SW846 3050/6010	1010
Selenium	05/26/2011	SW846 3050/6010	0.551 J
Silver	05/26/2011	SW846 3050/6010	< 1.00
Sodium	05/26/2011	SW846 3050/6010	< 251
Thallium	05/26/2011	SW846 3050/6010	< 2.51
Vanadium	05/26/2011	SW846 3050/6010	21.0
Zinc	05/26/2011	SW846 3050/6010	102

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-TP3-D45-S-0

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6290

Sample Type: Soil

Date Sampled: 05/09/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	11800
Antimony	05/26/2011	SW846 3050/6010	< 8.16
Arsenic	05/26/2011	SW846 3050/6010	13.7
Barium	05/26/2011	SW846 3050/6010	215
Beryllium	05/26/2011	SW846 3050/6010	< 0.679
Cadmium	05/26/2011	SW846 3050/6010	0.340 J
Calcium	05/26/2011	SW846 3050/6010	2600
Chromium	05/26/2011	SW846 3050/6010	15.0
Cobalt	05/26/2011	SW846 3050/6010	19.9
Copper	05/26/2011	SW846 3050/6010	29.8
Iron	05/26/2011	SW846 3050/6010	21000
Lead	05/26/2011	SW846 3050/6010	110
Magnesium	05/26/2011	SW846 3050/6010	2070
Manganese	05/26/2011	SW846 3050/6010	266
Mercury	05/19/2011	SW846 7471	0.0643
Nickel	05/26/2011	SW846 3050/6010	19.6
Potassium	05/26/2011	SW846 3050/6010	695
Selenium	05/26/2011	SW846 3050/6010	1.02 J
Silver	05/26/2011	SW846 3050/6010	< 1.36
Sodium	05/26/2011	SW846 3050/6010	< 340
Thallium	05/26/2011	SW846 3050/6010	< 3.40
Vanadium	05/26/2011	SW846 3050/6010	21.7
Zinc	05/26/2011	SW846 3050/6010	302

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cd.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Lab Sample No.: 6291

Client Job Site: A & A Metals

Sample Type: Soil

Client Job No.: 2011.0066.00

Date Sampled: 05/09/2011

Field Location: FAM-TP4-D13-S-O

Date Received: 05/12/2011

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	7840
Antimony	05/26/2011	SW846 3050/6010	19.5
Arsenic	05/26/2011	SW846 3050/6010	44.5
Barium	05/26/2011	SW846 3050/6010	798
Beryllium	05/26/2011	SW846 3050/6010	0.514 J
Cadmium	05/26/2011	SW846 3050/6010	5.26
Calcium	05/26/2011	SW846 3050/6010	50000
Chromium	05/26/2011	SW846 3050/6010	380
Cobalt	05/26/2011	SW846 3050/6010	48.0
Copper	05/26/2011	SW846 3050/6010	654
Iron	05/26/2011	SW846 3050/6010	329000
Lead	05/26/2011	SW846 3050/6010	647
Magnesium	05/26/2011	SW846 3050/6010	4660
Manganese	05/26/2011	SW846 3050/6010	7330
Mercury	05/19/2011	SW846 7471	2.76
Nickel	05/26/2011	SW846 3050/6010	978
Potassium	05/26/2011	SW846 3050/6010	877
Selenium	05/26/2011	SW846 3050/6010	< 1.29
Silver	05/26/2011	SW846 3050/6010	2.81
Sodium	05/26/2011	SW846 3050/6010	1360
Thallium	05/26/2011	SW846 3050/6010	< 3.22
Vanadium	05/26/2011	SW846 3050/6010	28.8
Zinc	05/26/2011	SW846 3050/6010	1662

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6292

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP5-D1011-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	13000
Antimony	05/26/2011	SW846 3050/6010	< 6.68
Arsenic	05/26/2011	SW846 3050/6010	8.51
Barium	05/26/2011	SW846 3050/6010	62.2
Beryllium	05/26/2011	SW846 3050/6010	0.602
Cadmium	05/26/2011	SW846 3050/6010	< 0.557
Calcium	05/26/2011	SW846 3050/6010	29500
Chromium	05/26/2011	SW846 3050/6010	17.9
Cobalt	05/26/2011	SW846 3050/6010	9.61
Copper	05/26/2011	SW846 3050/6010	29.5
Iron	05/26/2011	SW846 3050/6010	23500
Lead	05/26/2011	SW846 3050/6010	21.4
Magnesium	05/26/2011	SW846 3050/6010	4980
Manganese	05/26/2011	SW846 3050/6010	1470
Mercury	05/19/2011	SW846 7471	0.0914
Nickel	05/26/2011	SW846 3050/6010	26.9
Potassium	05/26/2011	SW846 3050/6010	1460
Selenium	05/26/2011	SW846 3050/6010	1.00 J
Silver	05/26/2011	SW846 3050/6010	< 1.11
Sodium	05/26/2011	SW846 3050/6010	< 278
Thallium	05/26/2011	SW846 3050/6010	< 2.78
Vanadium	05/26/2011	SW846 3050/6010	21.8
Zinc	05/26/2011	SW846 3050/6010	88.4

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6293

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP6-D67-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	12600
Antimony	05/26/2011	SW846 3050/6010	< 6.17
Arsenic	05/26/2011	SW846 3050/6010	8.99
Barium	05/26/2011	SW846 3050/6010	43.4
Beryllium	05/26/2011	SW846 3050/6010	0.521
Cadmium	05/26/2011	SW846 3050/6010	< 0.515
Calcium	05/26/2011	SW846 3050/6010	2000
Chromium	05/26/2011	SW846 3050/6010	16.4
Cobalt	05/26/2011	SW846 3050/6010	11.9
Copper	05/26/2011	SW846 3050/6010	39.1
Iron	05/26/2011	SW846 3050/6010	26300
Lead	05/26/2011	SW846 3050/6010	15.9
Magnesium	05/26/2011	SW846 3050/6010	5070
Manganese	05/26/2011	SW846 3050/6010	424
Mercury	05/19/2011	SW846 7471	0.0153
Nickel	05/26/2011	SW846 3050/6010	29.4
Potassium	05/26/2011	SW846 3050/6010	1150
Selenium	05/26/2011	SW846 3050/6010	< 1.03
Silver	05/26/2011	SW846 3050/6010	< 1.03
Sodium	05/26/2011	SW846 3050/6010	< 257
Thallium	05/26/2011	SW846 3050/6010	< 2.57
Vanadium	05/26/2011	SW846 3050/6010	18.3
Zinc	05/26/2011	SW846 3050/6010	70.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6294

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP7-D67-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	12100
Antimony	05/26/2011	SW846 3050/6010	< 6.06 M
Arsenic	05/26/2011	SW846 3050/6010	20.9 DM
Barium	05/26/2011	SW846 3050/6010	38.8 M
Beryllium	05/26/2011	SW846 3050/6010	0.671 M
Cadmium	05/26/2011	SW846 3050/6010	< 0.506 M
Calcium	05/26/2011	SW846 3050/6010	2860 M
Chromium	05/26/2011	SW846 3050/6010	17.4 M
Cobalt	05/26/2011	SW846 3050/6010	15.1 DM
Copper	05/26/2011	SW846 3050/6010	31.5
Iron	05/26/2011	SW846 3050/6010	28300
Lead	05/26/2011	SW846 3050/6010	37.3 D
Magnesium	05/26/2011	SW846 3050/6010	5050 M
Manganese	05/26/2011	SW846 3050/6010	487 M
Mercury	05/19/2011	SW846 7471	0.0144
Nickel	05/26/2011	SW846 3050/6010	35.8 DM
Potassium	05/26/2011	SW846 3050/6010	1210
Selenium	05/26/2011	SW846 3050/6010	< 1.01 M
Silver	05/26/2011	SW846 3050/6010	< 1.01 M
Sodium	05/26/2011	SW846 3050/6010	< 253
Thallium	05/26/2011	SW846 3050/6010	< 2.53 M
Vanadium	05/26/2011	SW846 3050/6010	18.2 M
Zinc	05/26/2011	SW846 3050/6010	82.8 M

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ag. The laboratory control spike was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6295

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP8-D01-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	5360
Antimony	05/26/2011	SW846 3050/6010	< 6.93
Arsenic	05/26/2011	SW846 3050/6010	6.62
Barium	05/26/2011	SW846 3050/6010	25.2
Beryllium	05/26/2011	SW846 3050/6010	0.312 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.577
Calcium	05/26/2011	SW846 3050/6010	31900
Chromium	05/26/2011	SW846 3050/6010	7.03
Cobalt	05/26/2011	SW846 3050/6010	< 5.77
Copper	05/26/2011	SW846 3050/6010	16.9
Iron	05/27/2011	SW846 3050/6010	13400
Lead	05/26/2011	SW846 3050/6010	7.98
Magnesium	05/26/2011	SW846 3050/6010	5400
Manganese	05/26/2011	SW846 3050/6010	335
Mercury	05/19/2011	SW846 7471	0.0055 J
Nickel	05/26/2011	SW846 3050/6010	13.2
Potassium	05/26/2011	SW846 3050/6010	1060
Selenium	05/26/2011	SW846 3050/6010	0.809 J
Silver	05/26/2011	SW846 3050/6010	< 1.15
Sodium	05/26/2011	SW846 3050/6010	< 289
Thallium	05/26/2011	SW846 3050/6010	< 2.89
Vanadium	05/26/2011	SW846 3050/6010	12.4
Zinc	05/26/2011	SW846 3050/6010	44.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6296

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP9-D005-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	2560
Antimony	05/26/2011	SW846 3050/6010	16.0
Arsenic	05/26/2011	SW846 3050/6010	28.2
Barium	05/26/2011	SW846 3050/6010	56.3
Beryllium	05/26/2011	SW846 3050/6010	0.439 J
Cadmium	05/26/2011	SW846 3050/6010	4.18
Calcium	05/26/2011	SW846 3050/6010	10100
Chromium	05/26/2011	SW846 3050/6010	331
Cobalt	05/26/2011	SW846 3050/6010	56.1
Copper	05/26/2011	SW846 3050/6010	929
Iron	05/27/2011	SW846 3050/6010	458000
Lead	05/26/2011	SW846 3050/6010	88.9
Magnesium	05/26/2011	SW846 3050/6010	3990
Manganese	05/26/2011	SW846 3050/6010	10700
Mercury	05/19/2011	SW846 7471	2.12
Nickel	05/26/2011	SW846 3050/6010	17800
Potassium	05/26/2011	SW846 3050/6010	803
Selenium	05/26/2011	SW846 3050/6010	< 0.895
Silver	05/26/2011	SW846 3050/6010	9.17
Sodium	05/26/2011	SW846 3050/6010	1010
Thallium	05/26/2011	SW846 3050/6010	< 2.23
Vanadium	05/26/2011	SW846 3050/6010	48.8
Zinc	05/26/2011	SW846 3050/6010	255

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6297

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP10-D152-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	13700
Antimony	05/26/2011	SW846 3050/6010	< 5.50
Arsenic	05/26/2011	SW846 3050/6010	5.44
Barium	05/26/2011	SW846 3050/6010	39.4
Beryllium	05/26/2011	SW846 3050/6010	0.564
Cadmium	05/26/2011	SW846 3050/6010	< 0.458
Calcium	05/26/2011	SW846 3050/6010	7130
Chromium	05/26/2011	SW846 3050/6010	18.3
Cobalt	05/26/2011	SW846 3050/6010	11.1
Copper	05/26/2011	SW846 3050/6010	27.7
Iron	05/27/2011	SW846 3050/6010	25900
Lead	05/26/2011	SW846 3050/6010	4.36
Magnesium	05/26/2011	SW846 3050/6010	6200
Manganese	05/26/2011	SW846 3050/6010	440
Mercury	05/19/2011	SW846 7471	0.0066 J
Nickel	05/26/2011	SW846 3050/6010	35.3
Potassium	05/26/2011	SW846 3050/6010	1190
Selenium	05/26/2011	SW846 3050/6010	< 0.917
Silver	05/26/2011	SW846 3050/6010	< 0.917
Sodium	05/26/2011	SW846 3050/6010	< 229
Thallium	05/26/2011	SW846 3050/6010	< 2.29
Vanadium	05/26/2011	SW846 3050/6010	18.6
Zinc	05/26/2011	SW846 3050/6010	59.1

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-TP11-D005-S-O

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6298

Sample Type: Soil

Date Sampled: 05/09/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	5960 D
Antimony	05/26/2011	SW846 3050/6010	< 7.02 M
Arsenic	05/26/2011	SW846 3050/6010	7.75 D
Barium	05/26/2011	SW846 3050/6010	31.6 DM
Beryllium	05/26/2011	SW846 3050/6010	< 0.585
Cadmium	05/26/2011	SW846 3050/6010	< 0.585 M
Calcium	05/26/2011	SW846 3050/6010	37200
Chromium	05/26/2011	SW846 3050/6010	45.2 DM
Cobalt	05/26/2011	SW846 3050/6010	7.04 DM
Copper	05/26/2011	SW846 3050/6010	241 DM
Iron	05/27/2011	SW846 3050/6010	41726 D
Lead	05/26/2011	SW846 3050/6010	83.3 DM
Magnesium	05/26/2011	SW846 3050/6010	4520 DM
Manganese	05/26/2011	SW846 3050/6010	625 DM
Mercury	05/19/2011	SW846 7471	0.0138 D
Nickel	05/26/2011	SW846 3050/6010	219 DM
Potassium	05/26/2011	SW846 3050/6010	654
Selenium	05/26/2011	SW846 3050/6010	< 1.17
Silver	05/26/2011	SW846 3050/6010	< 1.17
Sodium	05/26/2011	SW846 3050/6010	< 293
Thallium	05/26/2011	SW846 3050/6010	< 2.93 M
Vanadium	05/26/2011	SW846 3050/6010	11.4
Zinc	05/26/2011	SW846 3050/6010	131 DM

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6299

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP12-D0515-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	7630
Antimony	05/26/2011	SW846 3050/6010	< 7.04
Arsenic	05/26/2011	SW846 3050/6010	17.2
Barium	05/26/2011	SW846 3050/6010	31.7
Beryllium	05/26/2011	SW846 3050/6010	0.411 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.587
Calcium	05/26/2011	SW846 3050/6010	32400
Chromium	05/26/2011	SW846 3050/6010	17.2
Cobalt	05/26/2011	SW846 3050/6010	7.31
Copper	05/26/2011	SW846 3050/6010	51.7
Iron	05/27/2011	SW846 3050/6010	31300
Lead	05/26/2011	SW846 3050/6010	68.0
Magnesium	05/26/2011	SW846 3050/6010	6100
Manganese	05/26/2011	SW846 3050/6010	432
Mercury	05/19/2011	SW846 7471	< 0.0071
Nickel	05/26/2011	SW846 3050/6010	31.2
Potassium	05/26/2011	SW846 3050/6010	966
Selenium	05/26/2011	SW846 3050/6010	< 1.17
Silver	05/26/2011	SW846 3050/6010	< 1.17
Sodium	05/26/2011	SW846 3050/6010	< 293
Thallium	05/26/2011	SW846 3050/6010	< 2.93
Vanadium	05/26/2011	SW846 3050/6010	15.6
Zinc	05/26/2011	SW846 3050/6010	108

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-TP13-D23-S-O

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6300

Sample Type: Soil

Date Sampled: 05/09/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	9750
Antimony	05/26/2011	SW846 3050/6010	< 7.42
Arsenic	05/26/2011	SW846 3050/6010	10.2
Barium	05/26/2011	SW846 3050/6010	52.6
Beryllium	05/26/2011	SW846 3050/6010	0.408 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.618
Calcium	05/26/2011	SW846 3050/6010	1800
Chromium	05/26/2011	SW846 3050/6010	12.5
Cobalt	05/26/2011	SW846 3050/6010	9.35
Copper	05/26/2011	SW846 3050/6010	31.5
Iron	05/27/2011	SW846 3050/6010	19900
Lead	05/26/2011	SW846 3050/6010	10.8
Magnesium	05/26/2011	SW846 3050/6010	3160
Manganese	05/26/2011	SW846 3050/6010	1100
Mercury	05/19/2011	SW846 7471	< 0.0090
Nickel	05/26/2011	SW846 3050/6010	24.5
Potassium	05/26/2011	SW846 3050/6010	1170
Selenium	05/26/2011	SW846 3050/6010	< 1.24
Silver	05/26/2011	SW846 3050/6010	< 1.24
Sodium	05/26/2011	SW846 3050/6010	565
Thallium	05/26/2011	SW846 3050/6010	< 3.09
Vanadium	05/26/2011	SW846 3050/6010	18.7
Zinc	05/26/2011	SW846 3050/6010	80.1

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6301

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP14-D2-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	9030
Antimony	05/26/2011	SW846 3050/6010	< 6.08
Arsenic	05/26/2011	SW846 3050/6010	10.7
Barium	05/26/2011	SW846 3050/6010	39.6
Beryllium	05/26/2011	SW846 3050/6010	0.375 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.507
Calcium	05/26/2011	SW846 3050/6010	2040
Chromium	05/26/2011	SW846 3050/6010	12.2
Cobalt	05/26/2011	SW846 3050/6010	10.0
Copper	05/26/2011	SW846 3050/6010	29.1
Iron	05/27/2011	SW846 3050/6010	20746
Lead	05/26/2011	SW846 3050/6010	42.1
Magnesium	05/26/2011	SW846 3050/6010	3370
Manganese	05/26/2011	SW846 3050/6010	910
Mercury	05/19/2011	SW846 7471	< 0.0083
Nickel	05/26/2011	SW846 3050/6010	26.8
Potassium	05/26/2011	SW846 3050/6010	1030
Selenium	05/26/2011	SW846 3050/6010	< 1.01
Silver	05/26/2011	SW846 3050/6010	< 1.01
Sodium	05/26/2011	SW846 3050/6010	< 253
Thallium	05/26/2011	SW846 3050/6010	< 2.53
Vanadium	05/26/2011	SW846 3050/6010	16.9
Zinc	05/26/2011	SW846 3050/6010	71.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-TPDUP

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6302

Sample Type: Soil

Date Sampled: 05/09/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	8670
Antimony	05/26/2011	SW846 3050/6010	< 7.65
Arsenic	05/26/2011	SW846 3050/6010	8.67
Barium	05/26/2011	SW846 3050/6010	39.9
Beryllium	05/26/2011	SW846 3050/6010	0.382]
Cadmium	05/26/2011	SW846 3050/6010	< 0.638
Calcium	05/26/2011	SW846 3050/6010	2400
Chromium	05/26/2011	SW846 3050/6010	11.9
Cobalt	05/26/2011	SW846 3050/6010	9.36
Copper	05/26/2011	SW846 3050/6010	30.7
Iron	05/27/2011	SW846 3050/6010	20400
Lead	05/26/2011	SW846 3050/6010	39.2
Magnesium	05/26/2011	SW846 3050/6010	3370
Manganese	05/26/2011	SW846 3050/6010	807
Mercury	05/19/2011	SW846 7471	0.0160
Nickel	05/26/2011	SW846 3050/6010	27.3
Potassium	05/26/2011	SW846 3050/6010	1050
Selenium	05/26/2011	SW846 3050/6010	< 1.27
Silver	05/26/2011	SW846 3050/6010	< 1.27
Sodium	05/26/2011	SW846 3050/6010	< 319
Thallium	05/26/2011	SW846 3050/6010	< 3.19
Vanadium	05/26/2011	SW846 3050/6010	17.0
Zinc	05/26/2011	SW846 3050/6010	70.2

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6303

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP15-D005-S-O

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	5280
Antimony	05/26/2011	SW846 3050/6010	< 7.23
Arsenic	05/26/2011	SW846 3050/6010	2.59
Barium	05/26/2011	SW846 3050/6010	34.7
Beryllium	05/26/2011	SW846 3050/6010	< 0.603
Cadmium	05/26/2011	SW846 3050/6010	< 0.603
Calcium	05/26/2011	SW846 3050/6010	135000
Chromium	05/26/2011	SW846 3050/6010	12.6
Cobalt	05/26/2011	SW846 3050/6010	< 6.03
Copper	05/26/2011	SW846 3050/6010	22.7
Iron	05/27/2011	SW846 3050/6010	8603
Lead	05/26/2011	SW846 3050/6010	5.93
Magnesium	05/26/2011	SW846 3050/6010	48600
Manganese	05/26/2011	SW846 3050/6010	362
Mercury	05/19/2011	SW846 7471	0.0555
Nickel	05/26/2011	SW846 3050/6010	11.8
Potassium	05/26/2011	SW846 3050/6010	2210
Selenium	05/26/2011	SW846 3050/6010	< 1.21
Silver	05/26/2011	SW846 3050/6010	< 1.21
Sodium	05/26/2011	SW846 3050/6010	< 301
Thallium	05/26/2011	SW846 3050/6010	< 3.01
Vanadium	05/26/2011	SW846 3050/6010	12.1
Zinc	05/26/2011	SW846 3050/6010	62.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-TP16-D115-S-0

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6304

Sample Type: Soil

Date Sampled: 05/09/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	4970
Antimony	05/26/2011	SW846 3050/6010	< 5.67
Arsenic	05/26/2011	SW846 3050/6010	5.24
Barium	05/26/2011	SW846 3050/6010	42.0
Beryllium	05/26/2011	SW846 3050/6010	< 0.472
Cadmium	05/26/2011	SW846 3050/6010	< 0.472
Calcium	05/26/2011	SW846 3050/6010	11500
Chromium	05/26/2011	SW846 3050/6010	14.5
Cobalt	05/26/2011	SW846 3050/6010	< 4.72
Copper	05/26/2011	SW846 3050/6010	20.3
Iron	05/27/2011	SW846 3050/6010	14900
Lead	05/26/2011	SW846 3050/6010	15.0
Magnesium	05/26/2011	SW846 3050/6010	3390
Manganese	05/26/2011	SW846 3050/6010	252
Mercury	05/24/2011	SW846 7471	0.0107
Nickel	05/26/2011	SW846 3050/6010	17.2
Potassium	05/26/2011	SW846 3050/6010	662
Selenium	05/26/2011	SW846 3050/6010	< 0.944
Silver	05/26/2011	SW846 3050/6010	< 0.944
Sodium	05/26/2011	SW846 3050/6010	< 236
Thallium	05/26/2011	SW846 3050/6010	< 2.36
Vanadium	05/26/2011	SW846 3050/6010	10.2
Zinc	05/26/2011	SW846 3050/6010	625

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111868A.xls



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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Client Job Site: A & A Metals

Lab Sample No.: 6305

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-TP17-03-S-0

Date Sampled: 05/09/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	10900
Antimony	05/26/2011	SW846 3050/6010	< 8.07
Arsenic	05/26/2011	SW846 3050/6010	13.9
Barium	05/26/2011	SW846 3050/6010	101
Beryllium	05/26/2011	SW846 3050/6010	0.538 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.673
Calcium	05/26/2011	SW846 3050/6010	2620
Chromium	05/26/2011	SW846 3050/6010	14.2
Cobalt	05/26/2011	SW846 3050/6010	6.90
Copper	05/26/2011	SW846 3050/6010	25.1
Iron	05/27/2011	SW846 3050/6010	25202
Lead	05/26/2011	SW846 3050/6010	36.8
Magnesium	05/26/2011	SW846 3050/6010	1730
Manganese	05/26/2011	SW846 3050/6010	377
Mercury	05/24/2011	SW846 7471	0.0410
Nickel	05/26/2011	SW846 3050/6010	15.5
Potassium	05/26/2011	SW846 3050/6010	689
Selenium	05/26/2011	SW846 3050/6010	0.740 J
Silver	05/26/2011	SW846 3050/6010	< 1.35
Sodium	05/26/2011	SW846 3050/6010	< 337
Thallium	05/26/2011	SW846 3050/6010	< 3.37
Vanadium	05/26/2011	SW846 3050/6010	25.1
Zinc	05/26/2011	SW846 3050/6010	79.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A & A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP1-D7-S-O

Field ID No.: N/A

Lab Project No.: 11-1868A

Lab Sample No.: 6306

Sample Type: Soil

Date Sampled: 05/10/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	126000
Antimony	05/26/2011	SW846 3050/6010	< 5.65
Arsenic	05/26/2011	SW846 3050/6010	13.4
Barium	05/26/2011	SW846 3050/6010	28.2
Beryllium	05/26/2011	SW846 3050/6010	0.725
Cadmium	05/26/2011	SW846 3050/6010	< 0.472
Calcium	05/26/2011	SW846 3050/6010	1830
Chromium	05/26/2011	SW846 3050/6010	18.1
Cobalt	05/26/2011	SW846 3050/6010	13.5
Copper	05/26/2011	SW846 3050/6010	33.0
Iron	05/27/2011	SW846 3050/6010	28800
Lead	05/26/2011	SW846 3050/6010	17.2
Magnesium	05/26/2011	SW846 3050/6010	5480
Manganese	05/26/2011	SW846 3050/6010	311
Mercury	05/24/2011	SW846 7471	0.0152
Nickel	05/26/2011	SW846 3050/6010	31.7
Potassium	05/26/2011	SW846 3050/6010	1490
Selenium	05/26/2011	SW846 3050/6010	0.472 J
Silver	05/26/2011	SW846 3050/6010	< 0.942
Sodium	05/26/2011	SW846 3050/6010	< 236
Thallium	05/26/2011	SW846 3050/6010	< 2.36
Vanadium	05/26/2011	SW846 3050/6010	19.2
Zinc	05/26/2011	SW846 3050/6010	70.8

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1868A

Lab Sample No.: 6307

Client Job Site: A & A Metals

Sample Type: Soil

Client Job No.: 2011.0066.00

Date Sampled: 05/10/2011

Field Location: FAM-SP2-D4-S-O

Date Received: 05/12/2011

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/26/2011	SW846 3050/6010	12400
Antimony	05/26/2011	SW846 3050/6010	< 7.17
Arsenic	05/26/2011	SW846 3050/6010	13.2
Barium	05/26/2011	SW846 3050/6010	31.6
Beryllium	05/26/2011	SW846 3050/6010	0.562 J
Cadmium	05/26/2011	SW846 3050/6010	< 0.597
Calcium	05/26/2011	SW846 3050/6010	1640
Chromium	05/26/2011	SW846 3050/6010	15.7
Cobalt	05/26/2011	SW846 3050/6010	10.9
Copper	05/26/2011	SW846 3050/6010	35.2
Iron	05/27/2011	SW846 3050/6010	26200
Lead	05/26/2011	SW846 3050/6010	9.61
Magnesium	05/26/2011	SW846 3050/6010	4170
Manganese	05/26/2011	SW846 3050/6010	425
Mercury	05/24/2011	SW846 7471	0.0185
Nickel	05/26/2011	SW846 3050/6010	26.2
Potassium	05/26/2011	SW846 3050/6010	1150
Selenium	05/26/2011	SW846 3050/6010	< 1.20
Silver	05/26/2011	SW846 3050/6010	< 1.20
Sodium	05/26/2011	SW846 3050/6010	< 299
Thallium	05/26/2011	SW846 3050/6010	< 2.99
Vanadium	05/26/2011	SW846 3050/6010	20.0
Zinc	05/26/2011	SW846 3050/6010	72.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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**PARADIGM**
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/SludgesClient: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Client Job Number: 2011.0066.00

Lab Sample Number: 6288

Field Location: FAM-TP1-D67-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 348
Acenaphthylene	< 348
Acetophenone	< 348
Anthracene	< 348
Atrazine	< 348
Benzaldehyde	< 348
Benzo (a) anthracene	< 348
Benzo (a) pyrene	< 348
Benzo (b) fluoranthene	< 348
Benzo (g,h,i) perylene	< 348
Benzo (k) fluoranthene	< 348
Biphenyl	< 348
Bis (2-chloroethyl) ether	< 348
Bis (2-chloroethoxy) methane	< 348
Bis (2-ethylhexyl) phthalate	< 348
Bis (2-chloroisopropyl) ether	< 348
4-Bromophenyl phenyl ether	< 348
Butylbenzylphthalate	< 348
Caprolactam	< 348
Carbazole	< 348
4-Chloroaniline	< 348
4-Chloro-3-methylphenol	< 348
2-Chloronaphthalene	< 348
2-Chlorophenol	< 348
4-Chlorophenyl phenyl ether	< 348
Chrysene	< 348
1,3-Dichlorobenzene	< 348
1,4-Dichlorobenzene	< 348
1,2-Dichlorobenzene	< 348
Dibenz (a,h) anthracene	< 348
Dibenzofuran	< 348
3,3'-Dichlorobenzidine	< 348
2,4-Dichlorophenol	< 348
Diethyl phthalate	< 348
2,4-Dimethylphenol	< 348
Dimethyl phthalate	< 869

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 348
4,6-Dinitro-2-methylphenol	< 869
2,4-Dinitrophenol	< 869
2,4-Dinitrotoluene	< 348
2,6-Dinitrotoluene	< 348
Di-n-octylphthalate	< 348
Fluoranthene	< 348
Fluorene	< 348
Hexachlorobenzene	< 348
Hexachlorobutadiene	< 348
Hexachlorocyclopentadiene	< 348
Hexachloroethane	< 348
Indeno (1,2,3-cd) pyrene	< 348
Isophorone	< 348
2-Methylnaphthalene	< 348
2-Methylphenol	< 348
3&4-Methylphenol	< 348
Naphthalene	< 348
2-Nitroaniline	< 869
3-Nitroaniline	< 869
4-Nitroaniline	< 869
Nitrobenzene	< 348
2-Nitrophenol	< 348
4-Nitrophenol	< 869
N-Nitroso-di-n-propylamine	< 348
N-Nitrosodiphenylamine	< 348
Pentachlorophenol	< 869
Phenanthrene	< 348
Phenol	< 348
Pyrene	< 348
1,2,4-Trichlorobenzene	< 348
2,4,5-Trichlorophenol	< 869
2,4,6-Trichlorophenol	< 348
1,2,4,5-Tetrachlorobenzene	< 348
2,3,4,6-Tetrachlorophenol	< 348

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56675A.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S1

**Semi-Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6289**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP2-D23-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 312
Acenaphthylene	< 312
Acetophenone	< 312
Anthracene	< 312
Atrazine	< 312
Benzaldehyde	< 312
Benzo (a) anthracene	< 312
Benzo (a) pyrene	< 312
Benzo (b) fluoranthene	< 312
Benzo (g,h,i) perylene	< 312
Benzo (k) fluoranthene	< 312
Biphenyl	< 312
Bis (2-chloroethyl) ether	< 312
Bis (2-chloroethoxy) methane	< 312
Bis (2-ethylhexyl) phthalate	< 312
Bis (2-chloroisopropyl) ether	< 312
4-Bromophenyl phenyl ether	< 312
Butylbenzylphthalate	< 312
Caprolactam	< 312
Carbazole	< 312
4-Chloroaniline	< 312
4-Chloro-3-methylphenol	< 312
2-Chloronaphthalene	< 312
2-Chlorophenol	< 312
4-Chlorophenyl phenyl ether	< 312
Chrysene	< 312
1,3-Dichlorobenzene	< 312
1,4-Dichlorobenzene	< 312
1,2-Dichlorobenzene	< 312
Dibenz (a,h) anthracene	< 312
Dibenzofuran	< 312
3,3'-Dichlorobenzidine	< 312
2,4-Dichlorophenol	< 312
Diethyl phthalate	< 312
2,4-Dimethylphenol	< 312
Dimethyl phthalate	< 779

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 312
4,6-Dinitro-2-methylphenol	< 779
2,4-Dinitrophenol	< 779
2,4-Dinitrotoluene	< 312
2,6-Dinitrotoluene	< 312
Di-n-octylphthalate	< 312
Fluoranthene	< 312
Fluorene	< 312
Hexachlorobenzene	< 312
Hexachlorobutadiene	< 312
Hexachlorocyclopentadiene	< 312
Hexachloroethane	< 312
Indeno (1,2,3-cd) pyrene	< 312
Isophorone	< 312
2-Methylnaphthalene	< 312
2-Methylphenol	< 312
3&4-Methylphenol	< 312
Naphthalene	< 312
2-Nitroaniline	< 779
3-Nitroaniline	< 779
4-Nitroaniline	< 779
Nitrobenzene	< 312
2-Nitrophenol	< 312
4-Nitrophenol	< 779
N-Nitroso-di-n-propylamine	< 312
N-Nitrosodiphenylamine	< 312
Pentachlorophenol	< 779
Phenanthrene	< 312
Phenol	< 312
Pyrene	< 312
1,2,4-Trichlorobenzene	< 312
2,4,5-Trichlorophenol	< 779
2,4,6-Trichlorophenol	< 312
1,2,4,5-Tetrachlorobenzene	< 312
2,3,4,6-Tetrachlorophenol	< 312

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56676.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S2.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6290

Client Job Number: 2011.0066.00

Field Location: FAM-TP3-D45-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 11,100
Acenaphthylene	J 5,850
Acetophenone	< 11,100
Anthracene	J 8,560
Atrazine	< 11,100
Benzaldehyde	< 11,100
Benzo (a) anthracene	20,800
Benzo (a) pyrene	15,100
Benzo (b) fluoranthene	13,200
Benzo (g,h,i) perylene	J 6,130
Benzo (k) fluoranthene	15,000
Biphenyl	< 11,100
Bis (2-chloroethyl) ether	< 11,100
Bis (2-chloroethoxy) methane	< 11,100
Bis (2-ethylhexyl) phthalate	< 11,100
Bis (2-chloroisopropyl) ether	< 11,100
4-Bromophenyl phenyl ether	< 11,100
Butylbenzylphthalate	< 11,100
Caprolactam	< 11,100
Carbazole	< 11,100
4-Chloroaniline	< 11,100
4-Chloro-3-methylphenol	< 11,100
2-Chloronaphthalene	< 11,100
2-Chlorophenol	< 11,100
4-Chlorophenyl phenyl ether	< 11,100
Chrysene	18,700
1,3-Dichlorobenzene	< 11,100
1,4-Dichlorobenzene	< 11,100
1,2-Dichlorobenzene	< 11,100
Dibenz (a,h) anthracene	< 11,100
Dibenzofuran	< 11,100
3,3'-Dichlorobenzidine	< 11,100
2,4-Dichlorophenol	< 11,100
Diethyl phthalate	< 11,100
2,4-Dimethylphenol	< 11,100
Dimethyl phthalate	< 27,700

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 11,100
4,6-Dinitro-2-methylphenol	< 27,700
2,4-Dinitrophenol	< 27,700
2,4-Dinitrotoluene	< 11,100
2,6-Dinitrotoluene	< 11,100
Di-n-octylphthalate	< 11,100
Fluoranthene	36,900
Fluorene	< 11,100
Hexachlorobenzene	< 11,100
Hexachlorobutadiene	< 11,100
Hexachlorocyclopentadiene	< 11,100
Hexachloroethane	< 11,100
Indeno (1,2,3-cd) pyrene	J 7,920
Isophorone	< 11,100
2-Methylnaphthalene	< 11,100
2-Methylphenol	< 11,100
3&4-Methylphenol	< 11,100
Naphthalene	< 11,100
2-Nitroaniline	< 27,700
3-Nitroaniline	< 27,700
4-Nitroaniline	< 27,700
Nitrobenzene	< 11,100
2-Nitrophenol	< 11,100
4-Nitrophenol	< 27,700
N-Nitroso-di-n-propylamine	< 11,100
N-Nitrosodiphenylamine	< 11,100
Pentachlorophenol	< 27,700
Phenanthrene	23,000
Phenol	< 11,100
Pyrene	28,500
1,2,4-Trichlorobenzene	< 11,100
2,4,5-Trichlorophenol	< 27,700
2,4,6-Trichlorophenol	< 11,100
1,2,4,5-Tetrachlorobenzene	< 11,100
2,3,4,6-Tetrachlorophenol	< 11,100

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56677.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S3.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6291

Client Job Number: 2011.0066.00

Field Location: FAM-TP4-D13-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,840
Acenaphthylene	< 1,840
Acetophenone	< 1,840
Anthracene	< 1,840
Atrazine	< 1,840
Benzaldehyde	< 1,840
Benzo (a) anthracene	2,540
Benzo (a) pyrene	2,650
Benzo (b) fluoranthene	2,930
Benzo (g,h,i) perylene	2,250
Benzo (k) fluoranthene	2,140
Biphenyl	< 1,840
Bis (2-chloroethyl) ether	< 1,840
Bis (2-chloroethoxy) methane	< 1,840
Bis (2-ethylhexyl) phthalate	< 1,840
Bis (2-chloroisopropyl) ether	< 1,840
4-Bromophenyl phenyl ether	< 1,840
Butylbenzylphthalate	< 1,840
Caprolactam	< 1,840
Carbazole	< 1,840
4-Chloroaniline	< 1,840
4-Chloro-3-methylphenol	< 1,840
2-Chloronaphthalene	< 1,840
2-Chlorophenol	< 1,840
4-Chlorophenyl phenyl ether	< 1,840
Chrysene	2,890
1,3-Dichlorobenzene	< 1,840
1,4-Dichlorobenzene	< 1,840
1,2-Dichlorobenzene	< 1,840
Dibenz (a,h) anthracene	< 1,840
Dibenzofuran	< 1,840
3,3'-Dichlorobenzidine	< 1,840
2,4-Dichlorophenol	< 1,840
Diethyl phthalate	< 1,840
2,4-Dimethylphenol	< 1,840
Dimethyl phthalate	< 4,600

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,840
4,6-Dinitro-2-methylphenol	< 4,600
2,4-Dinitrophenol	< 4,600
2,4-Dinitrotoluene	< 1,840
2,6-Dinitrotoluene	< 1,840
Di-n-octylphthalate	< 1,840
Fluoranthene	5,880
Fluorene	< 1,840
Hexachlorobenzene	< 1,840
Hexachlorobutadiene	< 1,840
Hexachlorocyclopentadiene	< 1,840
Hexachloroethane	< 1,840
Indeno (1,2,3-cd) pyrene	J 1,420
Isophorone	< 1,840
2-Methylnaphthalene	< 1,840
2-Methylphenol	< 1,840
3&4-Methylphenol	< 1,840
Naphthalene	< 1,840
2-Nitroaniline	< 4,600
3-Nitroaniline	< 4,600
4-Nitroaniline	< 4,600
Nitrobenzene	< 1,840
2-Nitrophenol	< 1,840
4-Nitrophenol	< 4,600
N-Nitroso-di-n-propylamine	< 1,840
N-Nitrosodiphenylamine	< 1,840
Pentachlorophenol	< 4,600
Phenanthrene	3,730
Phenol	< 1,840
Pyrene	5,090
1,2,4-Trichlorobenzene	< 1,840
2,4,5-Trichlorophenol	< 4,600
2,4,6-Trichlorophenol	< 1,840
1,2,4,5-Tetrachlorobenzene	< 1,840
2,3,4,6-Tetrachlorophenol	< 1,840

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56793.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S4.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6292

Client Job Number: 2011.0066.00

Field Location: FAM-TP5-D1011-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,680
Acenaphthylene	< 1,680
Acetophenone	< 1,680
Anthracene	< 1,680
Atrazine	< 1,680
Benzaldehyde	< 1,680
Benzo (a) anthracene	1,910
Benzo (a) pyrene	J 1,490
Benzo (b) fluoranthene	1,710
Benzo (g,h,i) perylene	J 960
Benzo (k) fluoranthene	J 1,440
Biphenyl	< 1,680
Bis (2-chloroethyl) ether	< 1,680
Bis (2-chloroethoxy) methane	< 1,680
Bis (2-ethylhexyl) phthalate	< 1,680
Bis (2-chloroisopropyl) ether	< 1,680
4-Bromophenyl phenyl ether	< 1,680
Butylbenzylphthalate	< 1,680
Caprolactam	< 1,680
Carbazole	< 1,680
4-Chloroaniline	< 1,680
4-Chloro-3-methylphenol	< 1,680
2-Chloronaphthalene	< 1,680
2-Chlorophenol	< 1,680
4-Chlorophenyl phenyl ether	< 1,680
Chrysene	1,990
1,3-Dichlorobenzene	< 1,680
1,4-Dichlorobenzene	< 1,680
1,2-Dichlorobenzene	< 1,680
Dibenz (a,h) anthracene	< 1,680
Dibenzofuran	< 1,680
3,3'-Dichlorobenzidine	< 1,680
2,4-Dichlorophenol	< 1,680
Diethyl phthalate	< 1,680
2,4-Dimethylphenol	< 1,680
Dimethyl phthalate	< 4,210

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,680
4,6-Dinitro-2-methylphenol	< 4,210
2,4-Dinitrophenol	< 4,210
2,4-Dinitrotoluene	< 1,680
2,6-Dinitrotoluene	< 1,680
Di-n-octylphthalate	< 1,680
Fluoranthene	4,450
Fluorene	< 1,680
Hexachlorobenzene	< 1,680
Hexachlorobutadiene	< 1,680
Hexachlorocyclopentadiene	< 1,680
Hexachloroethane	< 1,680
Indeno (1,2,3-cd) pyrene	J 936
Isophorone	< 1,680
2-Methylnaphthalene	< 1,680
2-Methylphenol	< 1,680
3&4-Methylphenol	< 1,680
Naphthalene	< 1,680
2-Nitroaniline	< 4,210
3-Nitroaniline	< 4,210
4-Nitroaniline	< 4,210
Nitrobenzene	< 1,680
2-Nitrophenol	< 1,680
4-Nitrophenol	< 4,210
N-Nitroso-di-n-propylamine	< 1,680
N-Nitrosodiphenylamine	< 1,680
Pentachlorophenol	< 4,210
Phenanthrene	2,030
Phenol	< 1,680
Pyrene	3,640
1,2,4-Trichlorobenzene	< 1,680
2,4,5-Trichlorophenol	< 4,210
2,4,6-Trichlorophenol	< 1,680
1,2,4,5-Tetrachlorobenzene	< 1,680
2,3,4,6-Tetrachlorophenol	< 1,680

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56679.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S5.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6293

Client Job Number: 2011.0066.00

Field Location: FAM-TP6-D67-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 332
Acenaphthylene	< 332
Acetophenone	< 332
Anthracene	< 332
Atrazine	< 332
Benzaldehyde	< 332
Benzo (a) anthracene	< 332
Benzo (a) pyrene	< 332
Benzo (b) fluoranthene	< 332
Benzo (g,h,i) perylene	< 332
Benzo (k) fluoranthene	< 332
Biphenyl	< 332
Bis (2-chloroethyl) ether	< 332
Bis (2-chloroethoxy) methane	< 332
Bis (2-ethylhexyl) phthalate	< 332
Bis (2-chloroisopropyl) ether	< 332
4-Bromophenyl phenyl ether	< 332
Butylbenzylphthalate	< 332
Caprolactam	< 332
Carbazole	< 332
4-Chloroaniline	< 332
4-Chloro-3-methylphenol	< 332
2-Chloronaphthalene	< 332
2-Chlorophenol	< 332
4-Chlorophenyl phenyl ether	< 332
Chrysene	< 332
1,3-Dichlorobenzene	< 332
1,4-Dichlorobenzene	< 332
1,2-Dichlorobenzene	< 332
Dibenz (a,h) anthracene	< 332
Dibenzofuran	< 332
3,3'-Dichlorobenzidine	< 332
2,4-Dichlorophenol	< 332
Diethyl phthalate	< 332
2,4-Dimethylphenol	< 332
Dimethyl phthalate	< 830

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 332
4,6-Dinitro-2-methylphenol	< 830
2,4-Dinitrophenol	< 830
2,4-Dinitrotoluene	< 332
2,6-Dinitrotoluene	< 332
Di-n-octylphthalate	< 332
Fluoranthene	< 332
Fluorene	J 288
Hexachlorobenzene	< 332
Hexachlorobutadiene	< 332
Hexachlorocyclopentadiene	< 332
Hexachloroethane	< 332
Indeno (1,2,3-cd) pyrene	< 332
Isophorone	< 332
2-Methylnaphthalene	< 332
2-Methylphenol	< 332
3&4-Methylphenol	< 332
Naphthalene	< 332
2-Nitroaniline	< 830
3-Nitroaniline	< 830
4-Nitroaniline	< 830
Nitrobenzene	< 332
2-Nitrophenol	< 332
4-Nitrophenol	< 830
N-Nitroso-di-n-propylamine	< 332
N-Nitrosodiphenylamine	< 332
Pentachlorophenol	< 830
Phenanthrene	705
Phenol	< 332
Pyrene	< 332
1,2,4-Trichlorobenzene	< 332
2,4,5-Trichlorophenol	< 830
2,4,6-Trichlorophenol	< 332
1,2,4,5-Tetrachlorobenzene	< 332
2,3,4,6-Tetrachlorophenol	< 332

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56680.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S6.XLS

**PARADIGM**

ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6294**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP7-D67-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,640
Acenaphthylene	< 1,640
Acetophenone	< 1,640
Anthracene	< 1,640
Atrazine	< 1,640
Benzaldehyde	< 1,640
Benzo (a) anthracene	< 1,640
Benzo (a) pyrene	< 1,640
Benzo (b) fluoranthene	< 1,640
Benzo (g,h,i) perylene	< 1,640
Benzo (k) fluoranthene	< 1,640
Biphenyl	2,140
Bis (2-chloroethyl) ether	< 1,640
Bis (2-chloroethoxy) methane	< 1,640
Bis (2-ethylhexyl) phthalate	< 1,640
Bis (2-chloroisopropyl) ether	< 1,640
4-Bromophenyl phenyl ether	< 1,640
Butylbenzylphthalate	< 1,640
Caprolactam	< 1,640
Carbazole	< 1,640
4-Chloroaniline	< 1,640
4-Chloro-3-methylphenol	< 1,640
2-Chloronaphthalene	< 1,640
2-Chlorophenol	< 1,640
4-Chlorophenyl phenyl ether	< 1,640
Chrysene	< 1,640
1,3-Dichlorobenzene	< 1,640
1,4-Dichlorobenzene	< 1,640
1,2-Dichlorobenzene	< 1,640
Dibenz (a,h) anthracene	< 1,640
Dibenzofuran	J 882
3,3'-Dichlorobenzidine	< 1,640
2,4-Dichlorophenol	< 1,640
Diethyl phthalate	< 1,640
2,4-Dimethylphenol	< 1,640
Dimethyl phthalate	< 4,100

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,640
4,6-Dinitro-2-methylphenol	< 4,100
2,4-Dinitrophenol	< 4,100
2,4-Dinitrotoluene	< 1,640
2,6-Dinitrotoluene	< 1,640
Di-n-octylphthalate	< 1,640
Fluoranthene	< 1,640
Fluorene	1,860
Hexachlorobenzene	< 1,640
Hexachlorobutadiene	< 1,640
Hexachlorocyclopentadiene	< 1,640
Hexachloroethane	< 1,640
Indeno (1,2,3-cd) pyrene	< 1,640
Isophorone	< 1,640
2-Methylnaphthalene	15,700
2-Methylphenol	< 1,640
3&4-Methylphenol	< 1,640
Naphthalene	2,630
2-Nitroaniline	< 4,100
3-Nitroaniline	< 4,100
4-Nitroaniline	< 4,100
Nitrobenzene	< 1,640
2-Nitrophenol	< 1,640
4-Nitrophenol	< 4,100
N-Nitroso-di-n-propylamine	< 1,640
N-Nitrosodiphenylamine	< 1,640
Pentachlorophenol	< 4,100
Phenanthrene	4,100
Phenol	< 1,640
Pyrene	< 1,640
1,2,4-Trichlorobenzene	< 1,640
2,4,5-Trichlorophenol	< 4,100
2,4,6-Trichlorophenol	< 1,640
1,2,4,5-Tetrachlorobenzene	< 1,640
2,3,4,6-Tetrachlorophenol	< 1,640

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56794.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S7.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6295

Client Job Number: 2011.0066.00

Field Location: FAM-TP8-D01-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 313
Acenaphthylene	< 313
Acetophenone	< 313
Anthracene	< 313
Atrazine	< 313
Benzaldehyde	< 313
Benzo (a) anthracene	< 313
Benzo (a) pyrene	< 313
Benzo (b) fluoranthene	J 168
Benzo (g,h,i) perylene	< 313
Benzo (k) fluoranthene	< 313
Biphenyl	< 313
Bis (2-chloroethyl) ether	< 313
Bis (2-chloroethoxy) methane	< 313
Bis (2-ethylhexyl) phthalate	< 313
Bis (2-chloroisopropyl) ether	< 313
4-Bromophenyl phenyl ether	< 313
Butylbenzylphthalate	< 313
Caprolactam	< 313
Carbazole	< 313
4-Chloroaniline	< 313
4-Chloro-3-methylphenol	< 313
2-Chloronaphthalene	< 313
2-Chlorophenol	< 313
4-Chlorophenyl phenyl ether	< 313
Chrysene	J 163
1,3-Dichlorobenzene	< 313
1,4-Dichlorobenzene	< 313
1,2-Dichlorobenzene	< 313
Dibenz (a,h) anthracene	< 313
Dibenzofuran	< 313
3,3'-Dichlorobenzidine	< 313
2,4-Dichlorophenol	< 313
Diethyl phthalate	< 313
2,4-Dimethylphenol	< 313
Dimethyl phthalate	< 781

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 313
4,6-Dinitro-2-methylphenol	< 781
2,4-Dinitrophenol	< 781
2,4-Dinitrotoluene	< 313
2,6-Dinitrotoluene	< 313
Di-n-octylphthalate	< 313
Fluoranthene	< 313
Fluorene	< 313
Hexachlorobenzene	< 313
Hexachlorobutadiene	< 313
Hexachlorocyclopentadiene	< 313
Hexachloroethane	< 313
Indeno (1,2,3-cd) pyrene	< 313
Isophorone	< 313
2-Methylnaphthalene	< 313
2-Methylphenol	< 313
3&4-Methylphenol	< 313
Naphthalene	< 313
2-Nitroaniline	< 781
3-Nitroaniline	< 781
4-Nitroaniline	< 781
Nitrobenzene	< 313
2-Nitrophenol	< 313
4-Nitrophenol	< 781
N-Nitroso-di-n-propylamine	< 313
N-Nitrosodiphenylamine	< 313
Pentachlorophenol	< 781
Phenanthrene	< 313
Phenol	< 313
Pyrene	J 161
1,2,4-Trichlorobenzene	< 313
2,4,5-Trichlorophenol	< 781
2,4,6-Trichlorophenol	< 313
1,2,4,5-Tetrachlorobenzene	< 313
2,3,4,6-Tetrachlorophenol	< 313

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56682.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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11186858.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6296

Client Job Number: 2011.0066.00

Field Location: FAM-TP9-D005-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	J 89,000
Acenaphthylene	< 165,000
Acetophenone	< 165,000
Anthracene	J 162,000
Atrazine	< 165,000
Benzaldehyde	< 165,000
Benzo (a) anthracene	452,000
Benzo (a) pyrene	409,000
Benzo (b) fluoranthene	504,000
Benzo (g,h,i) perylene	290,000
Benzo (k) fluoranthene	380,000
Biphenyl	< 165,000
Bis (2-chloroethyl) ether	< 165,000
Bis (2-chloroethoxy) methane	< 165,000
Bis (2-ethylhexyl) phthalate	< 165,000
Bis (2-chloroisopropyl) ether	< 165,000
4-Bromophenyl phenyl ether	< 165,000
Butylbenzylphthalate	< 165,000
Caprolactam	< 165,000
Carbazole	< 165,000
4-Chloroaniline	< 165,000
4-Chloro-3-methylphenol	< 165,000
2-Chloronaphthalene	< 165,000
2-Chlorophenol	< 165,000
4-Chlorophenyl phenyl ether	< 165,000
Chrysene	480,000
1,3-Dichlorobenzene	< 165,000
1,4-Dichlorobenzene	< 165,000
1,2-Dichlorobenzene	< 165,000
Dibenz (a,h) anthracene	< 165,000
Dibenzofuran	< 165,000
3,3'-Dichlorobenzidine	< 165,000
2,4-Dichlorophenol	< 165,000
Diethyl phthalate	< 165,000
2,4-Dimethylphenol	< 165,000
Dimethyl phthalate	< 413,000

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 165,000
4,6-Dinitro-2-methylphenol	< 413,000
2,4-Dinitrophenol	< 413,000
2,4-Dinitrotoluene	< 165,000
2,6-Dinitrotoluene	< 165,000
Di-n-octylphthalate	< 165,000
Fluoranthene	1,200,000
Fluorene	J 85,100
Hexachlorobenzene	< 165,000
Hexachlorobutadiene	< 165,000
Hexachlorocyclopentadiene	< 165,000
Hexachloroethane	< 165,000
Indeno (1,2,3-cd) pyrene	246,000
Isophorone	< 165,000
2-Methylnaphthalene	< 165,000
2-Methylphenol	< 165,000
3&4-Methylphenol	< 165,000
Naphthalene	< 165,000
2-Nitroaniline	< 413,000
3-Nitroaniline	< 413,000
4-Nitroaniline	< 413,000
Nitrobenzene	< 165,000
2-Nitrophenol	< 165,000
4-Nitrophenol	< 413,000
N-Nitroso-di-n-propylamine	< 165,000
N-Nitrosodiphenylamine	< 165,000
Pentachlorophenol	< 413,000
Phenanthrene	920,000
Phenol	< 165,000
Pyrene	1,040,000
1,2,4-Trichlorobenzene	< 165,000
2,4,5-Trichlorophenol	< 413,000
2,4,6-Trichlorophenol	< 165,000
1,2,4,5-Tetrachlorobenzene	< 165,000
2,3,4,6-Tetrachlorophenol	< 165,000

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56795.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868S9.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA
Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6297

Client Job Number: 2011.0066.00

Field Location: FAM-TP10-D152-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	348
Acenaphthylene	< 326
Acetophenone	< 326
Anthracene	745
Atrazine	< 326
Benzaldehyde	< 326
Benzo (a) anthracene	1,960
Benzo (a) pyrene	1,730
Benzo (b) fluoranthene	2,040
Benzo (g,h,i) perylene	1,240
Benzo (k) fluoranthene	1,250
Biphenyl	< 326
Bis (2-chloroethyl) ether	< 326
Bis (2-chloroethoxy) methane	< 326
Bis (2-ethylhexyl) phthalate	< 326
Bis (2-chloroisopropyl) ether	< 326
4-Bromophenyl phenyl ether	< 326
Butylbenzylphthalate	< 326
Caprolactam	< 326
Carbazole	J 164
4-Chloroaniline	< 326
4-Chloro-3-methylphenol	< 326
2-Chloronaphthalene	< 326
2-Chlorophenol	< 326
4-Chlorophenyl phenyl ether	< 326
Chrysene	2,030
1,3-Dichlorobenzene	< 326
1,4-Dichlorobenzene	< 326
1,2-Dichlorobenzene	< 326
Dibenz (a,h) anthracene	358
Dibenzofuran	< 326
3,3'-Dichlorobenzidine	< 326
2,4-Dichlorophenol	< 326
Diethyl phthalate	< 326
2,4-Dimethylphenol	< 326
Dimethyl phthalate	< 815

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 326
4,6-Dinitro-2-methylphenol	< 815
2,4-Dinitrophenol	< 815
2,4-Dinitrotoluene	< 326
2,6-Dinitrotoluene	< 326
Di-n-octylphthalate	< 326
Fluoranthene	5,010
Fluorene	374
Hexachlorobenzene	< 326
Hexachlorobutadiene	< 326
Hexachlorocyclopentadiene	< 326
Hexachloroethane	< 326
Indeno (1,2,3-cd) pyrene	< 326
Isophorone	< 326
2-Methylnaphthalene	< 326
2-Methylphenol	< 326
3&4-Methylphenol	< 326
Naphthalene	< 326
2-Nitroaniline	< 815
3-Nitroaniline	< 815
4-Nitroaniline	< 815
Nitrobenzene	< 326
2-Nitrophenol	< 326
4-Nitrophenol	< 815
N-Nitroso-di-n-propylamine	< 326
N-Nitrosodiphenylamine	< 326
Pentachlorophenol	< 815
Phenanthrene	3,770
Phenol	< 326
Pyrene	4,220
1,2,4-Trichlorobenzene	< 326
2,4,5-Trichlorophenol	< 815
2,4,6-Trichlorophenol	< 326
1,2,4,5-Tetrachlorobenzene	< 326
2,3,4,6-Tetrachlorophenol	< 326

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56684.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature:


Bruce Hoogesteger: Technical Director

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111868S0.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6298

Client Job Number: 2011.0066.00

Field Location: FAM-TP11-D005-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	J 31,100
Acenaphthylene	< 33,100
Acetophenone	< 33,100
Anthracene	63,000
Atrazine	< 33,100
Benzaldehyde	< 33,100
Benzo (a) anthracene	163,000
Benzo (a) pyrene	159,000
Benzo (b) fluoranthene	169,000
Benzo (g,h,i) perylene	117,000
Benzo (k) fluoranthene	127,000
Biphenyl	< 33,100
Bis (2-chloroethyl) ether	< 33,100
Bis (2-chloroethoxy) methane	< 33,100
Bis (2-ethylhexyl) phthalate	< 33,100
Bis (2-chloroisopropyl) ether	< 33,100
4-Bromophenyl phenyl ether	< 33,100
Butylbenzylphthalate	< 33,100
Caprolactam	< 33,100
Carbazole	J 21,700
4-Chloroaniline	< 33,100
4-Chloro-3-methylphenol	< 33,100
2-Chloronaphthalene	< 33,100
2-Chlorophenol	< 33,100
4-Chlorophenyl phenyl ether	< 33,100
Chrysene	173,000
1,3-Dichlorobenzene	< 33,100
1,4-Dichlorobenzene	< 33,100
1,2-Dichlorobenzene	< 33,100
Dibenz (a,h) anthracene	J 27,800
Dibenzofuran	J 18,200
3,3'-Dichlorobenzidine	< 33,100
2,4-Dichlorophenol	< 33,100
Diethyl phthalate	< 33,100
2,4-Dimethylphenol	< 33,100
Dimethyl phthalate	< 82,800

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 33,100
4,6-Dinitro-2-methylphenol	< 82,800
2,4-Dinitrophenol	< 82,800
2,4-Dinitrotoluene	< 33,100
2,6-Dinitrotoluene	< 33,100
Di-n-octylphthalate	< 33,100
Fluoranthene	444,000
Fluorene	36,500
Hexachlorobenzene	< 33,100
Hexachlorobutadiene	< 33,100
Hexachlorocyclopentadiene	< 33,100
Hexachloroethane	< 33,100
Indeno (1,2,3-cd) pyrene	82,600
Isophorone	< 33,100
2-Methylnaphthalene	< 33,100
2-Methylphenol	< 33,100
3&4-Methylphenol	< 33,100
Naphthalene	< 33,100
2-Nitroaniline	< 82,800
3-Nitroaniline	< 82,800
4-Nitroaniline	< 82,800
Nitrobenzene	< 33,100
2-Nitrophenol	< 33,100
4-Nitrophenol	< 82,800
N-Nitroso-di-n-propylamine	< 33,100
N-Nitrosodiphenylamine	< 33,100
Pentachlorophenol	< 82,800
Phenanthrene	365,000
Phenol	< 33,100
Pyrene	382,000
1,2,4-Trichlorobenzene	< 33,100
2,4,5-Trichlorophenol	< 82,800
2,4,6-Trichlorophenol	< 33,100
1,2,4,5-Tetrachlorobenzene	< 33,100
2,3,4,6-Tetrachlorophenol	< 33,100

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56796.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T1.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6299

Client Job Number: 2011.0066.00

Field Location: FAM-TP12-D0515-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	J 255
Acenaphthylene	J 159
Acetophenone	< 306
Anthracene	373
Atrazine	< 306
Benzaldehyde	< 306
Benzo (a) anthracene	1,250
Benzo (a) pyrene	1,410
Benzo (b) fluoranthene	1,510
Benzo (g,h,i) perylene	1,450
Benzo (k) fluoranthene	1,200
Biphenyl	< 306
Bis (2-chloroethyl) ether	< 306
Bis (2-chloroethoxy) methane	< 306
Bis (2-ethylhexyl) phthalate	< 306
Bis (2-chloroisopropyl) ether	< 306
4-Bromophenyl phenyl ether	< 306
Butylbenzylphthalate	< 306
Caprolactam	< 306
Carbazole	< 306
4-Chloroaniline	< 306
4-Chloro-3-methylphenol	< 306
2-Chloronaphthalene	< 306
2-Chlorophenol	< 306
4-Chlorophenyl phenyl ether	< 306
Chrysene	1,440
1,3-Dichlorobenzene	< 306
1,4-Dichlorobenzene	< 306
1,2-Dichlorobenzene	< 306
Dibenz (a,h) anthracene	341
Dibenzofuran	J 171
3,3'-Dichlorobenzidine	< 306
2,4-Dichlorophenol	< 306
Diethyl phthalate	< 306
2,4-Dimethylphenol	< 306
Dimethyl phthalate	< 765

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 306
4,6-Dinitro-2-methylphenol	< 765
2,4-Dinitrophenol	< 765
2,4-Dinitrotoluene	< 306
2,6-Dinitrotoluene	< 306
Di-n-octylphthalate	< 306
Fluoranthene	2,970
Fluorene	J 304
Hexachlorobenzene	< 306
Hexachlorobutadiene	< 306
Hexachlorocyclopentadiene	< 306
Hexachloroethane	< 306
Indeno (1,2,3-cd) pyrene	1,060
Isophorone	< 306
2-Methylnaphthalene	J 294
2-Methylphenol	< 306
3&4-Methylphenol	< 306
Naphthalene	470
2-Nitroaniline	< 765
3-Nitroaniline	< 765
4-Nitroaniline	< 765
Nitrobenzene	< 306
2-Nitrophenol	< 306
4-Nitrophenol	< 765
N-Nitroso-di-n-propylamine	< 306
N-Nitrosodiphenylamine	< 306
Pentachlorophenol	< 765
Phenanthrene	2,120
Phenol	< 306
Pyrene	2,780
1,2,4-Trichlorobenzene	< 306
2,4,5-Trichlorophenol	< 765
2,4,6-Trichlorophenol	< 306
1,2,4,5-Tetrachlorobenzene	< 306
2,3,4,6-Tetrachlorophenol	< 306

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56799.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868T2.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6300

Client Job Number: 2011.0066.00

Field Location: FAM-TP13-D23-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/24/2011

Compound	Results in ug / Kg
Acenaphthene	< 318
Acenaphthylene	< 318
Acetophenone	< 318
Anthracene	< 318
Atrazine	< 318
Benzaldehyde	< 318
Benzo (a) anthracene	< 318
Benzo (a) pyrene	< 318
Benzo (b) fluoranthene	< 318
Benzo (g,h,i) perylene	< 318
Benzo (k) fluoranthene	< 318
Biphenyl	< 318
Bis (2-chloroethyl) ether	< 318
Bis (2-chloroethoxy) methane	< 318
Bis (2-ethylhexyl) phthalate	< 318
Bis (2-chloroisopropyl) ether	< 318
4-Bromophenyl phenyl ether	< 318
Butylbenzylphthalate	< 318
Caprolactam	< 318
Carbazole	< 318
4-Chloroaniline	< 318
4-Chloro-3-methylphenol	< 318
2-Chloronaphthalene	< 318
2-Chlorophenol	< 318
4-Chlorophenyl phenyl ether	< 318
Chrysene	< 318
1,3-Dichlorobenzene	< 318
1,4-Dichlorobenzene	< 318
1,2-Dichlorobenzene	< 318
Dibenz (a,h) anthracene	< 318
Dibenzofuran	< 318
3,3'-Dichlorobenzidine	< 318
2,4-Dichlorophenol	< 318
Diethyl phthalate	< 318
2,4-Dimethylphenol	< 318
Dimethyl phthalate	< 794

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 318
4,6-Dinitro-2-methylphenol	< 794
2,4-Dinitrophenol	< 794
2,4-Dinitrotoluene	< 318
2,6-Dinitrotoluene	< 318
Di-n-octylphthalate	< 318
Fluoranthene	< 318
Fluorene	< 318
Hexachlorobenzene	< 318
Hexachlorobutadiene	< 318
Hexachlorocyclopentadiene	< 318
Hexachloroethane	< 318
Indeno (1,2,3-cd) pyrene	< 318
Isophorone	< 318
2-Methylnaphthalene	< 318
2-Methylphenol	< 318
3&4-Methylphenol	< 318
Naphthalene	< 318
2-Nitroaniline	< 794
3-Nitroaniline	< 794
4-Nitroaniline	< 794
Nitrobenzene	< 318
2-Nitrophenol	< 318
4-Nitrophenol	< 794
N-Nitroso-di-n-propylamine	< 318
N-Nitrosodiphenylamine	< 318
Pentachlorophenol	< 794
Phenanthrene	< 318
Phenol	< 318
Pyrene	< 318
1,2,4-Trichlorobenzene	< 318
2,4,5-Trichlorophenol	< 794
2,4,6-Trichlorophenol	< 318
1,2,4,5-Tetrachlorobenzene	< 318
2,3,4,6-Tetrachlorophenol	< 318

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56689.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T3.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6301

Client Job Number: 2011.0066.00

Field Location: FAM-TP14-D2-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	< 325
Acenaphthylene	< 325
Acetophenone	< 325
Anthracene	< 325
Atrazine	< 325
Benzaldehyde	< 325
Benzo (a) anthracene	< 325
Benzo (a) pyrene	< 325
Benzo (b) fluoranthene	< 325
Benzo (g,h,i) perylene	< 325
Benzo (k) fluoranthene	< 325
Biphenyl	< 325
Bis (2-chloroethyl) ether	< 325
Bis (2-chloroethoxy) methane	< 325
Bis (2-ethylhexyl) phthalate	< 325
Bis (2-chloroisopropyl) ether	< 325
4-Bromophenyl phenyl ether	< 325
Butylbenzylphthalate	< 325
Caprolactam	< 325
Carbazole	< 325
4-Chloroaniline	< 325
4-Chloro-3-methylphenol	< 325
2-Chloronaphthalene	< 325
2-Chlorophenol	< 325
4-Chlorophenyl phenyl ether	< 325
Chrysene	< 325
1,3-Dichlorobenzene	< 325
1,4-Dichlorobenzene	< 325
1,2-Dichlorobenzene	< 325
Dibenz (a,h) anthracene	< 325
Dibenzofuran	< 325
3,3'-Dichlorobenzidine	< 325
2,4-Dichlorophenol	< 325
Diethyl phthalate	< 325
2,4-Dimethylphenol	< 325
Dimethyl phthalate	< 812

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 325
4,6-Dinitro-2-methylphenol	< 812
2,4-Dinitrophenol	< 812
2,4-Dinitrotoluene	< 325
2,6-Dinitrotoluene	< 325
Di-n-octylphthalate	< 325
Fluoranthene	J 173
Fluorene	< 325
Hexachlorobenzene	< 325
Hexachlorobutadiene	< 325
Hexachlorocyclopentadiene	< 325
Hexachloroethane	< 325
Indeno (1,2,3-cd) pyrene	< 325
Isophorone	< 325
2-Methylnaphthalene	< 325
2-Methylphenol	< 325
3&4-Methylphenol	< 325
Naphthalene	< 325
2-Nitroaniline	< 812
3-Nitroaniline	< 812
4-Nitroaniline	< 812
Nitrobenzene	< 325
2-Nitrophenol	< 325
4-Nitrophenol	< 812
N-Nitroso-di-n-propylamine	< 325
N-Nitrosodiphenylamine	< 325
Pentachlorophenol	< 812
Phenanthrene	< 325
Phenol	< 325
Pyrene	< 325
1,2,4-Trichlorobenzene	< 325
2,4,5-Trichlorophenol	< 812
2,4,6-Trichlorophenol	< 325
1,2,4,5-Tetrachlorobenzene	< 325
2,3,4,6-Tetrachlorophenol	< 325

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56800.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T4.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Client Job Number: 2011.0066.00

Lab Sample Number: 6302

Field Location: FAM-TPDUP

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/27/2011

Compound	Results in ug / Kg
Acenaphthene	< 317
Acenaphthylene	< 317
Acetophenone	< 317
Anthracene	< 317
Atrazine	< 317
Benzaldehyde	< 317
Benzo (a) anthracene	< 317
Benzo (a) pyrene	< 317
Benzo (b) fluoranthene	< 317
Benzo (g,h,i) perylene	< 317
Benzo (k) fluoranthene	< 317
Biphenyl	< 317
Bis (2-chloroethyl) ether	< 317
Bis (2-chloroethoxy) methane	< 317
Bis (2-ethylhexyl) phthalate	< 317
Bis (2-chloroisopropyl) ether	< 317
4-Bromophenyl phenyl ether	< 317
Butylbenzylphthalate	< 317
Caprolactam	< 317
Carbazole	< 317
4-Chloroaniline	< 317
4-Chloro-3-methylphenol	< 317
2-Chloronaphthalene	< 317
2-Chlorophenol	< 317
4-Chlorophenyl phenyl ether	< 317
Chrysene	< 317
1,3-Dichlorobenzene	< 317
1,4-Dichlorobenzene	< 317
1,2-Dichlorobenzene	< 317
Dibenz (a,h) anthracene	< 317
Dibenzofuran	< 317
3,3'-Dichlorobenzidine	< 317
2,4-Dichlorophenol	< 317
Diethyl phthalate	< 317
2,4-Dimethylphenol	< 317
Dimethyl phthalate	< 792

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 317
4,6-Dinitro-2-methylphenol	< 792
2,4-Dinitrophenol	< 792
2,4-Dinitrotoluene	< 317
2,6-Dinitrotoluene	< 317
Di-n-octylphthalate	< 317
Fluoranthene	J 204
Fluorene	< 317
Hexachlorobenzene	< 317
Hexachlorobutadiene	< 317
Hexachlorocyclopentadiene	< 317
Hexachloroethane	< 317
Indeno (1,2,3-cd) pyrene	< 317
Isophorone	< 317
2-Methylnaphthalene	< 317
2-Methylphenol	< 317
3&4-Methylphenol	< 317
Naphthalene	< 317
2-Nitroaniline	< 792
3-Nitroaniline	< 792
4-Nitroaniline	< 792
Nitrobenzene	< 317
2-Nitrophenol	< 317
4-Nitrophenol	< 792
N-Nitroso-di-n-propylamine	< 317
N-Nitrosodiphenylamine	< 317
Pentachlorophenol	< 792
Phenanthrene	< 317
Phenol	< 317
Pyrene	J 203
1,2,4-Trichlorobenzene	< 317
2,4,5-Trichlorophenol	< 792
2,4,6-Trichlorophenol	< 317
1,2,4,5-Tetrachlorobenzene	< 317
2,3,4,6-Tetrachlorophenol	< 317

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56801.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T5.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6303

Client Job Number: 2011.0066.00

Field Location: FAM-TP15-D005-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	J 8,960
Acenaphthylene	< 14,600
Acetophenone	< 14,600
Anthracene	18,800
Atrazine	< 14,600
Benzaldehyde	< 14,600
Benzo (a) anthracene	43,800
Benzo (a) pyrene	39,400
Benzo (b) fluoranthene	43,700
Benzo (g,h,i) perylene	27,700
Benzo (k) fluoranthene	30,400
Biphenyl	< 14,600
Bis (2-chloroethyl) ether	< 14,600
Bis (2-chloroethoxy) methane	< 14,600
Bis (2-ethylhexyl) phthalate	< 14,600
Bis (2-chloroisopropyl) ether	< 14,600
4-Bromophenyl phenyl ether	< 14,600
Butylbenzylphthalate	< 14,600
Caprolactam	< 14,600
Carbazole	< 14,600
4-Chloroaniline	< 14,600
4-Chloro-3-methylphenol	< 14,600
2-Chloronaphthalene	< 14,600
2-Chlorophenol	< 14,600
4-Chlorophenyl phenyl ether	< 14,600
Chrysene	46,400
1,3-Dichlorobenzene	< 14,600
1,4-Dichlorobenzene	< 14,600
1,2-Dichlorobenzene	< 14,600
Dibenz (a,h) anthracene	< 14,600
Dibenzofuran	< 14,600
3,3'-Dichlorobenzidine	< 14,600
2,4-Dichlorophenol	< 14,600
Diethyl phthalate	< 14,600
2,4-Dimethylphenol	< 14,600
Dimethyl phthalate	< 36,600

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 14,600
4,6-Dinitro-2-methylphenol	< 36,600
2,4-Dinitrophenol	< 36,600
2,4-Dinitrotoluene	< 14,600
2,6-Dinitrotoluene	< 14,600
Di-n-octylphthalate	< 14,600
Fluoranthene	113,000
Fluorene	J 9,980
Hexachlorobenzene	< 14,600
Hexachlorobutadiene	< 14,600
Hexachlorocyclopentadiene	< 14,600
Hexachloroethane	< 14,600
Indeno (1,2,3-cd) pyrene	25,700
Isophorone	< 14,600
2-Methylnaphthalene	< 14,600
2-Methylphenol	< 14,600
3&4-Methylphenol	< 14,600
Naphthalene	< 14,600
2-Nitroaniline	< 36,600
3-Nitroaniline	< 36,600
4-Nitroaniline	< 36,600
Nitrobenzene	< 14,600
2-Nitrophenol	< 14,600
4-Nitrophenol	< 36,600
N-Nitroso-di-n-propylamine	< 14,600
N-Nitrosodiphenylamine	< 14,600
Pentachlorophenol	< 36,600
Phenanthrene	86,600
Phenol	< 14,600
Pyrene	97,800
1,2,4-Trichlorobenzene	< 14,600
2,4,5-Trichlorophenol	< 36,600
2,4,6-Trichlorophenol	< 14,600
1,2,4,5-Tetrachlorobenzene	< 14,600
2,3,4,6-Tetrachlorophenol	< 14,600

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56802.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868T6.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6304

Client Job Number: 2011.0066.00

Field Location: FAM-TP16-D115-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 307
Acenaphthylene	< 307
Acetophenone	< 307
Anthracene	< 307
Atrazine	< 307
Benzaldehyde	< 307
Benzo (a) anthracene	< 307
Benzo (a) pyrene	< 307
Benzo (b) fluoranthene	< 307
Benzo (g,h,i) perylene	< 307
Benzo (k) fluoranthene	< 307
Biphenyl	< 307
Bis (2-chloroethyl) ether	< 307
Bis (2-chloroethoxy) methane	< 307
Bis (2-ethylhexyl) phthalate	< 307
Bis (2-chloroisopropyl) ether	< 307
4-Bromophenyl phenyl ether	< 307
Butylbenzylphthalate	< 307
Caprolactam	< 307
Carbazole	< 307
4-Chloroaniline	< 307
4-Chloro-3-methylphenol	< 307
2-Chloronaphthalene	< 307
2-Chlorophenol	< 307
4-Chlorophenyl phenyl ether	< 307
Chrysene	< 307
1,3-Dichlorobenzene	< 307
1,4-Dichlorobenzene	< 307
1,2-Dichlorobenzene	< 307
Dibenz (a,h) anthracene	< 307
Dibenzofuran	< 307
3,3'-Dichlorobenzidine	< 307
2,4-Dichlorophenol	< 307
Diethyl phthalate	< 307
2,4-Dimethylphenol	< 307
Dimethyl phthalate	< 768

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 307
4,6-Dinitro-2-methylphenol	< 768
2,4-Dinitrophenol	< 768
2,4-Dinitrotoluene	< 307
2,6-Dinitrotoluene	< 307
Di-n-octylphthalate	324
Fluoranthene	< 307
Fluorene	< 307
Hexachlorobenzene	< 307
Hexachlorobutadiene	< 307
Hexachlorocyclopentadiene	< 307
Hexachloroethane	< 307
Indeno (1,2,3-cd) pyrene	< 307
Isophorone	< 307
2-Methylnaphthalene	< 307
2-Methylphenol	< 307
3&4-Methylphenol	< 307
Naphthalene	< 307
2-Nitroaniline	< 768
3-Nitroaniline	< 768
4-Nitroaniline	< 768
Nitrobenzene	< 307
2-Nitrophenol	< 307
4-Nitrophenol	< 768
N-Nitroso-di-n-propylamine	< 307
N-Nitrosodiphenylamine	< 307
Pentachlorophenol	< 768
Phenanthrene	< 307
Phenol	< 307
Pyrene	< 307
1,2,4-Trichlorobenzene	< 307
2,4,5-Trichlorophenol	< 768
2,4,6-Trichlorophenol	< 307
1,2,4,5-Tetrachlorobenzene	< 307
2,3,4,6-Tetrachlorophenol	< 307

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56803.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T7.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6305

Client Job Number: 2011.0066.00

Field Location: FAM-TP17-D3-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 378
Acenaphthylene	< 378
Acetophenone	< 378
Anthracene	< 378
Atrazine	< 378
Benzaldehyde	< 378
Benzo (a) anthracene	< 378
Benzo (a) pyrene	< 378
Benzo (b) fluoranthene	< 378
Benzo (g,h,i) perylene	< 378
Benzo (k) fluoranthene	< 378
Biphenyl	< 378
Bis (2-chloroethyl) ether	< 378
Bis (2-chloroethoxy) methane	< 378
Bis (2-ethylhexyl) phthalate	< 378
Bis (2-chloroisopropyl) ether	< 378
4-Bromophenyl phenyl ether	< 378
Butylbenzylphthalate	< 378
Caprolactam	< 378
Carbazole	< 378
4-Chloroaniline	< 378
4-Chloro-3-methylphenol	< 378
2-Chloronaphthalene	< 378
2-Chlorophenol	< 378
4-Chlorophenyl phenyl ether	< 378
Chrysene	< 378
1,3-Dichlorobenzene	< 378
1,4-Dichlorobenzene	< 378
1,2-Dichlorobenzene	< 378
Dibenz (a,h) anthracene	< 378
Dibenzofuran	< 378
3,3'-Dichlorobenzidine	< 378
2,4-Dichlorophenol	< 378
Diethyl phthalate	< 378
2,4-Dimethylphenol	< 378
Dimethyl phthalate	< 944

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 378
4,6-Dinitro-2-methylphenol	< 944
2,4-Dinitrophenol	< 944
2,4-Dinitrotoluene	< 378
2,6-Dinitrotoluene	< 378
Di-n-octylphthalate	< 378
Fluoranthene	J 253
Fluorene	< 378
Hexachlorobenzene	< 378
Hexachlorobutadiene	< 378
Hexachlorocyclopentadiene	< 378
Hexachloroethane	< 378
Indeno (1,2,3-cd) pyrene	< 378
Isophorone	< 378
2-Methylnaphthalene	< 378
2-Methylphenol	< 378
3&4-Methylphenol	< 378
Naphthalene	< 378
2-Nitroaniline	< 944
3-Nitroaniline	< 944
4-Nitroaniline	< 944
Nitrobenzene	< 378
2-Nitrophenol	< 378
4-Nitrophenol	< 944
N-Nitroso-di-n-propylamine	< 378
N-Nitrosodiphenylamine	< 378
Pentachlorophenol	< 944
Phenanthrene	J 202
Phenol	< 378
Pyrene	J 245
1,2,4-Trichlorobenzene	< 378
2,4,5-Trichlorophenol	< 944
2,4,6-Trichlorophenol	< 378
1,2,4,5-Tetrachlorobenzene	< 378
2,3,4,6-Tetrachlorophenol	< 378

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56804.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868T8.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6306**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP1-D7-S-O**Date Sampled:** 05/10/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 317
Acenaphthylene	< 317
Acetophenone	< 317
Anthracene	< 317
Atrazine	< 317
Benzaldehyde	< 317
Benzo (a) anthracene	< 317
Benzo (a) pyrene	< 317
Benzo (b) fluoranthene	< 317
Benzo (g,h,i) perylene	< 317
Benzo (k) fluoranthene	< 317
Biphenyl	< 317
Bis (2-chloroethyl) ether	< 317
Bis (2-chloroethoxy) methane	< 317
Bis (2-ethylhexyl) phthalate	< 317
Bis (2-chloroisopropyl) ether	< 317
4-Bromophenyl phenyl ether	< 317
Butylbenzylphthalate	< 317
Caprolactam	< 317
Carbazole	< 317
4-Chloroaniline	< 317
4-Chloro-3-methylphenol	< 317
2-Chloronaphthalene	< 317
2-Chlorophenol	< 317
4-Chlorophenyl phenyl ether	< 317
Chrysene	< 317
1,3-Dichlorobenzene	< 317
1,4-Dichlorobenzene	< 317
1,2-Dichlorobenzene	< 317
Dibenz (a,h) anthracene	< 317
Dibenzofuran	< 317
3,3'-Dichlorobenzidine	< 317
2,4-Dichlorophenol	< 317
Diethyl phthalate	< 317
2,4-Dimethylphenol	< 317
Dimethyl phthalate	< 794

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 317
4,6-Dinitro-2-methylphenol	< 794
2,4-Dinitrophenol	< 794
2,4-Dinitrotoluene	< 317
2,6-Dinitrotoluene	< 317
Di-n-octylphthalate	< 317
Fluoranthene	< 317
Fluorene	< 317
Hexachlorobenzene	< 317
Hexachlorobutadiene	< 317
Hexachlorocyclopentadiene	< 317
Hexachloroethane	< 317
Indeno (1,2,3-cd) pyrene	< 317
Isophorone	< 317
2-Methylnaphthalene	< 317
2-Methylphenol	< 317
3&4-Methylphenol	< 317
Naphthalene	< 317
2-Nitroaniline	< 794
3-Nitroaniline	< 794
4-Nitroaniline	< 794
Nitrobenzene	< 317
2-Nitrophenol	< 317
4-Nitrophenol	< 794
N-Nitroso-di-n-propylamine	< 317
N-Nitrosodiphenylamine	< 317
Pentachlorophenol	< 794
Phenanthrene	< 317
Phenol	< 317
Pyrene	< 317
1,2,4-Trichlorobenzene	< 317
2,4,5-Trichlorophenol	< 794
2,4,6-Trichlorophenol	< 317
1,2,4,5-Tetrachlorobenzene	< 317
2,3,4,6-Tetrachlorophenol	< 317

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56805.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868T9.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6307

Client Job Number: 2011.0066.00

Field Location: FAM-SP2-D4-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 329
Acenaphthylene	< 329
Acetophenone	< 329
Anthracene	< 329
Atrazine	< 329
Benzaldehyde	< 329
Benzo (a) anthracene	< 329
Benzo (a) pyrene	< 329
Benzo (b) fluoranthene	< 329
Benzo (g,h,i) perylene	< 329
Benzo (k) fluoranthene	< 329
Biphenyl	< 329
Bis (2-chloroethyl) ether	< 329
Bis (2-chloroethoxy) methane	< 329
Bis (2-ethylhexyl) phthalate	< 329
Bis (2-chloroisopropyl) ether	< 329
4-Bromophenyl phenyl ether	< 329
Butylbenzylphthalate	< 329
Caprolactam	< 329
Carbazole	< 329
4-Chloroaniline	< 329
4-Chloro-3-methylphenol	< 329
2-Chloronaphthalene	< 329
2-Chlorophenol	< 329
4-Chlorophenyl phenyl ether	< 329
Chrysene	< 329
1,3-Dichlorobenzene	< 329
1,4-Dichlorobenzene	< 329
1,2-Dichlorobenzene	< 329
Dibenz (a,h) anthracene	< 329
Dibenzofuran	< 329
3,3'-Dichlorobenzidine	< 329
2,4-Dichlorophenol	< 329
Diethyl phthalate	< 329
2,4-Dimethylphenol	< 329
Dimethyl phthalate	< 822

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 329
4,6-Dinitro-2-methylphenol	< 822
2,4-Dinitrophenol	< 822
2,4-Dinitrotoluene	< 329
2,6-Dinitrotoluene	< 329
Di-n-octylphthalate	< 329
Fluoranthene	< 329
Fluorene	< 329
Hexachlorobenzene	< 329
Hexachlorobutadiene	< 329
Hexachlorocyclopentadiene	< 329
Hexachloroethane	< 329
Indeno (1,2,3-cd) pyrene	< 329
Isophorone	< 329
2-Methylnaphthalene	< 329
2-Methylphenol	< 329
3&4-Methylphenol	< 329
Naphthalene	< 329
2-Nitroaniline	< 822
3-Nitroaniline	< 822
4-Nitroaniline	< 822
Nitrobenzene	< 329
2-Nitrophenol	< 329
4-Nitrophenol	< 822
N-Nitroso-di-n-propylamine	< 329
N-Nitrosodiphenylamine	< 329
Pentachlorophenol	< 822
Phenanthrene	< 329
Phenol	< 329
Pyrene	< 329
1,2,4-Trichlorobenzene	< 329
2,4,5-Trichlorophenol	< 822
2,4,6-Trichlorophenol	< 329
1,2,4,5-Tetrachlorobenzene	< 329
2,3,4,6-Tetrachlorophenol	< 329

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56806.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868T0.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6288**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP1-D67-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	27.3
Benzene	< 4.59
Bromochloromethane	< 11.5
Bromodichloromethane	< 4.59
Bromoform	< 11.5
Bromomethane	< 4.59
2-Butanone	65.3
Carbon disulfide	< 4.59
Carbon Tetrachloride	< 4.59
Chlorobenzene	< 4.59
Chloroethane	< 4.59
Chloroform	< 4.59
Chloromethane	< 4.59
Cyclohexane	< 22.9
Dibromochloromethane	< 4.59
1,2-Dibromo-3-Chloropropane	< 22.9
1,2-Dibromoethane	< 4.59
1,2-Dichlorobenzene	< 4.59
1,3-Dichlorobenzene	< 4.59
1,4-Dichlorobenzene	< 4.59
Dichlorodifluoromethane	< 4.59
1,1-Dichloroethane	< 4.59
1,2-Dichloroethane	< 4.59
1,1-Dichloroethene	< 4.59
cis-1,2-Dichloroethene	< 4.59
trans-1,2-Dichloroethene	< 4.59

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.59
cis-1,3-Dichloropropene	< 4.59
trans-1,3-Dichloropropene	< 4.59
Ethylbenzene	< 4.59
Freon 113	< 4.59
2-Hexanone	< 11.5
Isopropylbenzene	< 4.59
Methyl acetate	< 4.59
Methyl tert-butyl Ether	< 4.59
Methylcyclohexane	< 4.59
Methylene chloride	< 11.5
4-Methyl-2-pentanone	< 11.5
Styrene	< 11.5
1,1,2,2-Tetrachloroethane	< 4.59
Tetrachloroethene	< 4.59
Toluene	< 4.59
1,2,3-Trichlorobenzene	< 11.5
1,2,4-Trichlorobenzene	< 11.5
1,1,1-Trichloroethane	< 4.59
1,1,2-Trichloroethane	< 4.59
Trichloroethene	< 4.59
Trichlorofluoromethane	< 4.59
Vinyl chloride	< 4.59
m,p-Xylene	< 4.59
o-Xylene	< 4.59

ELAP Number 10958

Method: EPA 8260B

Data File: V84709.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868V1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6289

Client Job Number: 2011.0066.00

Field Location: FAM-TP2-D23-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/17/2011

Compound	Results in ug / Kg
Acetone	132
Benzene	< 4.42
Bromochloromethane	< 11.1
Bromodichloromethane	< 4.42
Bromoform	< 11.1
Bromomethane	< 4.42
2-Butanone	157
Carbon disulfide	< 4.42
Carbon Tetrachloride	< 4.42
Chlorobenzene	< 4.42
Chloroethane	< 4.42
Chloroform	< 4.42
Chloromethane	< 4.42
Cyclohexane	< 22.1
Dibromochloromethane	< 4.42
1,2-Dibromo-3-Chloropropane	< 22.1
1,2-Dibromoethane	< 4.42
1,2-Dichlorobenzene	< 4.42
1,3-Dichlorobenzene	< 4.42
1,4-Dichlorobenzene	< 4.42
Dichlorodifluoromethane	< 4.42
1,1-Dichloroethane	< 4.42
1,2-Dichloroethane	< 4.42
1,1-Dichloroethene	< 4.42
cis-1,2-Dichloroethene	< 4.42
trans-1,2-Dichloroethene	< 4.42

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.42
cis-1,3-Dichloropropene	< 4.42
trans-1,3-Dichloropropene	< 4.42
Ethylbenzene	< 4.42
Freon 113	< 4.42
2-Hexanone	< 11.1
Isopropylbenzene	< 4.42
Methyl acetate	< 4.42
Methyl tert-butyl Ether	< 4.42
Methylcyclohexane	< 4.42
Methylene chloride	J 7.72
4-Methyl-2-pentanone	< 11.1
Styrene	< 11.1
1,1,2,2-Tetrachloroethane	< 4.42
Tetrachloroethene	< 4.42
Toluene	< 4.42
1,2,3-Trichlorobenzene	< 11.1
1,2,4-Trichlorobenzene	< 11.1
1,1,1-Trichloroethane	< 4.42
1,1,2-Trichloroethane	< 4.42
Trichloroethene	< 4.42
Trichlorofluoromethane	< 4.42
Vinyl chloride	< 4.42
m,p-Xylene	< 4.42
o-Xylene	< 4.42

ELAP Number 10958

Method: EPA 8260B

Data File: V84710.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868V2.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6290

Client Job Number: 2011.0066.00

Field Location: FAM-TP3-D45-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	671
Benzene	< 14.2
Bromochloromethane	< 35.4
Bromodichloromethane	< 14.2
Bromoform	< 35.4
Bromomethane	< 14.2
2-Butanone	321
Carbon disulfide	< 14.2
Carbon Tetrachloride	< 14.2
Chlorobenzene	< 14.2
Chloroethane	< 14.2
Chloroform	< 14.2
Chloromethane	< 14.2
Cyclohexane	< 70.8
Dibromochloromethane	< 14.2
1,2-Dibromo-3-Chloropropane	< 70.8
1,2-Dibromoethane	< 14.2
1,2-Dichlorobenzene	< 14.2
1,3-Dichlorobenzene	< 14.2
1,4-Dichlorobenzene	< 14.2
Dichlorodifluoromethane	< 14.2
1,1-Dichloroethane	< 14.2
1,2-Dichloroethane	< 14.2
1,1-Dichloroethene	< 14.2
cis-1,2-Dichloroethene	< 14.2
trans-1,2-Dichloroethene	< 14.2

Compound	Results in ug / Kg
1,2-Dichloropropane	< 14.2
cis-1,3-Dichloropropene	< 14.2
trans-1,3-Dichloropropene	< 14.2
Ethylbenzene	< 14.2
Freon 113	< 14.2
2-Hexanone	< 35.4
Isopropylbenzene	< 14.2
Methyl acetate	< 14.2
Methyl tert-butyl Ether	< 14.2
Methylcyclohexane	< 14.2
Methylene chloride	51.6
4-Methyl-2-pentanone	< 35.4
Styrene	< 35.4
1,1,2,2-Tetrachloroethane	< 14.2
Tetrachloroethene	< 14.2
Toluene	< 14.2
1,2,3-Trichlorobenzene	< 35.4
1,2,4-Trichlorobenzene	< 35.4
1,1,1-Trichloroethane	< 14.2
1,1,2-Trichloroethane	< 14.2
Trichloroethene	< 14.2
Trichlorofluoromethane	< 14.2
Vinyl chloride	< 14.2
m,p-Xylene	< 14.2
o-Xylene	< 14.2

ELAP Number 10958

Method: EPA 8260B

Data File: V84749.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868V3.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6291**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP4-D13-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	31.4
Benzene	< 4.41
Bromochloromethane	< 11.0
Bromodichloromethane	< 4.41
Bromoform	< 11.0
Bromomethane	< 4.41
2-Butanone	62.0
Carbon disulfide	< 4.41
Carbon Tetrachloride	< 4.41
Chlorobenzene	< 4.41
Chloroethane	< 4.41
Chloroform	< 4.41
Chloromethane	< 4.41
Cyclohexane	< 22.0
Dibromochloromethane	< 4.41
1,2-Dibromo-3-Chloropropane	< 22.0
1,2-Dibromoethane	< 4.41
1,2-Dichlorobenzene	< 4.41
1,3-Dichlorobenzene	< 4.41
1,4-Dichlorobenzene	< 4.41
Dichlorodifluoromethane	< 4.41
1,1-Dichloroethane	< 4.41
1,2-Dichloroethane	< 4.41
1,1-Dichloroethene	< 4.41
cis-1,2-Dichloroethene	< 4.41
trans-1,2-Dichloroethene	< 4.41

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.41
cis-1,3-Dichloropropene	< 4.41
trans-1,3-Dichloropropene	< 4.41
Ethylbenzene	< 4.41
Freon 113	< 4.41
2-Hexanone	< 11.0
Isopropylbenzene	< 4.41
Methyl acetate	< 4.41
Methyl tert-butyl Ether	< 4.41
Methylcyclohexane	< 4.41
Methylene chloride	17.5
4-Methyl-2-pentanone	< 11.0
Styrene	< 11.0
1,1,2,2-Tetrachloroethane	< 4.41
Tetrachloroethene	< 4.41
Toluene	< 4.41
1,2,3-Trichlorobenzene	< 11.0
1,2,4-Trichlorobenzene	< 11.0
1,1,1-Trichloroethane	< 4.41
1,1,2-Trichloroethane	< 4.41
Trichloroethene	43.1
Trichlorofluoromethane	< 4.41
Vinyl chloride	< 4.41
m,p-Xylene	< 4.41
o-Xylene	< 4.41

ELAP Number 10958

Method: EPA 8260B

Data File: V84712.D

Comments: ug / Kg = microgram per Kilogram

Internal Standard and Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

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111868V4.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6292**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP5-D1011-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	< 20.9
Benzene	< 4.17
Bromochloromethane	< 10.4
Bromodichloromethane	< 4.17
Bromoform	< 10.4
Bromomethane	< 4.17
2-Butanone	< 20.9
Carbon disulfide	< 4.17
Carbon Tetrachloride	< 4.17
Chlorobenzene	< 4.17
Chloroethane	< 4.17
Chloroform	< 4.17
Chloromethane	< 4.17
Cyclohexane	< 20.9
Dibromochloromethane	< 4.17
1,2-Dibromo-3-Chloropropane	< 20.9
1,2-Dibromoethane	< 4.17
1,2-Dichlorobenzene	< 4.17
1,3-Dichlorobenzene	< 4.17
1,4-Dichlorobenzene	< 4.17
Dichlorodifluoromethane	< 4.17
1,1-Dichloroethane	< 4.17
1,2-Dichloroethane	< 4.17
1,1-Dichloroethene	< 4.17
cis-1,2-Dichloroethene	< 4.17
trans-1,2-Dichloroethene	< 4.17

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.17
cis-1,3-Dichloropropene	< 4.17
trans-1,3-Dichloropropene	< 4.17
Ethylbenzene	< 4.17
Freon 113	< 4.17
2-Hexanone	< 10.4
Isopropylbenzene	< 4.17
Methyl acetate	< 4.17
Methyl tert-butyl Ether	< 4.17
Methylcyclohexane	< 4.17
Methylene chloride	< 10.4
4-Methyl-2-pentanone	< 10.4
Styrene	< 10.4
1,1,2,2-Tetrachloroethane	< 4.17
Tetrachloroethene	< 4.17
Toluene	< 4.17
1,2,3-Trichlorobenzene	< 10.4
1,2,4-Trichlorobenzene	< 10.4
1,1,1-Trichloroethane	< 4.17
1,1,2-Trichloroethane	< 4.17
Trichloroethene	< 4.17
Trichlorofluoromethane	< 4.17
Vinyl chloride	< 4.17
m,p-Xylene	< 4.17
o-Xylene	< 4.17

ELAP Number 10958

Method: EPA 8260B

Data File: V84713.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868V5.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6293

Client Job Number: 2011.0066.00

Field Location: FAM-TP6-D67-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/17/2011

Compound	Results in ug / Kg
Acetone	28.1
Benzene	< 4.57
Bromochloromethane	< 11.4
Bromodichloromethane	< 4.57
Bromoform	< 11.4
Bromomethane	< 4.57
2-Butanone	27.8
Carbon disulfide	< 4.57
Carbon Tetrachloride	< 4.57
Chlorobenzene	< 4.57
Chloroethane	< 4.57
Chloroform	< 4.57
Chloromethane	< 4.57
Cyclohexane	< 22.9
Dibromochloromethane	< 4.57
1,2-Dibromo-3-Chloropropane	< 22.9
1,2-Dibromoethane	< 4.57
1,2-Dichlorobenzene	< 4.57
1,3-Dichlorobenzene	< 4.57
1,4-Dichlorobenzene	< 4.57
Dichlorodifluoromethane	< 4.57
1,1-Dichloroethane	< 4.57
1,2-Dichloroethane	< 4.57
1,1-Dichloroethene	< 4.57
cis-1,2-Dichloroethene	< 4.57
trans-1,2-Dichloroethene	< 4.57

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.57
cis-1,3-Dichloropropene	< 4.57
trans-1,3-Dichloropropene	< 4.57
Ethylbenzene	< 4.57
Freon 113	< 4.57
2-Hexanone	< 11.4
Isopropylbenzene	5.56
Methyl acetate	< 4.57
Methyl tert-butyl Ether	< 4.57
Methylcyclohexane	46.9
Methylene chloride	< 11.4
4-Methyl-2-pentanone	< 11.4
Styrene	< 11.4
1,1,2,2-Tetrachloroethane	< 4.57
Tetrachloroethene	< 4.57
Toluene	< 4.57
1,2,3-Trichlorobenzene	< 11.4
1,2,4-Trichlorobenzene	< 11.4
1,1,1-Trichloroethane	< 4.57
1,1,2-Trichloroethane	< 4.57
Trichloroethene	< 4.57
Trichlorofluoromethane	< 4.57
Vinyl chloride	< 4.57
m,p-Xylene	< 4.57
o-Xylene	< 4.57

ELAP Number 10958

Method: EPA 8260B

Data File: V84714.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868V6.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6294**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP7-D67-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	291
Benzene	< 48.3
Bromochloromethane	< 121
Bromodichloromethane	< 48.3
Bromoform	< 121
Bromomethane	< 48.3
2-Butanone	< 242
Carbon disulfide	< 48.3
Carbon Tetrachloride	< 48.3
Chlorobenzene	< 48.3
Chloroethane	< 48.3
Chloroform	< 48.3
Chloromethane	< 48.3
Cyclohexane	< 242
Dibromochloromethane	< 48.3
1,2-Dibromo-3-Chloropropane	< 242
1,2-Dibromoethane	< 48.3
1,2-Dichlorobenzene	< 48.3
1,3-Dichlorobenzene	< 48.3
1,4-Dichlorobenzene	< 48.3
Dichlorodifluoromethane	< 48.3
1,1-Dichloroethane	< 48.3
1,2-Dichloroethane	< 48.3
1,1-Dichloroethene	< 48.3
cis-1,2-Dichloroethene	< 48.3
trans-1,2-Dichloroethene	< 48.3

Compound	Results in ug / Kg
1,2-Dichloropropane	< 48.3
cis-1,3-Dichloropropene	< 48.3
trans-1,3-Dichloropropene	< 48.3
Ethylbenzene	< 48.3
Freon 113	< 48.3
2-Hexanone	< 121
Isopropylbenzene	147
Methyl acetate	< 48.3
Methyl tert-butyl Ether	< 48.3
Methylcyclohexane	473
Methylene chloride	< 121
4-Methyl-2-pentanone	< 121
Styrene	< 121
1,1,2,2-Tetrachloroethane	< 48.3
Tetrachloroethene	< 48.3
Toluene	< 48.3
1,2,3-Trichlorobenzene	< 121
1,2,4-Trichlorobenzene	< 121
1,1,1-Trichloroethane	< 48.3
1,1,2-Trichloroethane	< 48.3
Trichloroethene	< 48.3
Trichlorofluoromethane	< 48.3
Vinyl chloride	< 48.3
m,p-Xylene	< 48.3
o-Xylene	< 48.3

ELAP Number 10958

Method: EPA 8260B

Data File: V84715.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868V7.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6295

Client Job Number: 2011.0066.00

Field Location: FAM-TP8-D01-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/17/2011

Compound	Results in ug / Kg
Acetone	34.3
Benzene	< 4.05
Bromochloromethane	< 10.1
Bromodichloromethane	< 4.05
Bromoform	< 10.1
Bromomethane	< 4.05
2-Butanone	198
Carbon disulfide	< 4.05
Carbon Tetrachloride	< 4.05
Chlorobenzene	< 4.05
Chloroethane	< 4.05
Chloroform	< 4.05
Chloromethane	< 4.05
Cyclohexane	< 20.3
Dibromochloromethane	< 4.05
1,2-Dibromo-3-Chloropropane	< 20.3
1,2-Dibromoethane	< 4.05
1,2-Dichlorobenzene	< 4.05
1,3-Dichlorobenzene	< 4.05
1,4-Dichlorobenzene	< 4.05
Dichlorodifluoromethane	< 4.05
1,1-Dichloroethane	< 4.05
1,2-Dichloroethane	< 4.05
1,1-Dichloroethene	< 4.05
cis-1,2-Dichloroethene	< 4.05
trans-1,2-Dichloroethene	< 4.05

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.05
cis-1,3-Dichloropropene	< 4.05
trans-1,3-Dichloropropene	< 4.05
Ethylbenzene	< 4.05
Freon 113	< 4.05
2-Hexanone	< 10.1
Isopropylbenzene	< 4.05
Methyl acetate	< 4.05
Methyl tert-butyl Ether	< 4.05
Methylcyclohexane	< 4.05
Methylene chloride	12.6
4-Methyl-2-pentanone	< 10.1
Styrene	< 10.1
1,1,2,2-Tetrachloroethane	< 4.05
Tetrachloroethene	< 4.05
Toluene	< 4.05
1,2,3-Trichlorobenzene	< 10.1
1,2,4-Trichlorobenzene	< 10.1
1,1,1-Trichloroethane	< 4.05
1,1,2-Trichloroethane	< 4.05
Trichloroethene	< 4.05
Trichlorofluoromethane	< 4.05
Vinyl chloride	< 4.05
m,p-Xylene	< 4.05
o-Xylene	< 4.05

ELAP Number 10958

Method: EPA 8260B

Data File: V84716.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868V8.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6296

Client Job Number: 2011.0066.00

Field Location: FAM-TP9-D005-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/17/2011

Compound	Results in ug / Kg
Acetone	< 17.6
Benzene	< 3.53
Bromochloromethane	< 8.82
Bromodichloromethane	< 3.53
Bromoform	< 8.82
Bromomethane	< 3.53
2-Butanone	< 17.6
Carbon disulfide	< 3.53
Carbon Tetrachloride	< 3.53
Chlorobenzene	< 3.53
Chloroethane	< 3.53
Chloroform	< 3.53
Chloromethane	< 3.53
Cyclohexane	< 17.6
Dibromochloromethane	< 3.53
1,2-Dibromo-3-Chloropropane	< 17.6
1,2-Dibromoethane	< 3.53
1,2-Dichlorobenzene	< 3.53
1,3-Dichlorobenzene	< 3.53
1,4-Dichlorobenzene	< 3.53
Dichlorodifluoromethane	< 3.53
1,1-Dichloroethane	< 3.53
1,2-Dichloroethane	< 3.53
1,1-Dichloroethene	< 3.53
cis-1,2-Dichloroethene	< 3.53
trans-1,2-Dichloroethene	< 3.53

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.53
cis-1,3-Dichloropropene	< 3.53
trans-1,3-Dichloropropene	< 3.53
Ethylbenzene	< 3.53
Freon 113	< 3.53
2-Hexanone	< 8.82
Isopropylbenzene	< 3.53
Methyl acetate	< 3.53
Methyl tert-butyl Ether	< 3.53
Methylcyclohexane	< 3.53
Methylene chloride	11.6
4-Methyl-2-pentanone	< 8.82
Styrene	< 8.82
1,1,2,2-Tetrachloroethane	< 3.53
Tetrachloroethene	< 3.53
Toluene	< 3.53
1,2,3-Trichlorobenzene	< 8.82
1,2,4-Trichlorobenzene	< 8.82
1,1,1-Trichloroethane	< 3.53
1,1,2-Trichloroethane	< 3.53
Trichloroethene	< 3.53
Trichlorofluoromethane	< 3.53
Vinyl chloride	< 3.53
m,p-Xylene	< 3.53
o-Xylene	< 3.53

ELAP Number 10958

Method: EPA 8260B

Data File: V84717.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868V9.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 6297**Field Location:** FAM-TP10-D152-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	J 17.5
Benzene	< 4.47
Bromochloromethane	< 11.2
Bromodichloromethane	< 4.47
Bromoform	< 11.2
Bromomethane	< 4.47
2-Butanone	31.2
Carbon disulfide	< 4.47
Carbon Tetrachloride	< 4.47
Chlorobenzene	< 4.47
Chloroethane	< 4.47
Chloroform	< 4.47
Chloromethane	< 4.47
Cyclohexane	< 22.3
Dibromochloromethane	< 4.47
1,2-Dibromo-3-Chloropropane	< 22.3
1,2-Dibromoethane	< 4.47
1,2-Dichlorobenzene	< 4.47
1,3-Dichlorobenzene	< 4.47
1,4-Dichlorobenzene	< 4.47
Dichlorodifluoromethane	< 4.47
1,1-Dichloroethane	< 4.47
1,2-Dichloroethane	< 4.47
1,1-Dichloroethene	< 4.47
cis-1,2-Dichloroethene	< 4.47
trans-1,2-Dichloroethene	< 4.47

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.47
cis-1,3-Dichloropropene	< 4.47
trans-1,3-Dichloropropene	< 4.47
Ethylbenzene	< 4.47
Freon 113	< 4.47
2-Hexanone	< 11.2
Isopropylbenzene	< 4.47
Methyl acetate	< 4.47
Methyl tert-butyl Ether	< 4.47
Methylcyclohexane	< 4.47
Methylene chloride	< 11.2
4-Methyl-2-pentanone	< 11.2
Styrene	< 11.2
1,1,2,2-Tetrachloroethane	< 4.47
Tetrachloroethene	< 4.47
Toluene	< 4.47
1,2,3-Trichlorobenzene	< 11.2
1,2,4-Trichlorobenzene	< 11.2
1,1,1-Trichloroethane	< 4.47
1,1,2-Trichloroethane	< 4.47
Trichloroethene	< 4.47
Trichlorofluoromethane	< 4.47
Vinyl chloride	< 4.47
m,p-Xylene	< 4.47
o-Xylene	< 4.47

ELAP Number 10958

Method: EPA 8260B

Data File: V84718.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868V0.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** 6298**Client Job Number:** 2011.0066.00**Field Location:** FAM-TP11-D005-S-O**Date Sampled:** 05/09/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/17/2011

Compound	Results in ug / Kg
Acetone	< 21.7
Benzene	< 4.35
Bromochloromethane	< 10.9
Bromodichloromethane	< 4.35
Bromoform	< 10.9
Bromomethane	< 4.35
2-Butanone	J 14.2
Carbon disulfide	< 4.35
Carbon Tetrachloride	< 4.35
Chlorobenzene	< 4.35
Chloroethane	< 4.35
Chloroform	< 4.35
Chloromethane	< 4.35
Cyclohexane	< 21.7
Dibromochloromethane	< 4.35
1,2-Dibromo-3-Chloropropane	< 21.7
1,2-Dibromoethane	< 4.35
1,2-Dichlorobenzene	< 4.35
1,3-Dichlorobenzene	< 4.35
1,4-Dichlorobenzene	< 4.35
Dichlorodifluoromethane	< 4.35
1,1-Dichloroethane	< 4.35
1,2-Dichloroethane	< 4.35
1,1-Dichloroethene	< 4.35
cis-1,2-Dichloroethene	< 4.35
trans-1,2-Dichloroethene	< 4.35

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.35
cis-1,3-Dichloropropene	< 4.35
trans-1,3-Dichloropropene	< 4.35
Ethylbenzene	< 4.35
Freon 113	< 4.35
2-Hexanone	< 10.9
Isopropylbenzene	< 4.35
Methyl acetate	< 4.35
Methyl tert-butyl Ether	< 4.35
Methylcyclohexane	< 4.35
Methylene chloride	< 10.9
4-Methyl-2-pentanone	< 10.9
Styrene	< 10.9
1,1,2,2-Tetrachloroethane	< 4.35
Tetrachloroethene	< 4.35
Toluene	< 4.35
1,2,3-Trichlorobenzene	< 10.9
1,2,4-Trichlorobenzene	< 10.9
1,1,1-Trichloroethane	< 4.35
1,1,2-Trichloroethane	< 4.35
Trichloroethene	< 4.35
Trichlorofluoromethane	< 4.35
Vinyl chloride	< 4.35
m,p-Xylene	< 4.35
o-Xylene	< 4.35

ELAP Number 10958

Method: EPA 8260B

Data File: V84719.D

Comments: ug / Kg = microgram per Kilogram

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111868W1.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: **TVGA**

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-TP12-D0515-S-O
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 11-1868A
Lab Sample Number: 6299
Date Sampled: 05/09/2011
Date Received: 05/12/2011
Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 36.5
Benzene	< 3.55
Bromochloromethane	< 8.87
Bromodichloromethane	< 3.55
Bromoform	< 8.87
Bromomethane	< 3.55
2-Butanone	85.2
Carbon disulfide	< 3.55
Carbon Tetrachloride	< 3.55
Chlorobenzene	< 3.55
Chloroethane	< 3.55
Chloroform	< 3.55
Chloromethane	< 3.55
Cyclohexane	< 17.7
Dibromochloromethane	< 3.55
1,2-Dibromo-3-Chloropropane	< 17.7
1,2-Dibromoethane	< 3.55
1,2-Dichlorobenzene	< 3.55
1,3-Dichlorobenzene	< 3.55
1,4-Dichlorobenzene	< 3.55
Dichlorodifluoromethane	< 3.55
1,1-Dichloroethane	< 3.55
1,2-Dichloroethane	< 3.55
1,1-Dichloroethene	< 3.55
cis-1,2-Dichloroethene	< 3.55
trans-1,2-Dichloroethene	< 3.55

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.55
cis-1,3-Dichloropropene	< 3.55
trans-1,3-Dichloropropene	< 3.55
Ethylbenzene	< 3.55
Freon 113	< 3.55
2-Hexanone	< 8.87
Isopropylbenzene	< 3.55
Methyl acetate	< 3.55
Methyl tert-butyl Ether	< 3.55
Methylcyclohexane	< 3.55
Methylene chloride	18.5
4-Methyl-2-pentanone	< 8.87
Styrene	< 8.87
1,1,2,2-Tetrachloroethane	< 3.55
Tetrachloroethene	< 3.55
Toluene	< 3.55
1,2,3-Trichlorobenzene	< 8.87
1,2,4-Trichlorobenzene	< 8.87
1,1,1-Trichloroethane	< 3.55
1,1,2-Trichloroethane	< 3.55
Trichloroethene	< 3.55
Trichlorofluoromethane	< 3.55
Vinyl chloride	< 3.55
m,p-Xylene	< 3.55
o-Xylene	< 3.55

ELAP Number 10958

Method: EPA 8260B

Data File: V84751.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111868W2

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6300

Client Job Number: 2011.0066.00

Field Location: FAM-TP13-D23-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 59.0
Benzene	< 4.50
Bromochloromethane	< 11.2
Bromodichloromethane	< 4.50
Bromoform	< 11.2
Bromomethane	< 4.50
2-Butanone	173
Carbon disulfide	< 4.50
Carbon Tetrachloride	< 4.50
Chlorobenzene	< 4.50
Chloroethane	< 4.50
Chloroform	< 4.50
Chloromethane	< 4.50
Cyclohexane	< 22.5
Dibromochloromethane	< 4.50
1,2-Dibromo-3-Chloropropane	< 22.5
1,2-Dibromoethane	< 4.50
1,2-Dichlorobenzene	< 4.50
1,3-Dichlorobenzene	< 4.50
1,4-Dichlorobenzene	< 4.50
Dichlorodifluoromethane	< 4.50
1,1-Dichloroethane	< 4.50
1,2-Dichloroethane	< 4.50
1,1-Dichloroethene	< 4.50
cis-1,2-Dichloroethene	< 4.50
trans-1,2-Dichloroethene	< 4.50

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.50
cis-1,3-Dichloropropene	< 4.50
trans-1,3-Dichloropropene	< 4.50
Ethylbenzene	< 4.50
Freon 113	< 4.50
2-Hexanone	< 11.2
Isopropylbenzene	< 4.50
Methyl acetate	< 4.50
Methyl tert-butyl Ether	< 4.50
Methylcyclohexane	< 4.50
Methylene chloride	13.3
4-Methyl-2-pentanone	< 11.2
Styrene	< 11.2
1,1,2,2-Tetrachloroethane	< 4.50
Tetrachloroethene	< 4.50
Toluene	< 4.50
1,2,3-Trichlorobenzene	< 11.2
1,2,4-Trichlorobenzene	< 11.2
1,1,1-Trichloroethane	< 4.50
1,1,2-Trichloroethane	< 4.50
Trichloroethene	< 4.50
Trichlorofluoromethane	< 4.50
Vinyl chloride	< 4.50
m,p-Xylene	< 4.50
o-Xylene	< 4.50

ELAP Number 10958

Method: EPA 8260B

Data File: V84752.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868W3.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6301

Client Job Number: 2011.0066.00

Field Location: FAM-TP14-D2-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 58.7
Benzene	< 4.25
Bromochloromethane	< 10.6
Bromodichloromethane	< 4.25
Bromoform	< 10.6
Bromomethane	< 4.25
2-Butanone	92.5
Carbon disulfide	< 4.25
Carbon Tetrachloride	< 4.25
Chlorobenzene	< 4.25
Chloroethane	< 4.25
Chloroform	< 4.25
Chloromethane	< 4.25
Cyclohexane	< 21.3
Dibromochloromethane	< 4.25
1,2-Dibromo-3-Chloropropane	< 21.3
1,2-Dibromoethane	< 4.25
1,2-Dichlorobenzene	< 4.25
1,3-Dichlorobenzene	< 4.25
1,4-Dichlorobenzene	< 4.25
Dichlorodifluoromethane	< 4.25
1,1-Dichloroethane	< 4.25
1,2-Dichloroethane	< 4.25
1,1-Dichloroethene	< 4.25
cis-1,2-Dichloroethene	< 4.25
trans-1,2-Dichloroethene	< 4.25

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.25
cis-1,3-Dichloropropene	< 4.25
trans-1,3-Dichloropropene	< 4.25
Ethylbenzene	< 4.25
Freon 113	< 4.25
2-Hexanone	< 10.6
Isopropylbenzene	< 4.25
Methyl acetate	< 4.25
Methyl tert-butyl Ether	< 4.25
Methylcyclohexane	< 4.25
Methylene chloride	15.4
4-Methyl-2-pentanone	< 10.6
Styrene	< 10.6
1,1,2,2-Tetrachloroethane	< 4.25
Tetrachloroethene	< 4.25
Toluene	< 4.25
1,2,3-Trichlorobenzene	< 10.6
1,2,4-Trichlorobenzene	< 10.6
1,1,1-Trichloroethane	< 4.25
1,1,2-Trichloroethane	< 4.25
Trichloroethene	< 4.25
Trichlorofluoromethane	< 4.25
Vinyl chloride	< 4.25
m,p-Xylene	< 4.25
o-Xylene	< 4.25

ELAP Number 10958

Method: EPA 8260B

Data File: V84753.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111868W4.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6302

Client Job Number: 2011.0066.00

Field Location: FAM-TPDUP

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 51.9
Benzene	< 4.59
Bromochloromethane	< 11.5
Bromodichloromethane	< 4.59
Bromoform	< 11.5
Bromomethane	< 4.59
2-Butanone	64.3
Carbon disulfide	< 4.59
Carbon Tetrachloride	< 4.59
Chlorobenzene	< 4.59
Chloroethane	< 4.59
Chloroform	< 4.59
Chloromethane	< 4.59
Cyclohexane	< 22.9
Dibromochloromethane	< 4.59
1,2-Dibromo-3-Chloropropane	< 22.9
1,2-Dibromoethane	< 4.59
1,2-Dichlorobenzene	< 4.59
1,3-Dichlorobenzene	< 4.59
1,4-Dichlorobenzene	< 4.59
Dichlorodifluoromethane	< 4.59
1,1-Dichloroethane	< 4.59
1,2-Dichloroethane	< 4.59
1,1-Dichloroethene	< 4.59
cis-1,2-Dichloroethene	< 4.59
trans-1,2-Dichloroethene	< 4.59

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.59
cis-1,3-Dichloropropene	< 4.59
trans-1,3-Dichloropropene	< 4.59
Ethylbenzene	< 4.59
Freon 113	< 4.59
2-Hexanone	< 11.5
Isopropylbenzene	< 4.59
Methyl acetate	< 4.59
Methyl tert-butyl Ether	< 4.59
Methylcyclohexane	< 4.59
Methylene chloride	15.6
4-Methyl-2-pentanone	< 11.5
Styrene	< 11.5
1,1,2,2-Tetrachloroethane	< 4.59
Tetrachloroethene	< 4.59
Toluene	< 4.59
1,2,3-Trichlorobenzene	< 11.5
1,2,4-Trichlorobenzene	< 11.5
1,1,1-Trichloroethane	< 4.59
1,1,2-Trichloroethane	< 4.59
Trichloroethene	< 4.59
Trichlorofluoromethane	< 4.59
Vinyl chloride	< 4.59
m,p-Xylene	< 4.59
o-Xylene	< 4.59

Data File: V84754.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W5.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6303

Client Job Number: 2011.0066.00

Field Location: FAM-TP15-D005-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	< 17.9
Benzene	< 3.57
Bromochloromethane	< 8.93
Bromodichloromethane	< 3.57
Bromoform	< 8.93
Bromomethane	< 3.57
2-Butanone	< 17.9
Carbon disulfide	< 3.57
Carbon Tetrachloride	< 3.57
Chlorobenzene	< 3.57
Chloroethane	< 3.57
Chloroform	< 3.57
Chloromethane	< 3.57
Cyclohexane	< 17.9
Dibromochloromethane	< 3.57
1,2-Dibromo-3-Chloropropane	< 17.9
1,2-Dibromoethane	< 3.57
1,2-Dichlorobenzene	< 3.57
1,3-Dichlorobenzene	< 3.57
1,4-Dichlorobenzene	< 3.57
Dichlorodifluoromethane	< 3.57
1,1-Dichloroethane	< 3.57
1,2-Dichloroethane	< 3.57
1,1-Dichloroethene	< 3.57
cis-1,2-Dichloroethene	< 3.57
trans-1,2-Dichloroethene	< 3.57

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.57
cis-1,3-Dichloropropene	< 3.57
trans-1,3-Dichloropropene	< 3.57
Ethylbenzene	< 3.57
Freon 113	< 3.57
2-Hexanone	< 8.93
Isopropylbenzene	< 3.57
Methyl acetate	< 3.57
Methyl tert-butyl Ether	< 3.57
Methylcyclohexane	< 3.57
Methylene chloride	12.6
4-Methyl-2-pentanone	< 8.93
Styrene	< 8.93
1,1,2,2-Tetrachloroethane	< 3.57
Tetrachloroethene	< 3.57
Toluene	< 3.57
1,2,3-Trichlorobenzene	< 8.93
1,2,4-Trichlorobenzene	< 8.93
1,1,1-Trichloroethane	< 3.57
1,1,2-Trichloroethane	< 3.57
Trichloroethene	< 3.57
Trichlorofluoromethane	< 3.57
Vinyl chloride	< 3.57
m,p-Xylene	< 3.57
o-Xylene	< 3.57

ELAP Number 10958

Method: EPA 8260B

Data File: V84755.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multi-page document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W6.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6304

Client Job Number: 2011.0066.00

Field Location: FAM-TP16-D115-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 59.1
Benzene	< 4.12
Bromochloromethane	< 10.3
Bromodichloromethane	< 4.12
Bromoform	< 10.3
Bromomethane	< 4.12
2-Butanone	197
Carbon disulfide	< 4.12
Carbon Tetrachloride	< 4.12
Chlorobenzene	< 4.12
Chloroethane	< 4.12
Chloroform	< 4.12
Chloromethane	< 4.12
Cyclohexane	< 20.6
Dibromochloromethane	< 4.12
1,2-Dibromo-3-Chloropropane	< 20.6
1,2-Dibromoethane	< 4.12
1,2-Dichlorobenzene	< 4.12
1,3-Dichlorobenzene	< 4.12
1,4-Dichlorobenzene	< 4.12
Dichlorodifluoromethane	< 4.12
1,1-Dichloroethane	< 4.12
1,2-Dichloroethane	< 4.12
1,1-Dichloroethene	< 4.12
cis-1,2-Dichloroethene	< 4.12
trans-1,2-Dichloroethene	< 4.12

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.12
cis-1,3-Dichloropropene	< 4.12
trans-1,3-Dichloropropene	< 4.12
Ethylbenzene	< 4.12
Freon 113	< 4.12
2-Hexanone	< 10.3
Isopropylbenzene	< 4.12
Methyl acetate	< 4.12
Methyl tert-butyl Ether	< 4.12
Methylcyclohexane	< 4.12
Methylene chloride	J 9.83
4-Methyl-2-pentanone	< 10.3
Styrene	< 10.3
1,1,2,2-Tetrachloroethane	< 4.12
Tetrachloroethene	< 4.12
Toluene	< 4.12
1,2,3-Trichlorobenzene	< 10.3
1,2,4-Trichlorobenzene	< 10.3
1,1,1-Trichloroethane	< 4.12
1,1,2-Trichloroethane	< 4.12
Trichloroethene	< 4.12
Trichlorofluoromethane	< 4.12
Vinyl chloride	< 4.12
m,p-Xylene	< 4.12
o-Xylene	< 4.12

ELAP Number 10958

Method: EPA 8260B

Data File: V84756.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W7.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Client Job Number: 2011.0066.00

Lab Sample Number: 6305

Field Location: FAM-TP17-D3-S-O

Date Sampled: 05/09/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 46.0
Benzene	< 5.05
Bromochloromethane	< 12.6
Bromodichloromethane	< 5.05
Bromoform	< 12.6
Bromomethane	< 5.05
2-Butanone	44.4
Carbon disulfide	< 5.05
Carbon Tetrachloride	< 5.05
Chlorobenzene	< 5.05
Chloroethane	< 5.05
Chloroform	< 5.05
Chloromethane	< 5.05
Cyclohexane	< 25.2
Dibromochloromethane	< 5.05
1,2-Dibromo-3-Chloropropane	< 25.2
1,2-Dibromoethane	< 5.05
1,2-Dichlorobenzene	< 5.05
1,3-Dichlorobenzene	< 5.05
1,4-Dichlorobenzene	< 5.05
Dichlorodifluoromethane	< 5.05
1,1-Dichloroethane	< 5.05
1,2-Dichloroethane	< 5.05
1,1-Dichloroethene	< 5.05
cis-1,2-Dichloroethene	< 5.05
trans-1,2-Dichloroethene	< 5.05

Compound	Results in ug / Kg
1,2-Dichloropropane	< 5.05
cis-1,3-Dichloropropene	< 5.05
trans-1,3-Dichloropropene	< 5.05
Ethylbenzene	< 5.05
Freon 113	< 5.05
2-Hexanone	< 12.6
Isopropylbenzene	< 5.05
Methyl acetate	< 5.05
Methyl tert-butyl Ether	< 5.05
Methylcyclohexane	< 5.05
Methylene chloride	14.1
4-Methyl-2-pentanone	< 12.6
Styrene	< 12.6
1,1,2,2-Tetrachloroethane	< 5.05
Tetrachloroethene	< 5.05
Toluene	< 5.05
1,2,3-Trichlorobenzene	< 12.6
1,2,4-Trichlorobenzene	< 12.6
1,1,1-Trichloroethane	< 5.05
1,1,2-Trichloroethane	< 5.05
Trichloroethene	< 5.05
Trichlorofluoromethane	< 5.05
Vinyl chloride	< 5.05
m,p-Xylene	< 5.05
o-Xylene	< 5.05

ELAP Number 10958

Method: EPA 8260B

Data File: V84757.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W8.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6306

Client Job Number: 2011.0066.00

Field Location: FAM-SP1-D7-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 27.1
Benzene	< 4.26
Bromochloromethane	< 10.7
Bromodichloromethane	< 4.26
Bromoform	< 10.7
Bromomethane	< 4.26
2-Butanone	J 15.9
Carbon disulfide	< 4.26
Carbon Tetrachloride	< 4.26
Chlorobenzene	< 4.26
Chloroethane	< 4.26
Chloroform	< 4.26
Chloromethane	< 4.26
Cyclohexane	< 21.3
Dibromochloromethane	< 4.26
1,2-Dibromo-3-Chloropropane	< 21.3
1,2-Dibromoethane	< 4.26
1,2-Dichlorobenzene	< 4.26
1,3-Dichlorobenzene	< 4.26
1,4-Dichlorobenzene	< 4.26
Dichlorodifluoromethane	< 4.26
1,1-Dichloroethane	< 4.26
1,2-Dichloroethane	< 4.26
1,1-Dichloroethene	< 4.26
cis-1,2-Dichloroethene	< 4.26
trans-1,2-Dichloroethene	< 4.26

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.26
cis-1,3-Dichloropropene	< 4.26
trans-1,3-Dichloropropene	< 4.26
Ethylbenzene	< 4.26
Freon 113	< 4.26
2-Hexanone	< 10.7
Isopropylbenzene	< 4.26
Methyl acetate	< 4.26
Methyl tert-butyl Ether	< 4.26
Methylcyclohexane	< 4.26
Methylene chloride	J 6.02
4-Methyl-2-pentanone	< 10.7
Styrene	< 10.7
1,1,2,2-Tetrachloroethane	< 4.26
Tetrachloroethene	< 4.26
Toluene	< 4.26
1,2,3-Trichlorobenzene	< 10.7
1,2,4-Trichlorobenzene	< 10.7
1,1,1-Trichloroethane	< 4.26
1,1,2-Trichloroethane	< 4.26
Trichloroethene	< 4.26
Trichlorofluoromethane	< 4.26
Vinyl chloride	< 4.26
m,p-Xylene	< 4.26
o-Xylene	< 4.26

ELAP Number 10958

Method: EPA 8260B

Data File: V84758.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W9.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1868A

Lab Sample Number: 6307

Client Job Number: 2011.0066.00

Field Location: FAM-SP2-D4-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 23.1
Benzene	< 3.96
Bromochloromethane	< 9.90
Bromodichloromethane	< 3.96
Bromoform	< 9.90
Bromomethane	< 3.96
2-Butanone	27.3
Carbon disulfide	< 3.96
Carbon Tetrachloride	< 3.96
Chlorobenzene	< 3.96
Chloroethane	< 3.96
Chloroform	< 3.96
Chloromethane	< 3.96
Cyclohexane	< 19.8
Dibromochloromethane	< 3.96
1,2-Dibromo-3-Chloropropane	< 19.8
1,2-Dibromoethane	< 3.96
1,2-Dichlorobenzene	< 3.96
1,3-Dichlorobenzene	< 3.96
1,4-Dichlorobenzene	< 3.96
Dichlorodifluoromethane	< 3.96
1,1-Dichloroethane	< 3.96
1,2-Dichloroethane	< 3.96
1,1-Dichloroethene	< 3.96
cis-1,2-Dichloroethene	< 3.96
trans-1,2-Dichloroethene	< 3.96

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.96
cis-1,3-Dichloropropene	< 3.96
trans-1,3-Dichloropropene	< 3.96
Ethylbenzene	< 3.96
Freon 113	< 3.96
2-Hexanone	< 9.90
Isopropylbenzene	< 3.96
Methyl acetate	< 3.96
Methyl tert-butyl Ether	< 3.96
Methylcyclohexane	< 3.96
Methylene chloride	< 9.90
4-Methyl-2-pentanone	< 9.90
Styrene	< 9.90
1,1,2,2-Tetrachloroethane	< 3.96
Tetrachloroethene	< 3.96
Toluene	< 3.96
1,2,3-Trichlorobenzene	< 9.90
1,2,4-Trichlorobenzene	< 9.90
1,1,1-Trichloroethane	< 3.96
1,1,2-Trichloroethane	< 3.96
Trichloroethene	< 3.96
Trichlorofluoromethane	< 3.96
Vinyl chloride	< 3.96
m,p-Xylene	< 3.96
o-Xylene	< 3.96

ELAP Number 10958

Method: EPA 8260B

Data File: V84759.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868W0.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1868A**Lab Sample Number:** Soil LRB 05/18**Client Job Number:** 2011.0066.00**Field Location:** N/A**Date Sampled:** N/A**Field ID Number:** N/A**Date Received:** N/A**Sample Type:** Soil**Date Analyzed:** 05/18/2011

Compound	Results in ug / Kg
Acetone	J 17.3
Benzene	< 4.00
Bromochloromethane	< 10.0
Bromodichloromethane	< 4.00
Bromoform	< 10.0
Bromomethane	< 4.00
2-Butanone	< 20.0
Carbon disulfide	< 4.00
Carbon Tetrachloride	< 4.00
Chlorobenzene	< 4.00
Chloroethane	< 4.00
Chloroform	< 4.00
Chloromethane	< 4.00
Cyclohexane	< 20.0
Dibromochloromethane	< 4.00
1,2-Dibromo-3-Chloropropane	< 20.0
1,2-Dibromoethane	< 4.00
1,2-Dichlorobenzene	< 4.00
1,3-Dichlorobenzene	< 4.00
1,4-Dichlorobenzene	< 4.00
Dichlorodifluoromethane	< 4.00
1,1-Dichloroethane	< 4.00
1,2-Dichloroethane	< 4.00
1,1-Dichloroethene	< 4.00
cis-1,2-Dichloroethene	< 4.00
trans-1,2-Dichloroethene	< 4.00

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.00
cis-1,3-Dichloropropene	< 4.00
trans-1,3-Dichloropropene	< 4.00
Ethylbenzene	< 4.00
Freon 113	< 4.00
2-Hexanone	< 10.0
Isopropylbenzene	< 4.00
Methyl acetate	< 4.00
Methyl tert-butyl Ether	< 4.00
Methylcyclohexane	< 4.00
Methylene chloride	< 10.0
4-Methyl-2-pentanone	< 10.0
Styrene	< 10.0
1,1,2,2-Tetrachloroethane	< 4.00
Tetrachloroethene	< 4.00
Toluene	< 4.00
1,2,3-Trichlorobenzene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
1,1,1-Trichloroethane	< 4.00
1,1,2-Trichloroethane	< 4.00
Trichloroethene	< 4.00
Trichlorofluoromethane	< 4.00
Vinyl chloride	< 4.00
m,p-Xylene	< 4.00
o-Xylene	< 4.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84748.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111868B2.XLS

CHAIN OF CUSTODY**PARADIGM**
LABORATORY SERVICES, INC.**REPORT TO:****INVOICE TO:**COMPANY: **TUGA**COMPANY: **Same**ADDRESS: **620 Main Street**

ADDRESS:

CITY: **Buffalo** STATE: **NY** ZIP: **14202**

CITY:

PHONE: **716 849 8739** FAX:

PHONE:

ATTN: **J. Mazzella**

ATTN:

PROJECT NAME/SITE NAME:
2011.0066.00
Art MetalsCOMMENTS: **ASP Cat B per 5/12/11.****EAH 5/12****REQUESTED ANALYSIS**

LAB PROJECT #:

CLIENT PROJECT #:

11-1868A**2011.0066.00**

TURNAROUND TIME: (WORKING DAYS)

1 2 3 4 5

STD OTHER
per quote
EAH 5/12

Quotation #

74021011Per Request Form, do 8260 TCL
ASP2008, 8270 ABN ASP2008.REMARKS **EAH 5/12**PARADIGM LAB
SAMPLE NUMBER

DATE	TIME	COMPOSITE	GRADES	SAMPLE LOCATION/FIELD ID	MATERIALS	CONTAMINANTS	TCL VOCs	TCL SVOCs	TAL Metals	PARADIGM LAB SAMPLE NUMBER
15/9/11	915	X		FAM-TP1-D67-5-0	301	1	X	X	X	6288
2	955	X		FAM-TP2-D23-5-0	1	1	X	X	X	6289
3	1025	X		FAM-TP3-D45-5-0	1	1	X	X	X	6290
4	1110	X		FAM-TP4-D13-5-0	1	1	X	X	X	6291
5	1230	X		FAM-TP5-D101-5-0	1	1	X	X	X	6292
6	1330	X		FAM-TP6-D67-5-0	1	1	X	X	X	6293
7	1430	X		FAM-TP7-D67-5-0	1	1	X	X	X	6294
8	1445	X		FAM-TP8-D01-5-0	1	1	X	X	X	6295
9	1515	X		FAM-TP9-D005-5-0	1	1	X	X	X	6296
10	1545	X		FAM-TP10-D152-5-0	1	1	X	X	X	6297

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/LAP 210/241/242/243/244

Receipt Parameter **NELAC Compliance**Comments: Container Type: ☒ Y ☐ NComments: Preservation: **N/A** ☐ Y ☐ NComments: Holding Time: ☒ Y ☐ NComments: Temperature: **DNice 60°C 5/12/11** ☒ Y ☐ NSampled By **Robert Haller** Date/Time **5/9/11**Relinquished By **Sharon Legett** Date/Time **5/12/11**Received By **[Signature]** Date/Time **5-12-11**Received @ Lab By **Sharon A. Honick** Date/Time **5/12/11 1435**

Total Cost:

P.I.F.

W/O custody seals,
but was sealed
w/ tape. **EAH 5/12**

Total Cost:

2 of 2

CHAIN OF CUSTODY

PARADIGM
ENVIRONMENTAL SERVICES, INC.

REPORT TO:

INVOICE TO:

COMPANY: <u>TUGA</u>	COMPANY: <u>Same</u>	LAB PROJECT #: <u>11-1868A</u>	CLIENT PROJECT #: <u>2011.006600</u>
ADDRESS: <u>620 Main Street</u>	ADDRESS:	TURNAROUND TIME: (WORKING DAYS) <u>per 2 note</u>	
CITY: <u>Buffalo</u>	CITY: <u>NY</u>	STATE: <u>NY</u>	ZIP: <u>14202</u>
PHONE: <u>716 849 9739</u>	PHONE: <u>716 849 9739</u>	FAX:	
ATTN: <u>J. Manzella</u>	ATTN:	STD ☒ 1 ☐ 2 ☐ 3 ☐ 5 ☐ 10	OTHER ☐ 10
COMMENTS:		Quotation # <u>JH021011</u>	

PROJECT NAME/SITE NAME:

A+A Metals

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAMINANTS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 5/9/11	1610		X	FAM-TP11-D005-S-0	Soil	3	MS/M50	6298
2 1630			X	FAM-TP12-D0515-S-0		1		6299
3 1655			X	FAM-TP13-D23-S-0		1		6300
4 1715			X	FAM-TP14-D2-S-0		1		6301
5 1725			X	FAM-TP00P		1		6302
6 1740			X	FAM-TP15-D005-S-0		1		6303
7 1800			X	FAM-TP16-D115-S-0		1		6304
8 1830			X	FAM-TP17-D3-S-0		1		6305
9 5/10/11	920		X	FAM-SP1-D7-S-0		1		6306
10 5/10/11	950		X	FAM-SP2-D4-S-0		1		6307

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter		NELAC Compliance	
Container Type:	Y ☒ N ☐	Y ☒ N ☐	
Preservation:	N/A	Y ☐ N ☐	
Holding Time:	Y ☒ N ☐	Y ☒ N ☐	
Temperature:	Y ☒ N ☐	Y ☒ N ☐	

Sampled By: <u>[Signature]</u>	Date/Time: <u>5/9/11-5/10/11</u>
Relinquished By: <u>[Signature]</u>	Date/Time: <u>5/12/11</u>
Received By: <u>[Signature]</u>	Date/Time: <u>5-12-11 9:25</u>
Received @ Lab By: <u>Elizabeth A. Honch</u>	Date/Time: <u>5/12/11 1435</u>

Total Cost:

P.I.F.



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6308

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP3-D1112-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	9630
Antimony	05/27/2011	SW846 3050/6010	< 7.88
Arsenic	05/27/2011	SW846 3050/6010	7.35
Barium	05/27/2011	SW846 3050/6010	39.0
Beryllium	05/27/2011	SW846 3050/6010	0.446 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.657
Calcium	05/27/2011	SW846 3050/6010	1740
Chromium	05/27/2011	SW846 3050/6010	13.4
Cobalt	05/27/2011	SW846 3050/6010	8.96
Copper	05/27/2011	SW846 3050/6010	23.4
Iron	05/27/2011	SW846 3050/6010	18200
Lead	05/27/2011	SW846 3050/6010	13.8
Magnesium	05/27/2011	SW846 3050/6010	3010
Manganese	05/27/2011	SW846 3050/6010	365
Mercury	05/24/2011	SW846 7471	0.0254
Nickel	05/27/2011	SW846 3050/6010	22.4
Potassium	05/27/2011	SW846 3050/6010	986
Selenium	05/27/2011	SW846 3050/6010	< 1.309
Silver	05/27/2011	SW846 3050/6010	< 1.31
Sodium	05/27/2011	SW846 3050/6010	< 328
Thallium	05/27/2011	SW846 3050/6010	< 3.28
Vanadium	05/27/2011	SW846 3050/6010	20.0
Zinc	05/27/2011	SW846 3050/6010	69.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6309

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP4-D5-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	10900
Antimony	05/27/2011	SW846 3050/6010	< 5.90
Arsenic	05/27/2011	SW846 3050/6010	10.9
Barium	05/27/2011	SW846 3050/6010	35.1
Beryllium	05/27/2011	SW846 3050/6010	0.463 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.492
Calcium	05/27/2011	SW846 3050/6010	2230
Chromium	05/27/2011	SW846 3050/6010	13.9
Cobalt	05/27/2011	SW846 3050/6010	9.32
Copper	05/27/2011	SW846 3050/6010	28.7
Iron	05/27/2011	SW846 3050/6010	21300
Lead	05/27/2011	SW846 3050/6010	12.4
Magnesium	05/27/2011	SW846 3050/6010	3450
Manganese	05/27/2011	SW846 3050/6010	462
Mercury	05/24/2011	SW846 7471	0.0305
Nickel	05/27/2011	SW846 3050/6010	22.8
Potassium	05/27/2011	SW846 3050/6010	861
Selenium	05/27/2011	SW846 3050/6010	< 0.983
Silver	05/27/2011	SW846 3050/6010	< 0.983
Sodium	05/27/2011	SW846 3050/6010	< 246
Thallium	05/27/2011	SW846 3050/6010	< 2.46
Vanadium	05/27/2011	SW846 3050/6010	19.8
Zinc	05/27/2011	SW846 3050/6010	76.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6310

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP5-D78-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	10200
Antimony	05/27/2011	SW846 3050/6010	< 5.60
Arsenic	05/27/2011	SW846 3050/6010	7.41
Barium	05/27/2011	SW846 3050/6010	33.5
Beryllium	05/27/2011	SW846 3050/6010	0.420]
Cadmium	05/27/2011	SW846 3050/6010	< 0.467
Calcium	05/27/2011	SW846 3050/6010	3770
Chromium	05/27/2011	SW846 3050/6010	13.4
Cobalt	05/27/2011	SW846 3050/6010	8.11
Copper	05/27/2011	SW846 3050/6010	26.7
Iron	05/27/2011	SW846 3050/6010	18300
Lead	05/27/2011	SW846 3050/6010	13.1
Magnesium	05/27/2011	SW846 3050/6010	3850
Manganese	05/27/2011	SW846 3050/6010	264
Mercury	05/24/2011	SW846 7471	0.0227
Nickel	05/27/2011	SW846 3050/6010	20.3
Potassium	05/27/2011	SW846 3050/6010	853
Selenium	05/27/2011	SW846 3050/6010	< 0.933
Silver	05/27/2011	SW846 3050/6010	< 0.933
Sodium	05/27/2011	SW846 3050/6010	< 233
Thallium	05/27/2011	SW846 3050/6010	< 2.33
Vanadium	05/27/2011	SW846 3050/6010	22.0
Zinc	05/27/2011	SW846 3050/6010	77.6

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6311

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP6-D152-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	8130
Antimony	05/27/2011	SW846 3050/6010	< 7.54
Arsenic	05/27/2011	SW846 3050/6010	21.6
Barium	05/27/2011	SW846 3050/6010	231
Beryllium	05/27/2011	SW846 3050/6010	0.806
Cadmium	05/27/2011	SW846 3050/6010	< 0.629
Calcium	05/27/2011	SW846 3050/6010	3090
Chromium	05/27/2011	SW846 3050/6010	16.2
Cobalt	05/27/2011	SW846 3050/6010	9.84
Copper	05/27/2011	SW846 3050/6010	50.8
Iron	05/27/2011	SW846 3050/6010	43100
Lead	05/27/2011	SW846 3050/6010	157
Magnesium	05/27/2011	SW846 3050/6010	1400
Manganese	05/27/2011	SW846 3050/6010	264
Mercury	05/24/2011	SW846 7471	0.0390
Nickel	05/27/2011	SW846 3050/6010	23.9
Potassium	05/27/2011	SW846 3050/6010	625
Selenium	05/27/2011	SW846 3050/6010	< 1.26
Silver	05/27/2011	SW846 3050/6010	< 1.26
Sodium	05/27/2011	SW846 3050/6010	< 315
Thallium	05/27/2011	SW846 3050/6010	< 3.15
Vanadium	05/27/2011	SW846 3050/6010	23.7
Zinc	05/27/2011	SW846 3050/6010	216

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Lab Sample No.: 6312

Client Job Site: A&A Metals

Sample Type: Soil

Client Job No.: 2011.0066.00

Date Sampled: 05/10/2011

Field Location: FAM-SP7-D1314-S-0

Date Received: 05/12/2011

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	15800
Antimony	05/27/2011	SW846 3050/6010	< 6.01 M
Arsenic	05/27/2011	SW846 3050/6010	9.42 DM
Barium	05/27/2011	SW846 3050/6010	32.7 M
Beryllium	05/27/2011	SW846 3050/6010	0.679 M
Cadmium	05/27/2011	SW846 3050/6010	< 0.502 M
Calcium	05/27/2011	SW846 3050/6010	3490 M
Chromium	05/27/2011	SW846 3050/6010	20.5 M
Cobalt	05/27/2011	SW846 3050/6010	13.8 DM
Copper	05/27/2011	SW846 3050/6010	30.2 D
Iron	05/27/2011	SW846 3050/6010	30300
Lead	05/27/2011	SW846 3050/6010	7.67 DM
Magnesium	05/27/2011	SW846 3050/6010	5980 DM
Manganese	05/27/2011	SW846 3050/6010	508 DM
Mercury	05/24/2011	SW846 7471	0.0150 DM
Nickel	05/27/2011	SW846 3050/6010	37.6 M
Potassium	05/27/2011	SW846 3050/6010	1620 M
Selenium	05/27/2011	SW846 3050/6010	< 1.00 M
Silver	05/27/2011	SW846 3050/6010	< 1.00 M
Sodium	05/27/2011	SW846 3050/6010	< 251
Thallium	05/27/2011	SW846 3050/6010	< 2.51 M
Vanadium	05/27/2011	SW846 3050/6010	23.0 M
Zinc	05/27/2011	SW846 3050/6010	72.1 M

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6313

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP8-D2-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	10500
Antimony	05/27/2011	SW846 3050/6010	< 6.48
Arsenic	05/27/2011	SW846 3050/6010	10.5
Barium	05/27/2011	SW846 3050/6010	31.0
Beryllium	05/27/2011	SW846 3050/6010	0.432 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.540
Calcium	05/27/2011	SW846 3050/6010	12900
Chromium	05/27/2011	SW846 3050/6010	13.7
Cobalt	05/27/2011	SW846 3050/6010	8.73
Copper	05/27/2011	SW846 3050/6010	28.7
Iron	05/27/2011	SW846 3050/6010	21300
Lead	05/27/2011	SW846 3050/6010	10.1
Magnesium	05/27/2011	SW846 3050/6010	5390
Manganese	05/27/2011	SW846 3050/6010	434
Mercury	05/24/2011	SW846 7471	0.0198
Nickel	05/27/2011	SW846 3050/6010	21.6
Potassium	05/27/2011	SW846 3050/6010	1170
Selenium	05/27/2011	SW846 3050/6010	< 1.08
Silver	05/27/2011	SW846 3050/6010	< 1.08
Sodium	05/27/2011	SW846 3050/6010	< 270
Thallium	05/27/2011	SW846 3050/6010	< 2.70
Vanadium	05/27/2011	SW846 3050/6010	20.1
Zinc	05/27/2011	SW846 3050/6010	76.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6314

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP9-D34-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	11600
Antimony	05/27/2011	SW846 3050/6010	< 5.74
Arsenic	05/27/2011	SW846 3050/6010	5.06
Barium	05/27/2011	SW846 3050/6010	38.6
Beryllium	05/27/2011	SW846 3050/6010	0.364]
Cadmium	05/27/2011	SW846 3050/6010	< 0.479
Calcium	05/27/2011	SW846 3050/6010	1460
Chromium	05/27/2011	SW846 3050/6010	12.2
Cobalt	05/27/2011	SW846 3050/6010	7.06
Copper	05/27/2011	SW846 3050/6010	13.5
Iron	05/27/2011	SW846 3050/6010	16500
Lead	05/27/2011	SW846 3050/6010	6.79
Magnesium	05/27/2011	SW846 3050/6010	2500
Manganese	05/27/2011	SW846 3050/6010	803
Mercury	05/24/2011	SW846 7471	0.0376
Nickel	05/27/2011	SW846 3050/6010	14.7
Potassium	05/27/2011	SW846 3050/6010	508
Selenium	05/27/2011	SW846 3050/6010	< 0.957
Silver	05/27/2011	SW846 3050/6010	< 0.957
Sodium	05/27/2011	SW846 3050/6010	< 240
Thallium	05/27/2011	SW846 3050/6010	< 2.40
Vanadium	05/27/2011	SW846 3050/6010	19.3
Zinc	05/27/2011	SW846 3050/6010	63.3

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6315

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP10-D34-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	9190
Antimony	05/27/2011	SW846 3050/6010	4.81 J
Arsenic	05/27/2011	SW846 3050/6010	15.5
Barium	05/27/2011	SW846 3050/6010	392
Beryllium	05/27/2011	SW846 3050/6010	0.476 J
Cadmium	05/27/2011	SW846 3050/6010	0.529
Calcium	05/27/2011	SW846 3050/6010	9740
Chromium	05/27/2011	SW846 3050/6010	43.0
Cobalt	05/27/2011	SW846 3050/6010	9.61
Copper	05/27/2011	SW846 3050/6010	62.7
Iron	05/27/2011	SW846 3050/6010	35100
Lead	05/27/2011	SW846 3050/6010	241
Magnesium	05/27/2011	SW846 3050/6010	2960
Manganese	05/27/2011	SW846 3050/6010	501
Mercury	05/24/2011	SW846 7471	0.0770
Nickel	05/27/2011	SW846 3050/6010	27.1
Potassium	05/27/2011	SW846 3050/6010	849
Selenium	05/27/2011	SW846 3050/6010	0.973 J
Silver	05/27/2011	SW846 3050/6010	< 1.06
Sodium	05/27/2011	SW846 3050/6010	< 264
Thallium	05/27/2011	SW846 3050/6010	< 2.64
Vanadium	05/27/2011	SW846 3050/6010	20.3
Zinc	05/27/2011	SW846 3050/6010	325

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6316

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SDUP-1

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	12600
Antimony	05/27/2011	SW846 3050/6010	< 6.78
Arsenic	05/27/2011	SW846 3050/6010	7.84
Barium	05/27/2011	SW846 3050/6010	33.1
Beryllium	05/27/2011	SW846 3050/6010	0.486 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.565
Calcium	05/27/2011	SW846 3050/6010	829
Chromium	05/27/2011	SW846 3050/6010	15.0
Cobalt	05/27/2011	SW846 3050/6010	8.84
Copper	05/27/2011	SW846 3050/6010	26.2
Iron	05/27/2011	SW846 3050/6010	21400
Lead	05/27/2011	SW846 3050/6010	17.4
Magnesium	05/27/2011	SW846 3050/6010	3350
Manganese	05/27/2011	SW846 3050/6010	952
Mercury	05/24/2011	SW846 7471	< 0.0076
Nickel	05/27/2011	SW846 3050/6010	22.4
Potassium	05/27/2011	SW846 3050/6010	854
Selenium	05/27/2011	SW846 3050/6010	< 1.13
Silver	05/27/2011	SW846 3050/6010	< 1.13
Sodium	05/27/2011	SW846 3050/6010	< 282
Thallium	05/27/2011	SW846 3050/6010	< 2.82
Vanadium	05/27/2011	SW846 3050/6010	22.3
Zinc	05/27/2011	SW846 3050/6010	76.4

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6317

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP11-D78-S-0

Date Sampled: 05/10/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	13600
Antimony	05/27/2011	SW846 3050/6010	< 6.98
Arsenic	05/27/2011	SW846 3050/6010	8.32
Barium	05/27/2011	SW846 3050/6010	54.7
Beryllium	05/27/2011	SW846 3050/6010	0.395 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.582
Calcium	05/27/2011	SW846 3050/6010	1020
Chromium	05/27/2011	SW846 3050/6010	13.9
Cobalt	05/27/2011	SW846 3050/6010	5.90
Copper	05/27/2011	SW846 3050/6010	11.8
Iron	05/27/2011	SW846 3050/6010	16600
Lead	05/27/2011	SW846 3050/6010	9.66
Magnesium	05/27/2011	SW846 3050/6010	2420
Manganese	05/27/2011	SW846 3050/6010	256
Mercury	05/24/2011	SW846 7471	0.0161
Nickel	05/27/2011	SW846 3050/6010	14.9
Potassium	05/27/2011	SW846 3050/6010	514
Selenium	05/27/2011	SW846 3050/6010	< 1.16
Silver	05/27/2011	SW846 3050/6010	< 1.16
Sodium	05/27/2011	SW846 3050/6010	< 291
Thallium	05/27/2011	SW846 3050/6010	< 2.91
Vanadium	05/27/2011	SW846 3050/6010	22.8
Zinc	05/27/2011	SW846 3050/6010	71.0

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Lab Sample No.: 6318

Client Job Site: A&A Metals

Sample Type: Soil

Client Job No.: 2011.0066.00

Date Sampled: 05/10/2011

Field Location: FAM-SP12-D1011-S-0

Date Received: 05/12/2011

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	16200
Antimony	05/27/2011	SW846 3050/6010	< 6.17
Arsenic	05/27/2011	SW846 3050/6010	5.68
Barium	05/27/2011	SW846 3050/6010	25.1
Beryllium	05/27/2011	SW846 3050/6010	0.543
Cadmium	05/27/2011	SW846 3050/6010	< 0.515
Calcium	05/27/2011	SW846 3050/6010	1810
Chromium	05/27/2011	SW846 3050/6010	21.2
Cobalt	05/27/2011	SW846 3050/6010	12.0
Copper	05/27/2011	SW846 3050/6010	37.6
Iron	05/27/2011	SW846 3050/6010	31200
Lead	05/27/2011	SW846 3050/6010	2.91
Magnesium	05/27/2011	SW846 3050/6010	6340
Manganese	05/27/2011	SW846 3050/6010	455
Mercury	05/24/2011	SW846 7471	0.0073 J
Nickel	05/27/2011	SW846 3050/6010	32.0
Potassium	05/27/2011	SW846 3050/6010	1250
Selenium	05/27/2011	SW846 3050/6010	< 1.03
Silver	05/27/2011	SW846 3050/6010	< 1.03
Sodium	05/27/2011	SW846 3050/6010	< 257
Thallium	05/27/2011	SW846 3050/6010	< 2.57
Vanadium	05/27/2011	SW846 3050/6010	21.5
Zinc	05/27/2011	SW846 3050/6010	63.4

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP14-D1012-S-0

Field ID No.: N/A

Lab Project No.: 11-1869A

Lab Sample No.: 6319

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	13900
Antimony	05/27/2011	SW846 3050/6010	< 6.70
Arsenic	05/27/2011	SW846 3050/6010	25.4
Barium	05/27/2011	SW846 3050/6010	23.5
Beryllium	05/27/2011	SW846 3050/6010	0.651
Cadmium	05/27/2011	SW846 3050/6010	< 0.559
Calcium	05/27/2011	SW846 3050/6010	4950
Chromium	05/27/2011	SW846 3050/6010	18.5
Cobalt	05/27/2011	SW846 3050/6010	21.0
Copper	05/27/2011	SW846 3050/6010	27.8
Iron	05/27/2011	SW846 3050/6010	37500
Lead	05/27/2011	SW846 3050/6010	30.8
Magnesium	05/27/2011	SW846 3050/6010	7290
Manganese	05/27/2011	SW846 3050/6010	299
Mercury	05/24/2011	SW846 7471	0.0087
Nickel	05/27/2011	SW846 3050/6010	42.2
Potassium	05/27/2011	SW846 3050/6010	1530
Selenium	05/27/2011	SW846 3050/6010	< 1.12
Silver	05/27/2011	SW846 3050/6010	< 1.12
Sodium	05/27/2011	SW846 3050/6010	< 279
Thallium	05/27/2011	SW846 3050/6010	< 2.79
Vanadium	05/27/2011	SW846 3050/6010	19.0
Zinc	05/27/2011	SW846 3050/6010	66.3

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6320

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP16-D34-S-0

Date Sampled: 05/11/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	11500
Antimony	05/27/2011	SW846 3050/6010	< 6.19
Arsenic	05/27/2011	SW846 3050/6010	7.11
Barium	05/27/2011	SW846 3050/6010	37.2
Beryllium	05/27/2011	SW846 3050/6010	0.475 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.516
Calcium	05/27/2011	SW846 3050/6010	8840
Chromium	05/27/2011	SW846 3050/6010	15.7
Cobalt	05/27/2011	SW846 3050/6010	8.89
Copper	05/27/2011	SW846 3050/6010	29.0
Iron	05/27/2011	SW846 3050/6010	22130
Lead	05/27/2011	SW846 3050/6010	12.1
Magnesium	05/27/2011	SW846 3050/6010	4540
Manganese	05/27/2011	SW846 3050/6010	400
Mercury	05/24/2011	SW846 7471	0.0227
Nickel	05/27/2011	SW846 3050/6010	24.5
Potassium	05/27/2011	SW846 3050/6010	1100
Selenium	05/27/2011	SW846 3050/6010	< 1.03
Silver	05/27/2011	SW846 3050/6010	< 1.03
Sodium	05/27/2011	SW846 3050/6010	< 258
Thallium	05/27/2011	SW846 3050/6010	< 2.58
Vanadium	05/27/2011	SW846 3050/6010	19.3
Zinc	05/27/2011	SW846 3050/6010	74.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP17-D78-S-0

Field ID No.: N/A

Lab Project No.: 11-1869A

Lab Sample No.: 6321

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	18200
Antimony	05/27/2011	SW846 3050/6010	< 7.55
Arsenic	05/27/2011	SW846 3050/6010	8.77
Barium	05/27/2011	SW846 3050/6010	60.7
Beryllium	05/27/2011	SW846 3050/6010	0.875
Cadmium	05/27/2011	SW846 3050/6010	< 0.630
Calcium	05/27/2011	SW846 3050/6010	3870
Chromium	05/27/2011	SW846 3050/6010	23.1
Cobalt	05/27/2011	SW846 3050/6010	14.9
Copper	05/27/2011	SW846 3050/6010	25.9
Iron	05/27/2011	SW846 3050/6010	33000
Lead	05/27/2011	SW846 3050/6010	9.94
Magnesium	05/27/2011	SW846 3050/6010	7330
Manganese	05/27/2011	SW846 3050/6010	455
Mercury	05/24/2011	SW846 7471	0.0125
Nickel	05/27/2011	SW846 3050/6010	36.6
Potassium	05/27/2011	SW846 3050/6010	1920
Selenium	05/27/2011	SW846 3050/6010	< 1.26
Silver	05/27/2011	SW846 3050/6010	< 1.26
Sodium	05/27/2011	SW846 3050/6010	< 314
Thallium	05/27/2011	SW846 3050/6010	< 3.14
Vanadium	05/27/2011	SW846 3050/6010	24.1
Zinc	05/27/2011	SW846 3050/6010	70.5

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6322

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SPDUP-2

Date Sampled: 05/11/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	16900
Antimony	05/27/2011	SW846 3050/6010	< 7.02
Arsenic	05/27/2011	SW846 3050/6010	9.46
Barium	05/27/2011	SW846 3050/6010	61.8
Beryllium	05/27/2011	SW846 3050/6010	0.832
Cadmium	05/27/2011	SW846 3050/6010	< 0.585
Calcium	05/27/2011	SW846 3050/6010	4540
Chromium	05/27/2011	SW846 3050/6010	22.1
Cobalt	05/27/2011	SW846 3050/6010	15.1
Copper	05/27/2011	SW846 3050/6010	31.7
Iron	05/27/2011	SW846 3050/6010	31100
Lead	05/27/2011	SW846 3050/6010	11.8
Magnesium	05/27/2011	SW846 3050/6010	6900
Manganese	05/27/2011	SW846 3050/6010	678
Mercury	05/24/2011	SW846 7471	0.0138
Nickel	05/27/2011	SW846 3050/6010	37.7
Potassium	05/27/2011	SW846 3050/6010	1930
Selenium	05/27/2011	SW846 3050/6010	< 1.17
Silver	05/27/2011	SW846 3050/6010	< 1.17
Sodium	05/27/2011	SW846 3050/6010	< 293
Thallium	05/27/2011	SW846 3050/6010	< 2.93
Vanadium	05/27/2011	SW846 3050/6010	23.3
Zinc	05/27/2011	SW846 3050/6010	69.5

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP18-D23-S-0

Field ID No.: N/A

Lab Project No.: 11-1869A

Lab Sample No.: 6323

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	11600
Antimony	05/27/2011	SW846 3050/6010	< 6.19
Arsenic	05/27/2011	SW846 3050/6010	12.7
Barium	05/27/2011	SW846 3050/6010	32.6
Beryllium	05/27/2011	SW846 3050/6010	0.520
Cadmium	05/27/2011	SW846 3050/6010	< 0.516
Calcium	05/27/2011	SW846 3050/6010	12200
Chromium	05/27/2011	SW846 3050/6010	14.9
Cobalt	05/27/2011	SW846 3050/6010	10.7
Copper	05/27/2011	SW846 3050/6010	26.6
Iron	05/27/2011	SW846 3050/6010	24300
Lead	05/27/2011	SW846 3050/6010	10.5
Magnesium	05/27/2011	SW846 3050/6010	6650
Manganese	05/27/2011	SW846 3050/6010	374
Mercury	05/24/2011	SW846 7471	0.0140
Nickel	05/27/2011	SW846 3050/6010	26.7
Potassium	05/27/2011	SW846 3050/6010	1530
Selenium	05/27/2011	SW846 3050/6010	< 1.03
Silver	05/27/2011	SW846 3050/6010	< 1.03
Sodium	05/27/2011	SW846 3050/6010	< 257
Thallium	05/27/2011	SW846 3050/6010	< 2.57
Vanadium	05/27/2011	SW846 3050/6010	18.0
Zinc	05/27/2011	SW846 3050/6010	68.9

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6324

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP19-D1.5-S-0

Date Sampled: 05/11/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	4920
Antimony	05/27/2011	SW846 3050/6010	< 7.03
Arsenic	05/27/2011	SW846 3050/6010	13.8
Barium	05/27/2011	SW846 3050/6010	72.5
Beryllium	05/27/2011	SW846 3050/6010	0.388 J
Cadmium	05/27/2011	SW846 3050/6010	< 0.586
Calcium	05/27/2011	SW846 3050/6010	3400
Chromium	05/27/2011	SW846 3050/6010	24.8
Cobalt	05/27/2011	SW846 3050/6010	< 5.86
Copper	05/27/2011	SW846 3050/6010	28.2
Iron	05/27/2011	SW846 3050/6010	22100
Lead	05/27/2011	SW846 3050/6010	574
Magnesium	05/27/2011	SW846 3050/6010	1850
Manganese	05/27/2011	SW846 3050/6010	499
Mercury	05/24/2011	SW846 7471	0.119
Nickel	05/27/2011	SW846 3050/6010	36.6
Potassium	05/27/2011	SW846 3050/6010	715
Selenium	05/27/2011	SW846 3050/6010	0.950 J
Silver	05/27/2011	SW846 3050/6010	< 1.17
Sodium	05/27/2011	SW846 3050/6010	< 293
Thallium	05/27/2011	SW846 3050/6010	< 2.93
Vanadium	05/27/2011	SW846 3050/6010	12.8
Zinc	05/27/2011	SW846 3050/6010	110

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TYGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP20-D34-S-0

Field ID No.: N/A

Lab Project No.: 11-1869A

Lab Sample No.: 6325

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	12700
Antimony	05/27/2011	SW846 3050/6010	< 6.31
Arsenic	05/27/2011	SW846 3050/6010	18.5
Barium	05/27/2011	SW846 3050/6010	29.2
Beryllium	05/27/2011	SW846 3050/6010	0.580
Cadmium	05/27/2011	SW846 3050/6010	< 0.525
Calcium	05/27/2011	SW846 3050/6010	2930
Chromium	05/27/2011	SW846 3050/6010	16.9
Cobalt	05/27/2011	SW846 3050/6010	11.5
Copper	05/27/2011	SW846 3050/6010	26.8
Iron	05/27/2011	SW846 3050/6010	31200
Lead	05/27/2011	SW846 3050/6010	11.9
Magnesium	05/27/2011	SW846 3050/6010	5560
Manganese	05/27/2011	SW846 3050/6010	276
Mercury	05/24/2011	SW846 7471	0.0225
Nickel	05/27/2011	SW846 3050/6010	29.1
Potassium	05/27/2011	SW846 3050/6010	1260
Selenium	05/27/2011	SW846 3050/6010	< 1.05
Silver	05/27/2011	SW846 3050/6010	< 1.05
Sodium	05/27/2011	SW846 3050/6010	< 262
Thallium	05/27/2011	SW846 3050/6010	< 2.62
Vanadium	05/27/2011	SW846 3050/6010	18.5
Zinc	05/27/2011	SW846 3050/6010	67.1

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1869A

Client Job Site: A&A Metals

Lab Sample No.: 6326

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP21-D15-S-0

Date Sampled: 05/11/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/27/2011	SW846 3050/6010	4970
Antimony	05/27/2011	SW846 3050/6010	7260
Arsenic	05/27/2011	SW846 3050/6010	62.4
Barium	05/27/2011	SW846 3050/6010	101
Beryllium	05/27/2011	SW846 3050/6010	0.400 J
Cadmium	05/27/2011	SW846 3050/6010	0.353 J
Calcium	05/27/2011	SW846 3050/6010	90500
Chromium	05/27/2011	SW846 3050/6010	25.9
Cobalt	05/27/2011	SW846 3050/6010	4.88
Copper	05/27/2011	SW846 3050/6010	200
Iron	05/27/2011	SW846 3050/6010	29800
Lead	05/27/2011	SW846 3050/6010	20500
Magnesium	05/27/2011	SW846 3050/6010	3250
Manganese	05/27/2011	SW846 3050/6010	263
Mercury	05/24/2011	SW846 7471	0.476
Nickel	05/27/2011	SW846 3050/6010	19.9
Potassium	05/27/2011	SW846 3050/6010	413
Selenium	05/27/2011	SW846 3050/6010	< 0.930
Silver	05/27/2011	SW846 3050/6010	1.56
Sodium	05/27/2011	SW846 3050/6010	< 232
Thallium	05/27/2011	SW846 3050/6010	< 2.32
Vanadium	05/27/2011	SW846 3050/6010	13.6
Zinc	05/27/2011	SW846 3050/6010	274

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Cu.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PCB Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SP14-D1012-S-O
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 11-1869A
Lab Sample Number: 6319
Date Sampled: 05/11/2011
Date Received: 05/12/2011
Date Analyzed: 05/26/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.0320
Aroclor 1221	< 0.0320
Aroclor 1232	< 0.0320
Aroclor 1242	< 0.0320
Aroclor 1248	< 0.0320
Aroclor 1254	< 0.0320
Aroclor 1260	< 0.0320

ELAP Number 10958

Analytical Method: EPA 8082A
Prep Method: EPA 3550C

Comments: mg / Kg = milligram per Kilogram

Signature: _____


Bruce Hoogesteger: Technical Director

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**PCB Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SP16-D34-S-O
Field ID Number: N/A
Sample Type: Soil

Lab Project Number: 11-1869A
Lab Sample Number: 6320
Date Sampled: 05/11/2011
Date Received: 05/12/2011
Date Analyzed: 05/26/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.0340
Aroclor 1221	< 0.0340
Aroclor 1232	< 0.0340
Aroclor 1242	< 0.0340
Aroclor 1248	< 0.0340
Aroclor 1254	< 0.0340
Aroclor 1260	< 0.0340

ELAP Number 10958

Analytical Method: EPA 8082A
Prep Method: EPA 3550C

Comments: mg / Kg = milligram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111889P2.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Client Job Number: 2011.0066.00

Lab Sample Number: 6308

Field Location: FAM-SP3-D1112-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 329
Acenaphthylene	< 329
Acetophenone	< 329
Anthracene	< 329
Atrazine	< 329
Benzaldehyde	< 329
Benzo (a) anthracene	< 329
Benzo (a) pyrene	< 329
Benzo (b) fluoranthene	< 329
Benzo (g,h,i) perylene	< 329
Benzo (k) fluoranthene	< 329
Biphenyl	< 329
Bis (2-chloroethyl) ether	< 329
Bis (2-chloroethoxy) methane	< 329
Bis (2-ethylhexyl) phthalate	< 329
Bis (2-chloroisopropyl) ether	< 329
4-Bromophenyl phenyl ether	< 329
Butylbenzylphthalate	< 329
Caprolactam	< 329
Carbazole	< 329
4-Chloroaniline	< 329
4-Chloro-3-methylphenol	< 329
2-Chloronaphthalene	< 329
2-Chlorophenol	< 329
4-Chlorophenyl phenyl ether	< 329
Chrysene	< 329
1,3-Dichlorobenzene	< 329
1,4-Dichlorobenzene	< 329
1,2-Dichlorobenzene	< 329
Dibenz (a,h) anthracene	< 329
Dibenzofuran	< 329
3,3'-Dichlorobenzidine	< 329
2,4-Dichlorophenol	< 329
Diethyl phthalate	< 329
2,4-Dimethylphenol	< 329
Dimethyl phthalate	< 823

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 329
4,6-Dinitro-2-methylphenol	< 823
2,4-Dinitrophenol	< 823
2,4-Dinitrotoluene	< 329
2,6-Dinitrotoluene	< 329
Di-n-octylphthalate	< 329
Fluoranthene	< 329
Fluorene	< 329
Hexachlorobenzene	< 329
Hexachlorobutadiene	< 329
Hexachlorocyclopentadiene	< 329
Hexachloroethane	< 329
Indeno (1,2,3-cd) pyrene	< 329
Isophorone	< 329
2-Methylnaphthalene	< 329
2-Methylphenol	< 329
3&4-Methylphenol	< 329
Naphthalene	< 329
2-Nitroaniline	< 823
3-Nitroaniline	< 823
4-Nitroaniline	< 823
Nitrobenzene	< 329
2-Nitrophenol	< 329
4-Nitrophenol	< 823
N-Nitroso-di-n-propylamine	< 329
N-Nitrosodiphenylamine	< 329
Pentachlorophenol	< 823
Phenanthrene	< 329
Phenol	< 329
Pyrene	< 329
1,2,4-Trichlorobenzene	< 329
2,4,5-Trichlorophenol	< 823
2,4,6-Trichlorophenol	< 329
1,2,4,5-Tetrachlorobenzene	< 329
2,3,4,6-Tetrachlorophenol	< 329

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56807.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteyn Technical Director

This report is part of a multiple document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111869S1.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6309

Client Job Number: 2011.0066.00

Field Location: FAM-SP4-D5-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/10/2011

Date Received: 05/12/2011

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 335
Acenaphthylene	< 335
Acetophenone	< 335
Anthracene	< 335
Atrazine	< 335
Benzaldehyde	< 335
Benzo (a) anthracene	< 335
Benzo (a) pyrene	< 335
Benzo (b) fluoranthene	< 335
Benzo (g,h,i) perylene	< 335
Benzo (k) fluoranthene	< 335
Biphenyl	< 335
Bis (2-chloroethyl) ether	< 335
Bis (2-chloroethoxy) methane	< 335
Bis (2-ethylhexyl) phthalate	< 335
Bis (2-chloroisopropyl) ether	< 335
4-Bromophenyl phenyl ether	< 335
Butylbenzylphthalate	< 335
Caprolactam	< 335
Carbazole	< 335
4-Chloroaniline	< 335
4-Chloro-3-methylphenol	< 335
2-Chloronaphthalene	< 335
2-Chlorophenol	< 335
4-Chlorophenyl phenyl ether	< 335
Chrysene	< 335
1,3-Dichlorobenzene	< 335
1,4-Dichlorobenzene	< 335
1,2-Dichlorobenzene	< 335
Dibenz (a,h) anthracene	< 335
Dibenzofuran	< 335
3,3'-Dichlorobenzidine	< 335
2,4-Dichlorophenol	< 335
Diethyl phthalate	< 335
2,4-Dimethylphenol	< 335
Dimethyl phthalate	< 839

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 335
4,6-Dinitro-2-methylphenol	< 839
2,4-Dinitrophenol	< 839
2,4-Dinitrotoluene	< 335
2,6-Dinitrotoluene	< 335
Di-n-octylphthalate	< 335
Fluoranthene	< 335
Fluorene	< 335
Hexachlorobenzene	< 335
Hexachlorobutadiene	< 335
Hexachlorocyclopentadiene	< 335
Hexachloroethane	< 335
Indeno (1,2,3-cd) pyrene	< 335
Isophorone	< 335
2-Methylnaphthalene	< 335
2-Methylphenol	< 335
3&4-Methylphenol	< 335
Naphthalene	< 335
2-Nitroaniline	< 839
3-Nitroaniline	< 839
4-Nitroaniline	< 839
Nitrobenzene	< 335
2-Nitrophenol	< 335
4-Nitrophenol	< 839
N-Nitroso-di-n-propylamine	< 335
N-Nitrosodiphenylamine	< 335
Pentachlorophenol	< 839
Phenanthrene	< 335
Phenol	< 335
Pyrene	< 335
1,2,4-Trichlorobenzene	< 335
2,4,5-Trichlorophenol	< 839
2,4,6-Trichlorophenol	< 335
1,2,4,5-Tetrachlorobenzene	< 335
2,3,4,6-Tetrachlorophenol	< 335

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56808.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869S2.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA
Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6310

Client Job Number: 2011.0066.00

Field Location: FAM-SP5-D78-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/31/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,710
Acenaphthylene	< 1,710
Acetophenone	< 1,710
Anthracene	< 1,710
Atrazine	< 1,710
Benzaldehyde	< 1,710
Benzo (a) anthracene	< 1,710
Benzo (a) pyrene	< 1,710
Benzo (b) fluoranthene	< 1,710
Benzo (g,h,i) perylene	< 1,710
Benzo (k) fluoranthene	< 1,710
Biphenyl	J 1,530
Bis (2-chloroethyl) ether	< 1,710
Bis (2-chloroethoxy) methane	< 1,710
Bis (2-ethylhexyl) phthalate	< 1,710
Bis (2-chloroisopropyl) ether	< 1,710
4-Bromophenyl phenyl ether	< 1,710
Butylbenzylphthalate	< 1,710
Caprolactam	< 1,710
Carbazole	< 1,710
4-Chloroaniline	< 1,710
4-Chloro-3-methylphenol	< 1,710
2-Chloronaphthalene	< 1,710
2-Chlorophenol	< 1,710
4-Chlorophenyl phenyl ether	< 1,710
Chrysene	< 1,710
1,3-Dichlorobenzene	< 1,710
1,4-Dichlorobenzene	< 1,710
1,2-Dichlorobenzene	< 1,710
Dibenz (a,h) anthracene	< 1,710
Dibenzofuran	J 859
3,3'-Dichlorobenzidine	< 1,710
2,4-Dichlorophenol	< 1,710
Diethyl phthalate	< 1,710
2,4-Dimethylphenol	< 1,710
Dimethyl phthalate	< 4,290

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,710
4,6-Dinitro-2-methylphenol	< 4,290
2,4-Dinitrophenol	< 4,290
2,4-Dinitrotoluene	< 1,710
2,6-Dinitrotoluene	< 1,710
Di-n-octylphthalate	< 1,710
Fluoranthene	< 1,710
Fluorene	J 1,500
Hexachlorobenzene	< 1,710
Hexachlorobutadiene	< 1,710
Hexachlorocyclopentadiene	< 1,710
Hexachloroethane	< 1,710
Indeno (1,2,3-cd) pyrene	< 1,710
Isophorone	< 1,710
2-Methylnaphthalene	20,700
2-Methylphenol	< 1,710
3&4-Methylphenol	< 1,710
Naphthalene	3,840
2-Nitroaniline	< 4,290
3-Nitroaniline	< 4,290
4-Nitroaniline	< 4,290
Nitrobenzene	< 1,710
2-Nitrophenol	< 1,710
4-Nitrophenol	< 4,290
N-Nitroso-di-n-propylamine	< 1,710
N-Nitrosodiphenylamine	< 1,710
Pentachlorophenol	< 4,290
Phenanthrene	2,640
Phenol	< 1,710
Pyrene	< 1,710
1,2,4-Trichlorobenzene	< 1,710
2,4,5-Trichlorophenol	< 4,290
2,4,6-Trichlorophenol	< 1,710
1,2,4,5-Tetrachlorobenzene	< 1,710
2,3,4,6-Tetrachlorophenol	< 1,710

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56907.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:


 Bruce Hoogesteger, Technical Director

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6311

Client Job Number: 2011.0066.00

Field Location: FAM-SP6-D152-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 337
Acenaphthylene	< 337
Acetophenone	< 337
Anthracene	< 337
Atrazine	< 337
Benzaldehyde	< 337
Benzo (a) anthracene	< 337
Benzo (a) pyrene	< 337
Benzo (b) fluoranthene	< 337
Benzo (g,h,i) perylene	< 337
Benzo (k) fluoranthene	< 337
Biphenyl	< 337
Bis (2-chloroethyl) ether	< 337
Bis (2-chloroethoxy) methane	< 337
Bis (2-ethylhexyl) phthalate	< 337
Bis (2-chloroisopropyl) ether	< 337
4-Bromophenyl phenyl ether	< 337
Butylbenzylphthalate	< 337
Caprolactam	< 337
Carbazole	< 337
4-Chloroaniline	< 337
4-Chloro-3-methylphenol	< 337
2-Chloronaphthalene	< 337
2-Chlorophenol	< 337
4-Chlorophenyl phenyl ether	< 337
Chrysene	J 171
1,3-Dichlorobenzene	< 337
1,4-Dichlorobenzene	< 337
1,2-Dichlorobenzene	< 337
Dibenz (a,h) anthracene	< 337
Dibenzofuran	< 337
3,3'-Dichlorobenzidine	< 337
2,4-Dichlorophenol	< 337
Diethyl phthalate	< 337
2,4-Dimethylphenol	< 337
Dimethyl phthalate	< 842

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 337
4,6-Dinitro-2-methylphenol	< 842
2,4-Dinitrophenol	< 842
2,4-Dinitrotoluene	< 337
2,6-Dinitrotoluene	< 337
Di-n-octylphthalate	< 337
Fluoranthene	J 221
Fluorene	< 337
Hexachlorobenzene	< 337
Hexachlorobutadiene	< 337
Hexachlorocyclopentadiene	< 337
Hexachloroethane	< 337
Indeno (1,2,3-cd) pyrene	< 337
Isophorone	< 337
2-Methylnaphthalene	< 337
2-Methylphenol	< 337
3&4-Methylphenol	< 337
Naphthalene	< 337
2-Nitroaniline	< 842
3-Nitroaniline	< 842
4-Nitroaniline	< 842
Nitrobenzene	< 337
2-Nitrophenol	< 337
4-Nitrophenol	< 842
N-Nitroso-di-n-propylamine	< 337
N-Nitrosodiphenylamine	< 337
Pentachlorophenol	< 842
Phenanthrene	< 337
Phenol	< 337
Pyrene	J 201
1,2,4-Trichlorobenzene	< 337
2,4,5-Trichlorophenol	< 842
2,4,6-Trichlorophenol	< 337
1,2,4,5-Tetrachlorobenzene	< 337
2,3,4,6-Tetrachlorophenol	< 337

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56810.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869S4

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6312

Client Job Number: 2011.0066.00

Field Location: FAM-SP7-D1314-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 315
Acenaphthylene	< 315
Acetophenone	< 315
Anthracene	< 315
Atrazine	< 315
Benzaldehyde	< 315
Benzo (a) anthracene	< 315
Benzo (a) pyrene	< 315
Benzo (b) fluoranthene	< 315
Benzo (g,h,i) perylene	< 315
Benzo (k) fluoranthene	< 315
Biphenyl	< 315
Bis (2-chloroethyl) ether	< 315
Bis (2-chloroethoxy) methane	< 315
Bis (2-ethylhexyl) phthalate	< 315
Bis (2-chloroisopropyl) ether	< 315
4-Bromophenyl phenyl ether	< 315
Butylbenzylphthalate	< 315
Caprolactam	< 315
Carbazole	< 315
4-Chloroaniline	< 315
4-Chloro-3-methylphenol	< 315
2-Chloronaphthalene	< 315
2-Chlorophenol	< 315
4-Chlorophenyl phenyl ether	< 315
Chrysene	< 315
1,3-Dichlorobenzene	< 315
1,4-Dichlorobenzene	< 315
1,2-Dichlorobenzene	< 315
Dibenz (a,h) anthracene	< 315
Dibenzofuran	< 315
3,3'-Dichlorobenzidine	< 315
2,4-Dichlorophenol	< 315
Diethyl phthalate	< 315
2,4-Dimethylphenol	< 315
Dimethyl phthalate	< 788

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 315
4,6-Dinitro-2-methylphenol	< 788
2,4-Dinitrophenol	< 788
2,4-Dinitrotoluene	< 315
2,6-Dinitrotoluene	< 315
Di-n-octylphthalate	< 315
Fluoranthene	< 315
Fluorene	< 315
Hexachlorobenzene	< 315
Hexachlorobutadiene	< 315
Hexachlorocyclopentadiene	< 315
Hexachloroethane	< 315
Indeno (1,2,3-cd) pyrene	< 315
Isophorone	< 315
2-Methylnaphthalene	< 315
2-Methylphenol	< 315
3&4-Methylphenol	< 315
Naphthalene	< 315
2-Nitroaniline	< 788
3-Nitroaniline	< 788
4-Nitroaniline	< 788
Nitrobenzene	< 315
2-Nitrophenol	< 315
4-Nitrophenol	< 788
N-Nitroso-di-n-propylamine	< 315
N-Nitrosodiphenylamine	< 315
Pentachlorophenol	< 788
Phenanthrene	< 315
Phenol	< 315
Pyrene	< 315
1,2,4-Trichlorobenzene	< 315
2,4,5-Trichlorophenol	< 788
2,4,6-Trichlorophenol	< 315
1,2,4,5-Tetrachlorobenzene	< 315
2,3,4,6-Tetrachlorophenol	< 315

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56811.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111869S5

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Client Job Number: 2011.0066.00

Lab Sample Number: 6313

Field Location: FAM-SP8-D2-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 320
Acenaphthylene	< 320
Acetophenone	< 320
Anthracene	< 320
Atrazine	< 320
Benzaldehyde	< 320
Benzo (a) anthracene	< 320
Benzo (a) pyrene	< 320
Benzo (b) fluoranthene	< 320
Benzo (g,h,i) perylene	< 320
Benzo (k) fluoranthene	< 320
Biphenyl	< 320
Bis (2-chloroethyl) ether	< 320
Bis (2-chloroethoxy) methane	< 320
Bis (2-ethylhexyl) phthalate	< 320
Bis (2-chloroisopropyl) ether	< 320
4-Bromophenyl phenyl ether	< 320
Butylbenzylphthalate	< 320
Caprolactam	< 320
Carbazole	< 320
4-Chloroaniline	< 320
4-Chloro-3-methylphenol	< 320
2-Chloronaphthalene	< 320
2-Chlorophenol	< 320
4-Chlorophenyl phenyl ether	< 320
Chrysene	< 320
1,3-Dichlorobenzene	< 320
1,4-Dichlorobenzene	< 320
1,2-Dichlorobenzene	< 320
Dibenz (a,h) anthracene	< 320
Dibenzofuran	< 320
3,3'-Dichlorobenzidine	< 320
2,4-Dichlorophenol	< 320
Diethyl phthalate	< 320
2,4-Dimethylphenol	< 320
Dimethyl phthalate	< 801

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 320
4,6-Dinitro-2-methylphenol	< 801
2,4-Dinitrophenol	< 801
2,4-Dinitrotoluene	< 320
2,6-Dinitrotoluene	< 320
Di-n-octylphthalate	< 320
Fluoranthene	< 320
Fluorene	< 320
Hexachlorobenzene	< 320
Hexachlorobutadiene	< 320
Hexachlorocyclopentadiene	< 320
Hexachloroethane	< 320
Indeno (1,2,3-cd) pyrene	< 320
Isophorone	< 320
2-Methylnaphthalene	< 320
2-Methylphenol	< 320
3&4-Methylphenol	< 320
Naphthalene	< 320
2-Nitroaniline	< 801
3-Nitroaniline	< 801
4-Nitroaniline	< 801
Nitrobenzene	< 320
2-Nitrophenol	< 320
4-Nitrophenol	< 801
N-Nitroso-di-n-propylamine	< 320
N-Nitrosodiphenylamine	< 320
Pentachlorophenol	< 801
Phenanthrene	< 320
Phenol	< 320
Pyrene	< 320
1,2,4-Trichlorobenzene	< 320
2,4,5-Trichlorophenol	< 801
2,4,6-Trichlorophenol	< 320
1,2,4,5-Tetrachlorobenzene	< 320
2,3,4,6-Tetrachlorophenol	< 320

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56842.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogeseger, Technical Director

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111869S6



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6314

Client Job Number: 2011.0066.00

Field Location: FAM-SP9-D34-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/10/2011

Date Received: 05/12/2011

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 349
Acenaphthylene	< 349
Acetophenone	< 349
Anthracene	< 349
Atrazine	< 349
Benzaldehyde	< 349
Benzo (a) anthracene	< 349
Benzo (a) pyrene	< 349
Benzo (b) fluoranthene	< 349
Benzo (g,h,i) perylene	< 349
Benzo (k) fluoranthene	< 349
Biphenyl	580
Bis (2-chloroethyl) ether	< 349
Bis (2-chloroethoxy) methane	< 349
Bis (2-ethylhexyl) phthalate	< 349
Bis (2-chloroisopropyl) ether	< 349
4-Bromophenyl phenyl ether	< 349
Butylbenzylphthalate	< 349
Caprolactam	< 349
Carbazole	< 349
4-Chloroaniline	< 349
4-Chloro-3-methylphenol	< 349
2-Chloronaphthalene	< 349
2-Chlorophenol	< 349
4-Chlorophenyl phenyl ether	< 349
Chrysene	< 349
1,3-Dichlorobenzene	< 349
1,4-Dichlorobenzene	< 349
1,2-Dichlorobenzene	< 349
Dibenz (a,h) anthracene	< 349
Dibenzofuran	< 349
3,3'-Dichlorobenzidine	< 349
2,4-Dichlorophenol	< 349
Diethyl phthalate	< 349
2,4-Dimethylphenol	< 349
Dimethyl phthalate	< 872

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 349
4,6-Dinitro-2-methylphenol	< 872
2,4-Dinitrophenol	< 872
2,4-Dinitrotoluene	< 349
2,6-Dinitrotoluene	< 349
Di-n-octylphthalate	< 349
Fluoranthene	< 349
Fluorene	583
Hexachlorobenzene	< 349
Hexachlorobutadiene	< 349
Hexachlorocyclopentadiene	< 349
Hexachloroethane	< 349
Indeno (1,2,3-cd) pyrene	< 349
Isophorone	< 349
2-Methylnaphthalene	5,700
2-Methylphenol	< 349
3&4-Methylphenol	< 349
Naphthalene	947
2-Nitroaniline	< 872
3-Nitroaniline	< 872
4-Nitroaniline	< 872
Nitrobenzene	< 349
2-Nitrophenol	< 349
4-Nitrophenol	< 872
N-Nitroso-di-n-propylamine	< 349
N-Nitrosodiphenylamine	< 349
Pentachlorophenol	< 872
Phenanthrene	1,300
Phenol	< 349
Pyrene	< 349
1,2,4-Trichlorobenzene	< 349
2,4,5-Trichlorophenol	< 872
2,4,6-Trichlorophenol	< 349
1,2,4,5-Tetrachlorobenzene	< 349
2,3,4,6-Tetrachlorophenol	< 349

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56843.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111869S7



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6315

Client Job Number: 2011.0066.00

Field Location: FAM-SP10-D34-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,680
Acenaphthylene	< 1,680
Acetophenone	< 1,680
Anthracene	< 1,680
Atrazine	< 1,680
Benzaldehyde	< 1,680
Benzo (a) anthracene	2,340
Benzo (a) pyrene	2,170
Benzo (b) fluoranthene	3,010
Benzo (g,h,i) perylene	J 1,200
Benzo (k) fluoranthene	2,470
Biphenyl	< 1,680
Bis (2-chloroethyl) ether	< 1,680
Bis (2-chloroethoxy) methane	< 1,680
Bis (2-ethylhexyl) phthalate	< 1,680
Bis (2-chloroisopropyl) ether	< 1,680
4-Bromophenyl phenyl ether	< 1,680
Butylbenzylphthalate	< 1,680
Caprolactam	< 1,680
Carbazole	< 1,680
4-Chloroaniline	< 1,680
4-Chloro-3-methylphenol	< 1,680
2-Chloronaphthalene	< 1,680
2-Chlorophenol	< 1,680
4-Chlorophenyl phenyl ether	< 1,680
Chrysene	3,880
1,3-Dichlorobenzene	< 1,680
1,4-Dichlorobenzene	< 1,680
1,2-Dichlorobenzene	< 1,680
Dibenz (a,h) anthracene	< 1,680
Dibenzofuran	< 1,680
3,3'-Dichlorobenzidine	< 1,680
2,4-Dichlorophenol	< 1,680
Diethyl phthalate	< 1,680
2,4-Dimethylphenol	< 1,680
Dimethyl phthalate	< 4,210

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,680
4,6-Dinitro-2-methylphenol	< 4,210
2,4-Dinitrophenol	< 4,210
2,4-Dinitrotoluene	< 1,680
2,6-Dinitrotoluene	< 1,680
Di-n-octylphthalate	< 1,680
Fluoranthene	9,560
Fluorene	< 1,680
Hexachlorobenzene	< 1,680
Hexachlorobutadiene	< 1,680
Hexachlorocyclopentadiene	< 1,680
Hexachloroethane	< 1,680
Indeno (1,2,3-cd) pyrene	J 1,090
Isophorone	< 1,680
2-Methylnaphthalene	< 1,680
2-Methylphenol	< 1,680
3&4-Methylphenol	< 1,680
Naphthalene	4,760
2-Nitroaniline	< 4,210
3-Nitroaniline	< 4,210
4-Nitroaniline	< 4,210
Nitrobenzene	< 1,680
2-Nitrophenol	< 1,680
4-Nitrophenol	< 4,210
N-Nitroso-di-n-propylamine	< 1,680
N-Nitrosodiphenylamine	< 1,680
Pentachlorophenol	< 4,210
Phenanthrene	5,610
Phenol	< 1,680
Pyrene	7,950
1,2,4-Trichlorobenzene	< 1,680
2,4,5-Trichlorophenol	< 4,210
2,4,6-Trichlorophenol	< 1,680
1,2,4,5-Tetrachlorobenzene	< 1,680
2,3,4,6-Tetrachlorophenol	< 1,680

ELAP Number 10958

Analytical Method: EPA 8270C

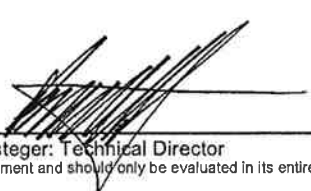
Data File: S56844.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature:


Bruce Hoogesteger: Technical Director

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111869S8.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6316

Client Job Number: 2011.0066.00

Field Location: FAM-SPDUP-1

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 323
Acenaphthylene	< 323
Acetophenone	< 323
Anthracene	< 323
Atrazine	< 323
Benzaldehyde	< 323
Benzo (a) anthracene	< 323
Benzo (a) pyrene	< 323
Benzo (b) fluoranthene	< 323
Benzo (g,h,i) perylene	< 323
Benzo (k) fluoranthene	< 323
Biphenyl	< 323
Bis (2-chloroethyl) ether	< 323
Bis (2-chloroethoxy) methane	< 323
Bis (2-ethylhexyl) phthalate	< 323
Bis (2-chloroisopropyl) ether	< 323
4-Bromophenyl phenyl ether	< 323
Butylbenzylphthalate	< 323
Caprolactam	< 323
Carbazole	< 323
4-Chloroaniline	< 323
4-Chloro-3-methylphenol	< 323
2-Chloronaphthalene	< 323
2-Chlorophenol	< 323
4-Chlorophenyl phenyl ether	< 323
Chrysene	< 323
1,3-Dichlorobenzene	< 323
1,4-Dichlorobenzene	< 323
1,2-Dichlorobenzene	< 323
Dibenz (a,h) anthracene	< 323
Dibenzofuran	< 323
3,3'-Dichlorobenzidine	< 323
2,4-Dichlorophenol	< 323
Diethyl phthalate	< 323
2,4-Dimethylphenol	< 323
Dimethyl phthalate	< 807

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 323
4,6-Dinitro-2-methylphenol	< 807
2,4-Dinitrophenol	< 807
2,4-Dinitrotoluene	< 323
2,6-Dinitrotoluene	< 323
Di-n-octylphthalate	< 323
Fluoranthene	< 323
Fluorene	< 323
Hexachlorobenzene	< 323
Hexachlorobutadiene	< 323
Hexachlorocyclopentadiene	< 323
Hexachloroethane	< 323
Indeno (1,2,3-cd) pyrene	< 323
Isophorone	< 323
2-Methylnaphthalene	< 323
2-Methylphenol	< 323
3&4-Methylphenol	< 323
Naphthalene	< 323
2-Nitroaniline	< 807
3-Nitroaniline	< 807
4-Nitroaniline	< 807
Nitrobenzene	< 323
2-Nitrophenol	< 323
4-Nitrophenol	< 807
N-Nitroso-di-n-propylamine	< 323
N-Nitrosodiphenylamine	< 323
Pentachlorophenol	< 807
Phenanthrene	< 323
Phenol	< 323
Pyrene	< 323
1,2,4-Trichlorobenzene	< 323
2,4,5-Trichlorophenol	< 807
2,4,6-Trichlorophenol	< 323
1,2,4,5-Tetrachlorobenzene	< 323
2,3,4,6-Tetrachlorophenol	< 323

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56845.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869S9.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6317

Client Job Number: 2011.0066.00

Field Location: FAM-SP11-D78-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/28/2011

Compound	Results in ug / Kg
Acenaphthene	< 331
Acenaphthylene	< 331
Acetophenone	< 331
Anthracene	< 331
Atrazine	< 331
Benzaldehyde	< 331
Benzo (a) anthracene	< 331
Benzo (a) pyrene	< 331
Benzo (b) fluoranthene	< 331
Benzo (g,h,i) perylene	< 331
Benzo (k) fluoranthene	< 331
Biphenyl	< 331
Bis (2-chloroethyl) ether	< 331
Bis (2-chloroethoxy) methane	< 331
Bis (2-ethylhexyl) phthalate	< 331
Bis (2-chloroisopropyl) ether	< 331
4-Bromophenyl phenyl ether	< 331
Butylbenzylphthalate	< 331
Caprolactam	< 331
Carbazole	< 331
4-Chloroaniline	< 331
4-Chloro-3-methylphenol	< 331
2-Chloronaphthalene	< 331
2-Chlorophenol	< 331
4-Chlorophenyl phenyl ether	< 331
Chrysene	< 331
1,3-Dichlorobenzene	< 331
1,4-Dichlorobenzene	< 331
1,2-Dichlorobenzene	< 331
Dibenz (a,h) anthracene	< 331
Dibenzofuran	< 331
3,3'-Dichlorobenzidine	< 331
2,4-Dichlorophenol	< 331
Diethyl phthalate	< 331
2,4-Dimethylphenol	< 331
Dimethyl phthalate	< 828

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 331
4,6-Dinitro-2-methylphenol	< 828
2,4-Dinitrophenol	< 828
2,4-Dinitrotoluene	< 331
2,6-Dinitrotoluene	< 331
Di-n-octylphthalate	< 331
Fluoranthene	< 331
Fluorene	< 331
Hexachlorobenzene	< 331
Hexachlorobutadiene	< 331
Hexachlorocyclopentadiene	< 331
Hexachloroethane	< 331
Indeno (1,2,3-cd) pyrene	< 331
Isophorone	< 331
2-Methylnaphthalene	< 331
2-Methylphenol	< 331
3&4-Methylphenol	< 331
Naphthalene	< 331
2-Nitroaniline	< 828
3-Nitroaniline	< 828
4-Nitroaniline	< 828
Nitrobenzene	< 331
2-Nitrophenol	< 331
4-Nitrophenol	< 828
N-Nitroso-di-n-propylamine	< 331
N-Nitrosodiphenylamine	< 331
Pentachlorophenol	< 828
Phenanthrene	< 331
Phenol	< 331
Pyrene	< 331
1,2,4-Trichlorobenzene	< 331
2,4,5-Trichlorophenol	< 828
2,4,6-Trichlorophenol	< 331
1,2,4,5-Tetrachlorobenzene	< 331
2,3,4,6-Tetrachlorophenol	< 331

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56846.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869S0.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6318

Client Job Number: 2011.0066.00

Field Location: FAM-SP12-D1011-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 317
Acenaphthylene	< 317
Acetophenone	< 317
Anthracene	< 317
Atrazine	< 317
Benzaldehyde	< 317
Benzo (a) anthracene	< 317
Benzo (a) pyrene	< 317
Benzo (b) fluoranthene	< 317
Benzo (g,h,i) perylene	< 317
Benzo (k) fluoranthene	< 317
Biphenyl	< 317
Bis (2-chloroethyl) ether	< 317
Bis (2-chloroethoxy) methane	< 317
Bis (2-ethylhexyl) phthalate	< 317
Bis (2-chloroisopropyl) ether	< 317
4-Bromophenyl phenyl ether	< 317
Butylbenzylphthalate	< 317
Caprolactam	< 317
Carbazole	< 317
4-Chloroaniline	< 317
4-Chloro-3-methylphenol	< 317
2-Chloronaphthalene	< 317
2-Chlorophenol	< 317
4-Chlorophenyl phenyl ether	< 317
Chrysene	< 317
1,3-Dichlorobenzene	< 317
1,4-Dichlorobenzene	< 317
1,2-Dichlorobenzene	< 317
Dibenz (a,h) anthracene	< 317
Dibenzofuran	< 317
3,3'-Dichlorobenzidine	< 317
2,4-Dichlorophenol	< 317
Diethyl phthalate	< 317
2,4-Dimethylphenol	< 317
Dimethyl phthalate	< 793

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 317
4,6-Dinitro-2-methylphenol	< 793
2,4-Dinitrophenol	< 793
2,4-Dinitrotoluene	< 317
2,6-Dinitrotoluene	< 317
Di-n-octylphthalate	< 317
Fluoranthene	< 317
Fluorene	< 317
Hexachlorobenzene	< 317
Hexachlorobutadiene	< 317
Hexachlorocyclopentadiene	< 317
Hexachloroethane	< 317
Indeno (1,2,3-cd) pyrene	< 317
Isophorone	< 317
2-Methylnaphthalene	< 317
2-Methylphenol	< 317
3&4-Methylphenol	< 317
Naphthalene	< 317
2-Nitroaniline	< 793
3-Nitroaniline	< 793
4-Nitroaniline	< 793
Nitrobenzene	< 317
2-Nitrophenol	< 317
4-Nitrophenol	< 793
N-Nitroso-di-n-propylamine	< 317
N-Nitrosodiphenylamine	< 317
Pentachlorophenol	< 793
Phenanthrene	< 317
Phenol	< 317
Pyrene	< 317
1,2,4-Trichlorobenzene	< 317
2,4,5-Trichlorophenol	< 793
2,4,6-Trichlorophenol	< 317
1,2,4,5-Tetrachlorobenzene	< 317
2,3,4,6-Tetrachlorophenol	< 317

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56847.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T1.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6319

Client Job Number: 2011.0066.00

Field Location: FAM-SP14-D1012-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 316
Acenaphthylene	< 316
Acetophenone	< 316
Anthracene	< 316
Atrazine	< 316
Benzaldehyde	< 316
Benzo (a) anthracene	< 316
Benzo (a) pyrene	< 316
Benzo (b) fluoranthene	< 316
Benzo (g,h,i) perylene	< 316
Benzo (k) fluoranthene	< 316
Biphenyl	< 316
Bis (2-chloroethyl) ether	< 316
Bis (2-chloroethoxy) methane	< 316
Bis (2-ethylhexyl) phthalate	< 316
Bis (2-chloroisopropyl) ether	< 316
4-Bromophenyl phenyl ether	< 316
Butylbenzylphthalate	< 316
Caprolactam	< 316
Carbazole	< 316
4-Chloroaniline	< 316
4-Chloro-3-methylphenol	< 316
2-Chloronaphthalene	< 316
2-Chlorophenol	< 316
4-Chlorophenyl phenyl ether	< 316
Chrysene	< 316
1,3-Dichlorobenzene	< 316
1,4-Dichlorobenzene	< 316
1,2-Dichlorobenzene	< 316
Dibenz (a,h) anthracene	< 316
Dibenzofuran	< 316
3,3'-Dichlorobenzidine	< 316
2,4-Dichlorophenol	< 316
Diethyl phthalate	< 316
2,4-Dimethylphenol	< 316
Dimethyl phthalate	< 789

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 316
4,6-Dinitro-2-methylphenol	< 789
2,4-Dinitrophenol	< 789
2,4-Dinitrotoluene	< 316
2,6-Dinitrotoluene	< 316
Di-n-octylphthalate	< 316
Fluoranthene	< 316
Fluorene	< 316
Hexachlorobenzene	< 316
Hexachlorobutadiene	< 316
Hexachlorocyclopentadiene	< 316
Hexachloroethane	< 316
Indeno (1,2,3-cd) pyrene	< 316
Isophorone	< 316
2-Methylnaphthalene	< 316
2-Methylphenol	< 316
3&4-Methylphenol	< 316
Naphthalene	< 316
2-Nitroaniline	< 789
3-Nitroaniline	< 789
4-Nitroaniline	< 789
Nitrobenzene	< 316
2-Nitrophenol	< 316
4-Nitrophenol	< 789
N-Nitroso-di-n-propylamine	< 316
N-Nitrosodiphenylamine	< 316
Pentachlorophenol	< 789
Phenanthrene	< 316
Phenol	< 316
Pyrene	< 316
1,2,4-Trichlorobenzene	< 316
2,4,5-Trichlorophenol	< 789
2,4,6-Trichlorophenol	< 316
1,2,4,5-Tetrachlorobenzene	< 316
2,3,4,6-Tetrachlorophenol	< 316

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56848.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T2.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6320

Client Job Number: 2011.0066.00

Field Location: FAM-SP16-D34-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 331
Acenaphthylene	< 331
Acetophenone	< 331
Anthracene	< 331
Atrazine	< 331
Benzaldehyde	< 331
Benzo (a) anthracene	< 331
Benzo (a) pyrene	< 331
Benzo (b) fluoranthene	< 331
Benzo (g,h,i) perylene	< 331
Benzo (k) fluoranthene	< 331
Biphenyl	< 331
Bis (2-chloroethyl) ether	< 331
Bis (2-chloroethoxy) methane	< 331
Bis (2-ethylhexyl) phthalate	< 331
Bis (2-chloroisopropyl) ether	< 331
4-Bromophenyl phenyl ether	< 331
Butylbenzylphthalate	< 331
Caprolactam	< 331
Carbazole	< 331
4-Chloroaniline	< 331
4-Chloro-3-methylphenol	< 331
2-Chloronaphthalene	< 331
2-Chlorophenol	< 331
4-Chlorophenyl phenyl ether	< 331
Chrysene	< 331
1,3-Dichlorobenzene	< 331
1,4-Dichlorobenzene	< 331
1,2-Dichlorobenzene	< 331
Dibenz (a,h) anthracene	< 331
Dibenzofuran	< 331
3,3'-Dichlorobenzidine	< 331
2,4-Dichlorophenol	< 331
Diethyl phthalate	< 331
2,4-Dimethylphenol	< 331
Dimethyl phthalate	< 826

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 331
4,6-Dinitro-2-methylphenol	< 826
2,4-Dinitrophenol	< 826
2,4-Dinitrotoluene	< 331
2,6-Dinitrotoluene	< 331
Di-n-octylphthalate	< 331
Fluoranthene	< 331
Fluorene	< 331
Hexachlorobenzene	< 331
Hexachlorobutadiene	< 331
Hexachlorocyclopentadiene	< 331
Hexachloroethane	< 331
Indeno (1,2,3-cd) pyrene	< 331
Isophorone	< 331
2-Methylnaphthalene	< 331
2-Methylphenol	< 331
3&4-Methylphenol	< 331
Naphthalene	< 331
2-Nitroaniline	< 826
3-Nitroaniline	< 826
4-Nitroaniline	< 826
Nitrobenzene	< 331
2-Nitrophenol	< 331
4-Nitrophenol	< 826
N-Nitroso-di-n-propylamine	< 331
N-Nitrosodiphenylamine	< 331
Pentachlorophenol	< 826
Phenanthrene	< 331
Phenol	< 331
Pyrene	< 331
1,2,4-Trichlorobenzene	< 331
2,4,5-Trichlorophenol	< 826
2,4,6-Trichlorophenol	< 331
1,2,4,5-Tetrachlorobenzene	< 331
2,3,4,6-Tetrachlorophenol	< 331

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56849.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T3.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6321

Client Job Number: 2011.0066.00

Field Location: FAM-SP17-D78-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 319
Acenaphthylene	< 319
Acetophenone	< 319
Anthracene	< 319
Atrazine	< 319
Benzaldehyde	< 319
Benzo (a) anthracene	< 319
Benzo (a) pyrene	< 319
Benzo (b) fluoranthene	< 319
Benzo (g,h,i) perylene	< 319
Benzo (k) fluoranthene	< 319
Biphenyl	< 319
Bis (2-chloroethyl) ether	< 319
Bis (2-chloroethoxy) methane	< 319
Bis (2-ethylhexyl) phthalate	< 319
Bis (2-chloroisopropyl) ether	< 319
4-Bromophenyl phenyl ether	< 319
Butylbenzylphthalate	< 319
Caprolactam	< 319
Carbazole	< 319
4-Chloroaniline	< 319
4-Chloro-3-methylphenol	< 319
2-Chloronaphthalene	< 319
2-Chlorophenol	< 319
4-Chlorophenyl phenyl ether	< 319
Chrysene	< 319
1,3-Dichlorobenzene	< 319
1,4-Dichlorobenzene	< 319
1,2-Dichlorobenzene	< 319
Dibenz (a,h) anthracene	< 319
Dibenzofuran	< 319
3,3'-Dichlorobenzidine	< 319
2,4-Dichlorophenol	< 319
Diethyl phthalate	< 319
2,4-Dimethylphenol	< 319
Dimethyl phthalate	< 798

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 319
4,6-Dinitro-2-methylphenol	< 798
2,4-Dinitrophenol	< 798
2,4-Dinitrotoluene	< 319
2,6-Dinitrotoluene	< 319
Di-n-octylphthalate	< 319
Fluoranthene	< 319
Fluorene	< 319
Hexachlorobenzene	< 319
Hexachlorobutadiene	< 319
Hexachlorocyclopentadiene	< 319
Hexachloroethane	< 319
Indeno (1,2,3-cd) pyrene	< 319
Isophorone	< 319
2-Methylnaphthalene	< 319
2-Methylphenol	< 319
3&4-Methylphenol	< 319
Naphthalene	< 319
2-Nitroaniline	< 798
3-Nitroaniline	< 798
4-Nitroaniline	< 798
Nitrobenzene	< 319
2-Nitrophenol	< 319
4-Nitrophenol	< 798
N-Nitroso-di-n-propylamine	< 319
N-Nitrosodiphenylamine	< 319
Pentachlorophenol	< 798
Phenanthrene	< 319
Phenol	< 319
Pyrene	< 319
1,2,4-Trichlorobenzene	< 319
2,4,5-Trichlorophenol	< 798
2,4,6-Trichlorophenol	< 319
1,2,4,5-Tetrachlorobenzene	< 319
2,3,4,6-Tetrachlorophenol	< 319

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56850.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature:


Bruce Hoogesteger, Technical Director

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111869T4.XLS

**PARADIGM**
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/SludgesClient: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6322

Client Job Number: 2011.0066.00

Field Location: FAM-SPDUP-2

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 319
Acenaphthylene	< 319
Acetophenone	< 319
Anthracene	< 319
Atrazine	< 319
Benzaldehyde	< 319
Benzo (a) anthracene	< 319
Benzo (a) pyrene	< 319
Benzo (b) fluoranthene	< 319
Benzo (g,h,i) perylene	< 319
Benzo (k) fluoranthene	< 319
Biphenyl	< 319
Bis (2-chloroethyl) ether	< 319
Bis (2-chloroethoxy) methane	< 319
Bis (2-ethylhexyl) phthalate	< 319
Bis (2-chloroisopropyl) ether	< 319
4-Bromophenyl phenyl ether	< 319
Butylbenzylphthalate	< 319
Caprolactam	< 319
Carbazole	< 319
4-Chloroaniline	< 319
4-Chloro-3-methylphenol	< 319
2-Chloronaphthalene	< 319
2-Chlorophenol	< 319
4-Chlorophenyl phenyl ether	< 319
Chrysene	< 319
1,3-Dichlorobenzene	< 319
1,4-Dichlorobenzene	< 319
1,2-Dichlorobenzene	< 319
Dibenz (a,h) anthracene	< 319
Dibenzofuran	< 319
3,3'-Dichlorobenzidine	< 319
2,4-Dichlorophenol	< 319
Diethyl phthalate	< 319
2,4-Dimethylphenol	< 319
Dimethyl phthalate	< 796

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 319
4,6-Dinitro-2-methylphenol	< 796
2,4-Dinitrophenol	< 796
2,4-Dinitrotoluene	< 319
2,6-Dinitrotoluene	< 319
Di-n-octylphthalate	< 319
Fluoranthene	< 319
Fluorene	< 319
Hexachlorobenzene	< 319
Hexachlorobutadiene	< 319
Hexachlorocyclopentadiene	< 319
Hexachloroethane	< 319
Indeno (1,2,3-cd) pyrene	< 319
Isophorone	< 319
2-Methylnaphthalene	< 319
2-Methylphenol	< 319
3&4-Methylphenol	< 319
Naphthalene	< 319
2-Nitroaniline	< 796
3-Nitroaniline	< 796
4-Nitroaniline	< 796
Nitrobenzene	< 319
2-Nitrophenol	< 319
4-Nitrophenol	< 796
N-Nitroso-di-n-propylamine	< 319
N-Nitrosodiphenylamine	< 319
Pentachlorophenol	< 796
Phenanthrene	< 319
Phenol	< 319
Pyrene	< 319
1,2,4-Trichlorobenzene	< 319
2,4,5-Trichlorophenol	< 796
2,4,6-Trichlorophenol	< 319
1,2,4,5-Tetrachlorobenzene	< 319
2,3,4,6-Tetrachlorophenol	< 319

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56851.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T5.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1869A**Lab Sample Number:** 6323**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP18-D23-S-O**Date Sampled:** 05/11/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 316
Acenaphthylene	< 316
Acetophenone	< 316
Anthracene	< 316
Atrazine	< 316
Benzaldehyde	< 316
Benzo (a) anthracene	< 316
Benzo (a) pyrene	< 316
Benzo (b) fluoranthene	< 316
Benzo (g,h,i) perylene	< 316
Benzo (k) fluoranthene	< 316
Biphenyl	< 316
Bis (2-chloroethyl) ether	< 316
Bis (2-chloroethoxy) methane	< 316
Bis (2-ethylhexyl) phthalate	< 316
Bis (2-chloroisopropyl) ether	< 316
4-Bromophenyl phenyl ether	< 316
Butylbenzylphthalate	< 316
Caprolactam	< 316
Carbazole	< 316
4-Chloroaniline	< 316
4-Chloro-3-methylphenol	< 316
2-Chloronaphthalene	< 316
2-Chlorophenol	< 316
4-Chlorophenyl phenyl ether	< 316
Chrysene	< 316
1,3-Dichlorobenzene	< 316
1,4-Dichlorobenzene	< 316
1,2-Dichlorobenzene	< 316
Dibenz (a,h) anthracene	< 316
Dibenzofuran	< 316
3,3'-Dichlorobenzidine	< 316
2,4-Dichlorophenol	< 316
Diethyl phthalate	< 316
2,4-Dimethylphenol	< 316
Dimethyl phthalate	< 791

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 316
4,6-Dinitro-2-methylphenol	< 791
2,4-Dinitrophenol	< 791
2,4-Dinitrotoluene	< 316
2,6-Dinitrotoluene	< 316
Di-n-octylphthalate	< 316
Fluoranthene	< 316
Fluorene	< 316
Hexachlorobenzene	< 316
Hexachlorobutadiene	< 316
Hexachlorocyclopentadiene	< 316
Hexachloroethane	< 316
Indeno (1,2,3-cd) pyrene	< 316
Isophorone	< 316
2-Methylnaphthalene	< 316
2-Methylphenol	< 316
3&4-Methylphenol	< 316
Naphthalene	< 316
2-Nitroaniline	< 791
3-Nitroaniline	< 791
4-Nitroaniline	< 791
Nitrobenzene	< 316
2-Nitrophenol	< 316
4-Nitrophenol	< 791
N-Nitroso-di-n-propylamine	< 316
N-Nitrosodiphenylamine	< 316
Pentachlorophenol	< 791
Phenanthrene	< 316
Phenol	< 316
Pyrene	< 316
1,2,4-Trichlorobenzene	< 316
2,4,5-Trichlorophenol	< 791
2,4,6-Trichlorophenol	< 316
1,2,4,5-Tetrachlorobenzene	< 316
2,3,4,6-Tetrachlorophenol	< 316

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56852.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T6.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6324

Client Job Number: 2011.0066.00

Field Location: FAM-SP19-D1.5-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 344
Acenaphthylene	< 344
Acetophenone	< 344
Anthracene	< 344
Atrazine	< 344
Benzaldehyde	< 344
Benzo (a) anthracene	428
Benzo (a) pyrene	397
Benzo (b) fluoranthene	477
Benzo (g,h,i) perylene	< 344
Benzo (k) fluoranthene	< 344
Biphenyl	< 344
Bis (2-chloroethyl) ether	< 344
Bis (2-chloroethoxy) methane	< 344
Bis (2-ethylhexyl) phthalate	< 344
Bis (2-chloroisopropyl) ether	< 344
4-Bromophenyl phenyl ether	< 344
Butylbenzylphthalate	< 344
Caprolactam	< 344
Carbazole	< 344
4-Chloroaniline	< 344
4-Chloro-3-methylphenol	< 344
2-Chloronaphthalene	< 344
2-Chlorophenol	< 344
4-Chlorophenyl phenyl ether	< 344
Chrysene	512
1,3-Dichlorobenzene	< 344
1,4-Dichlorobenzene	< 344
1,2-Dichlorobenzene	< 344
Dibenz (a,h) anthracene	< 344
Dibenzofuran	< 344
3,3'-Dichlorobenzidine	< 344
2,4-Dichlorophenol	< 344
Diethyl phthalate	< 344
2,4-Dimethylphenol	< 344
Dimethyl phthalate	< 859

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 344
4,6-Dinitro-2-methylphenol	< 859
2,4-Dinitrophenol	< 859
2,4-Dinitrotoluene	< 344
2,6-Dinitrotoluene	< 344
Di-n-octylphthalate	< 344
Fluoranthene	860
Fluorene	< 344
Hexachlorobenzene	< 344
Hexachlorobutadiene	< 344
Hexachlorocyclopentadiene	< 344
Hexachloroethane	< 344
Indeno (1,2,3-cd) pyrene	< 344
Isophorone	< 344
2-Methylnaphthalene	< 344
2-Methylphenol	< 344
3&4-Methylphenol	< 344
Naphthalene	< 344
2-Nitroaniline	< 859
3-Nitroaniline	< 859
4-Nitroaniline	< 859
Nitrobenzene	< 344
2-Nitrophenol	< 344
4-Nitrophenol	< 859
N-Nitroso-di-n-propylamine	< 344
N-Nitrosodiphenylamine	< 344
Pentachlorophenol	< 859
Phenanthrene	633
Phenol	< 344
Pyrene	840
1,2,4-Trichlorobenzene	< 344
2,4,5-Trichlorophenol	< 859
2,4,6-Trichlorophenol	< 344
1,2,4,5-Tetrachlorobenzene	< 344
2,3,4,6-Tetrachlorophenol	< 344

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56853.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T7.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6325

Client Job Number: 2011.0066.00

Field Location: FAM-SP20-D34-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/31/2011

Compound	Results in ug / Kg
Acenaphthene	J 1,860
Acenaphthylene	< 3,190
Acetophenone	< 3,190
Anthracene	< 3,190
Atrazine	< 3,190
Benzaldehyde	< 3,190
Benzo (a) anthracene	< 3,190
Benzo (a) pyrene	< 3,190
Benzo (b) fluoranthene	< 3,190
Benzo (g,h,i) perylene	< 3,190
Benzo (k) fluoranthene	< 3,190
Biphenyl	3,310
Bis (2-chloroethyl) ether	< 3,190
Bis (2-chloroethoxy) methane	< 3,190
Bis (2-ethylhexyl) phthalate	< 3,190
Bis (2-chloroisopropyl) ether	< 3,190
4-Bromophenyl phenyl ether	< 3,190
Butylbenzylphthalate	< 3,190
Caprolactam	< 3,190
Carbazole	< 3,190
4-Chloroaniline	< 3,190
4-Chloro-3-methylphenol	< 3,190
2-Chloronaphthalene	< 3,190
2-Chlorophenol	< 3,190
4-Chlorophenyl phenyl ether	< 3,190
Chrysene	< 3,190
1,3-Dichlorobenzene	< 3,190
1,4-Dichlorobenzene	< 3,190
1,2-Dichlorobenzene	< 3,190
Dibenz (a,h) anthracene	< 3,190
Dibenzofuran	J 1,750
3,3'-Dichlorobenzidine	< 3,190
2,4-Dichlorophenol	< 3,190
Diethyl phthalate	< 3,190
2,4-Dimethylphenol	< 3,190
Dimethyl phthalate	< 7,980

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 3,190
4,6-Dinitro-2-methylphenol	< 7,980
2,4-Dinitrophenol	< 7,980
2,4-Dinitrotoluene	< 3,190
2,6-Dinitrotoluene	< 3,190
Di-n-octylphthalate	< 3,190
Fluoranthene	< 3,190
Fluorene	3,550
Hexachlorobenzene	< 3,190
Hexachlorobutadiene	< 3,190
Hexachlorocyclopentadiene	< 3,190
Hexachloroethane	< 3,190
Indeno (1,2,3-cd) pyrene	< 3,190
Isophorone	< 3,190
2-Methylnaphthalene	47,800
2-Methylphenol	< 3,190
3&4-Methylphenol	< 3,190
Naphthalene	11,300
2-Nitroaniline	< 7,980
3-Nitroaniline	< 7,980
4-Nitroaniline	< 7,980
Nitrobenzene	< 3,190
2-Nitrophenol	< 3,190
4-Nitrophenol	< 7,980
N-Nitroso-di-n-propylamine	< 3,190
N-Nitrosodiphenylamine	< 3,190
Pentachlorophenol	< 7,980
Phenanthrene	8,350
Phenol	< 3,190
Pyrene	< 3,190
1,2,4-Trichlorobenzene	< 3,190
2,4,5-Trichlorophenol	< 7,980
2,4,6-Trichlorophenol	< 3,190
1,2,4,5-Tetrachlorobenzene	< 3,190
2,3,4,6-Tetrachlorophenol	< 3,190

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56908.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869T8.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6326

Client Job Number: 2011.0066.00

Field Location: FAM-SP21-D15-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/30/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,580
Acenaphthylene	< 1,580
Acetophenone	< 1,580
Anthracene	< 1,580
Atrazine	< 1,580
Benzaldehyde	< 1,580
Benzo (a) anthracene	< 1,580
Benzo (a) pyrene	< 1,580
Benzo (b) fluoranthene	< 1,580
Benzo (g,h,i) perylene	< 1,580
Benzo (k) fluoranthene	< 1,580
Biphenyl	< 1,580
Bis (2-chloroethyl) ether	< 1,580
Bis (2-chloroethoxy) methane	< 1,580
Bis (2-ethylhexyl) phthalate	< 1,580
Bis (2-chloroisopropyl) ether	< 1,580
4-Bromophenyl phenyl ether	< 1,580
Butylbenzylphthalate	< 1,580
Caprolactam	< 1,580
Carbazole	< 1,580
4-Chloroaniline	< 1,580
4-Chloro-3-methylphenol	< 1,580
2-Chloronaphthalene	< 1,580
2-Chlorophenol	< 1,580
4-Chlorophenyl phenyl ether	< 1,580
Chrysene	< 1,580
1,3-Dichlorobenzene	< 1,580
1,4-Dichlorobenzene	< 1,580
1,2-Dichlorobenzene	< 1,580
Dibenz (a,h) anthracene	< 1,580
Dibenzofuran	< 1,580
3,3'-Dichlorobenzidine	< 1,580
2,4-Dichlorophenol	< 1,580
Diethyl phthalate	< 1,580
2,4-Dimethylphenol	< 1,580
Dimethyl phthalate	< 3,940

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,580
4,6-Dinitro-2-methylphenol	< 3,940
2,4-Dinitrophenol	< 3,940
2,4-Dinitrotoluene	< 1,580
2,6-Dinitrotoluene	< 1,580
Di-n-octylphthalate	< 1,580
Fluoranthene	< 1,580
Fluorene	< 1,580
Hexachlorobenzene	< 1,580
Hexachlorobutadiene	< 1,580
Hexachlorocyclopentadiene	< 1,580
Hexachloroethane	< 1,580
Indeno (1,2,3-cd) pyrene	< 1,580
Isophorone	< 1,580
2-Methylnaphthalene	< 1,580
2-Methylphenol	< 1,580
3&4-Methylphenol	< 1,580
Naphthalene	< 1,580
2-Nitroaniline	< 3,940
3-Nitroaniline	< 3,940
4-Nitroaniline	< 3,940
Nitrobenzene	< 1,580
2-Nitrophenol	< 1,580
4-Nitrophenol	< 3,940
N-Nitroso-di-n-propylamine	< 1,580
N-Nitrosodiphenylamine	< 1,580
Pentachlorophenol	< 3,940
Phenanthrene	< 1,580
Phenol	< 1,580
Pyrene	< 1,580
1,2,4-Trichlorobenzene	< 1,580
2,4,5-Trichlorophenol	< 3,940
2,4,6-Trichlorophenol	< 1,580
1,2,4,5-Tetrachlorobenzene	< 1,580
2,3,4,6-Tetrachlorophenol	< 1,580

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56894.D

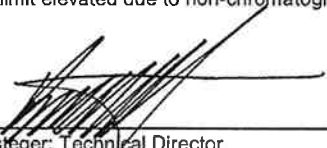
Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Reporting limit elevated due to non-chromatographable interferences

Signature:


Bruce Hoogesteger: Technical Director

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111869T9.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1869A**Lab Sample Number:** 6308**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP3-D1112-S-O**Date Sampled:** 05/10/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/18/2011

Compound	Results in ug / Kg
Acetone	B 95.2
Benzene	< 3.71
Bromochloromethane	< 9.28
Bromodichloromethane	< 3.71
Bromoform	< 9.28
Bromomethane	< 3.71
2-Butanone	86.3
Carbon disulfide	< 3.71
Carbon Tetrachloride	< 3.71
Chlorobenzene	< 3.71
Chloroethane	< 3.71
Chloroform	< 3.71
Chloromethane	< 3.71
Cyclohexane	< 18.6
Dibromochloromethane	< 3.71
1,2-Dibromo-3-Chloropropane	< 18.6
1,2-Dibromoethane	< 3.71
1,2-Dichlorobenzene	< 3.71
1,3-Dichlorobenzene	< 3.71
1,4-Dichlorobenzene	< 3.71
Dichlorodifluoromethane	< 3.71
1,1-Dichloroethane	< 3.71
1,2-Dichloroethane	< 3.71
1,1-Dichloroethene	< 3.71
cis-1,2-Dichloroethene	< 3.71
trans-1,2-Dichloroethene	< 3.71

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.71
cis-1,3-Dichloropropene	< 3.71
trans-1,3-Dichloropropene	< 3.71
Ethylbenzene	< 3.71
Freon 113	< 3.71
2-Hexanone	< 9.28
Isopropylbenzene	< 3.71
Methyl acetate	< 3.71
Methyl tert-butyl Ether	< 3.71
Methylcyclohexane	< 3.71
Methylene chloride	J 5.58
4-Methyl-2-pentanone	< 9.28
Styrene	< 9.28
1,1,2,2-Tetrachloroethane	< 3.71
Tetrachloroethene	< 3.71
Toluene	< 3.71
1,2,3-Trichlorobenzene	< 9.28
1,2,4-Trichlorobenzene	< 9.28
1,1,1-Trichloroethane	< 3.71
1,1,2-Trichloroethane	< 3.71
Trichloroethene	< 3.71
Trichlorofluoromethane	< 3.71
Vinyl chloride	< 3.71
m,p-Xylene	< 3.71
o-Xylene	< 3.71

Method: EPA 8260B

Data File: V84760.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869V1.XLS

**PARADIGM**
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges**Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1869A**Lab Sample Number:** 6309**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP4-D5-S-O**Date Sampled:** 05/10/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/18/2011

Compound	Results in ug / Kg
Acetone	< 18.7
Benzene	< 3.75
Bromochloromethane	< 9.37
Bromodichloromethane	< 3.75
Bromoform	< 9.37
Bromomethane	< 3.75
2-Butanone	< 18.7
Carbon disulfide	< 3.75
Carbon Tetrachloride	< 3.75
Chlorobenzene	< 3.75
Chloroethane	< 3.75
Chloroform	< 3.75
Chloromethane	< 3.75
Cyclohexane	< 18.7
Dibromochloromethane	< 3.75
1,2-Dibromo-3-Chloropropane	< 18.7
1,2-Dibromoethane	< 3.75
1,2-Dichlorobenzene	< 3.75
1,3-Dichlorobenzene	< 3.75
1,4-Dichlorobenzene	< 3.75
Dichlorodifluoromethane	< 3.75
1,1-Dichloroethane	< 3.75
1,2-Dichloroethane	< 3.75
1,1-Dichloroethene	< 3.75
cis-1,2-Dichloroethene	< 3.75
trans-1,2-Dichloroethene	< 3.75

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.75
cis-1,3-Dichloropropene	< 3.75
trans-1,3-Dichloropropene	< 3.75
Ethylbenzene	< 3.75
Freon 113	< 3.75
2-Hexanone	< 9.37
Isopropylbenzene	< 3.75
Methyl acetate	< 3.75
Methyl tert-butyl Ether	< 3.75
Methylcyclohexane	< 3.75
Methylene chloride	J 4.79
4-Methyl-2-pentanone	< 9.37
Styrene	< 9.37
1,1,2,2-Tetrachloroethane	< 3.75
Tetrachloroethene	< 3.75
Toluene	< 3.75
1,2,3-Trichlorobenzene	< 9.37
1,2,4-Trichlorobenzene	< 9.37
1,1,1-Trichloroethane	< 3.75
1,1,2-Trichloroethane	< 3.75
Trichloroethene	< 3.75
Trichlorofluoromethane	< 3.75
Vinyl chloride	< 3.75
m,p-Xylene	< 3.75
o-Xylene	< 3.75

ELAP Number 10958

Method: EPA 8260B

Data File: V84761.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869V2.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6310

Client Job Number: 2011.0066.00

Field Location: FAM-SP5-D78-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 756
Benzene	< 102
Bromochloromethane	< 255
Bromodichloromethane	< 102
Bromoform	< 255
Bromomethane	< 102
2-Butanone	< 510
Carbon disulfide	< 102
Carbon Tetrachloride	< 102
Chlorobenzene	< 102
Chloroethane	< 102
Chloroform	< 102
Chloromethane	< 102
Cyclohexane	< 510
Dibromochloromethane	< 102
1,2-Dibromo-3-Chloropropane	< 510
1,2-Dibromoethane	< 102
1,2-Dichlorobenzene	< 102
1,3-Dichlorobenzene	< 102
1,4-Dichlorobenzene	< 102
Dichlorodifluoromethane	< 102
1,1-Dichloroethane	< 102
1,2-Dichloroethane	< 102
1,1-Dichloroethene	< 102
cis-1,2-Dichloroethene	< 102
trans-1,2-Dichloroethene	< 102

Compound	Results in ug / Kg
1,2-Dichloropropane	< 102
cis-1,3-Dichloropropene	< 102
trans-1,3-Dichloropropene	< 102
Ethylbenzene	271
Freon 113	< 102
2-Hexanone	< 255
Isopropylbenzene	232
Methyl acetate	< 102
Methyl tert-butyl Ether	< 102
Methylcyclohexane	289
Methylene chloride	J 144
4-Methyl-2-pentanone	< 255
Styrene	< 255
1,1,2,2-Tetrachloroethane	< 102
Tetrachloroethene	< 102
Toluene	< 102
1,2,3-Trichlorobenzene	< 255
1,2,4-Trichlorobenzene	< 255
1,1,1-Trichloroethane	< 102
1,1,2-Trichloroethane	< 102
Trichloroethene	< 102
Trichlorofluoromethane	< 102
Vinyl chloride	< 102
m,p-Xylene	264
o-Xylene	< 102

ELAP Number 10958

Method: EPA 8260B

Data File: V84762.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V3.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6311

Client Job Number: 2011.0066.00

Field Location: FAM-SP6-D152-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 28.4
Benzene	< 4.29
Bromochloromethane	< 10.7
Bromodichloromethane	< 4.29
Bromoform	< 10.7
Bromomethane	< 4.29
2-Butanone	42.0
Carbon disulfide	< 4.29
Carbon Tetrachloride	< 4.29
Chlorobenzene	< 4.29
Chloroethane	< 4.29
Chloroform	< 4.29
Chloromethane	< 4.29
Cyclohexane	< 21.4
Dibromochloromethane	< 4.29
1,2-Dibromo-3-Chloropropane	< 21.4
1,2-Dibromoethane	< 4.29
1,2-Dichlorobenzene	< 4.29
1,3-Dichlorobenzene	< 4.29
1,4-Dichlorobenzene	< 4.29
Dichlorodifluoromethane	< 4.29
1,1-Dichloroethane	< 4.29
1,2-Dichloroethane	< 4.29
1,1-Dichloroethene	< 4.29
cis-1,2-Dichloroethene	< 4.29
trans-1,2-Dichloroethene	< 4.29

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.29
cis-1,3-Dichloropropene	< 4.29
trans-1,3-Dichloropropene	< 4.29
Ethylbenzene	< 4.29
Freon 113	< 4.29
2-Hexanone	< 10.7
Isopropylbenzene	< 4.29
Methyl acetate	< 4.29
Methyl tert-butyl Ether	< 4.29
Methylcyclohexane	< 4.29
Methylene chloride	17.5
4-Methyl-2-pentanone	< 10.7
Styrene	< 10.7
1,1,2,2-Tetrachloroethane	< 4.29
Tetrachloroethene	< 4.29
Toluene	< 4.29
1,2,3-Trichlorobenzene	< 10.7
1,2,4-Trichlorobenzene	< 10.7
1,1,1-Trichloroethane	< 4.29
1,1,2-Trichloroethane	< 4.29
Trichloroethene	< 4.29
Trichlorofluoromethane	< 4.29
Vinyl chloride	< 4.29
m,p-Xylene	< 4.29
o-Xylene	< 4.29

ELAP Number 10958

Method: EPA 8260B

Data File: V84763.D

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111869V4.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6312

Client Job Number: 2011.0066.00

Field Location: FAM-SP7-D1314-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	J B 49.1
Benzene	< 10.8
Bromochloromethane	< 26.9
Bromodichloromethane	< 10.8
Bromoform	< 26.9
Bromomethane	< 10.8
2-Butanone	J 37.6
Carbon disulfide	< 10.8
Carbon Tetrachloride	< 10.8
Chlorobenzene	< 10.8
Chloroethane	< 10.8
Chloroform	< 10.8
Chloromethane	< 10.8
Cyclohexane	< 53.9
Dibromochloromethane	< 10.8
1,2-Dibromo-3-Chloropropane	< 53.9
1,2-Dibromoethane	< 10.8
1,2-Dichlorobenzene	< 10.8
1,3-Dichlorobenzene	< 10.8
1,4-Dichlorobenzene	< 10.8
Dichlorodifluoromethane	< 10.8
1,1-Dichloroethane	< 10.8
1,2-Dichloroethane	< 10.8
1,1-Dichloroethene	< 10.8
cis-1,2-Dichloroethene	25.1
trans-1,2-Dichloroethene	< 10.8

Compound	Results in ug / Kg
1,2-Dichloropropane	< 10.8
cis-1,3-Dichloropropene	< 10.8
trans-1,3-Dichloropropene	< 10.8
Ethylbenzene	< 10.8
Freon 113	< 10.8
2-Hexanone	< 26.9
Isopropylbenzene	< 10.8
Methyl acetate	< 10.8
Methyl tert-butyl Ether	< 10.8
Methylcyclohexane	< 10.8
Methylene chloride	J 25.2
4-Methyl-2-pentanone	< 26.9
Styrene	< 26.9
1,1,2,2-Tetrachloroethane	< 10.8
Tetrachloroethene	< 10.8
Toluene	< 10.8
1,2,3-Trichlorobenzene	< 26.9
1,2,4-Trichlorobenzene	< 26.9
1,1,1-Trichloroethane	< 10.8
1,1,2-Trichloroethane	< 10.8
Trichloroethene	232
Trichlorofluoromethane	< 10.8
Vinyl chloride	< 10.8
m,p-Xylene	< 10.8
o-Xylene	< 10.8

ELAP Number 10958

Method: EPA 8260B

Data File: V84798.D

Comments: ug / Kg = microgram per Kilogram

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V5

**PARADIGM**
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges**Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1869A**Lab Sample Number:** 6313**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP8-D2-S-O**Date Sampled:** 05/10/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/18/2011

Compound	Results in ug / Kg
Acetone	B 56.4
Benzene	< 4.46
Bromochloromethane	< 11.2
Bromodichloromethane	< 4.46
Bromoform	< 11.2
Bromomethane	< 4.46
2-Butanone	163
Carbon disulfide	< 4.46
Carbon Tetrachloride	< 4.46
Chlorobenzene	< 4.46
Chloroethane	< 4.46
Chloroform	< 4.46
Chloromethane	< 4.46
Cyclohexane	< 22.3
Dibromochloromethane	< 4.46
1,2-Dibromo-3-Chloropropane	< 22.3
1,2-Dibromoethane	< 4.46
1,2-Dichlorobenzene	< 4.46
1,3-Dichlorobenzene	< 4.46
1,4-Dichlorobenzene	< 4.46
Dichlorodifluoromethane	< 4.46
1,1-Dichloroethane	< 4.46
1,2-Dichloroethane	< 4.46
1,1-Dichloroethene	< 4.46
cis-1,2-Dichloroethene	< 4.46
trans-1,2-Dichloroethene	< 4.46

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.46
cis-1,3-Dichloropropene	< 4.46
trans-1,3-Dichloropropene	< 4.46
Ethylbenzene	< 4.46
Freon 113	< 4.46
2-Hexanone	< 11.2
Isopropylbenzene	< 4.46
Methyl acetate	< 4.46
Methyl tert-butyl Ether	< 4.46
Methylcyclohexane	< 4.46
Methylene chloride	13.5
4-Methyl-2-pentanone	< 11.2
Styrene	< 11.2
1,1,2,2-Tetrachloroethane	< 4.46
Tetrachloroethene	< 4.46
Toluene	< 4.46
1,2,3-Trichlorobenzene	< 11.2
1,2,4-Trichlorobenzene	< 11.2
1,1,1-Trichloroethane	< 4.46
1,1,2-Trichloroethane	< 4.46
Trichloroethene	< 4.46
Trichlorofluoromethane	< 4.46
Vinyl chloride	< 4.46
m,p-Xylene	< 4.46
o-Xylene	< 4.46

ELAP Number 10958

Method: EPA 8260B

Data File: V84767.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869V6.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6314

Client Job Number: 2011.0066.00

Field Location: FAM-SP9-D34-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	B 266
Benzene	< 13.1
Bromochloromethane	< 32.8
Bromodichloromethane	< 13.1
Bromoform	< 32.8
Bromomethane	< 13.1
2-Butanone	82.5
Carbon disulfide	< 13.1
Carbon Tetrachloride	< 13.1
Chlorobenzene	< 13.1
Chloroethane	< 13.1
Chloroform	< 13.1
Chloromethane	< 13.1
Cyclohexane	209
Dibromochloromethane	< 13.1
1,2-Dibromo-3-Chloropropane	< 65.6
1,2-Dibromoethane	< 13.1
1,2-Dichlorobenzene	< 13.1
1,3-Dichlorobenzene	< 13.1
1,4-Dichlorobenzene	< 13.1
Dichlorodifluoromethane	< 13.1
1,1-Dichloroethane	< 13.1
1,2-Dichloroethane	< 13.1
1,1-Dichloroethene	< 13.1
cis-1,2-Dichloroethene	< 13.1
trans-1,2-Dichloroethene	< 13.1

Compound	Results in ug / Kg
1,2-Dichloropropane	< 13.1
cis-1,3-Dichloropropene	< 13.1
trans-1,3-Dichloropropene	< 13.1
Ethylbenzene	64.1
Freon 113	< 13.1
2-Hexanone	< 32.8
Isopropylbenzene	229
Methyl acetate	< 13.1
Methyl tert-butyl Ether	< 13.1
Methylcyclohexane	603
Methylene chloride	J 20.7
4-Methyl-2-pentanone	< 32.8
Styrene	< 32.8
1,1,2,2-Tetrachloroethane	< 13.1
Tetrachloroethene	< 13.1
Toluene	< 13.1
1,2,3-Trichlorobenzene	< 32.8
1,2,4-Trichlorobenzene	< 32.8
1,1,1-Trichloroethane	< 13.1
1,1,2-Trichloroethane	< 13.1
Trichloroethene	< 13.1
Trichlorofluoromethane	< 13.1
Vinyl chloride	< 13.1
m,p-Xylene	74.1
o-Xylene	14.0

ELAP Number 10958

Method: EPA 8260B

Data File: V84768.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V7.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6315

Client Job Number: 2011.0066.00

Field Location: FAM-SP10-D34-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	293
Benzene	< 4.39
Bromochloromethane	< 11.0
Bromodichloromethane	< 4.39
Bromoform	< 11.0
Bromomethane	< 4.39
2-Butanone	206
Carbon disulfide	< 4.39
Carbon Tetrachloride	< 4.39
Chlorobenzene	< 4.39
Chloroethane	< 4.39
Chloroform	< 4.39
Chloromethane	< 4.39
Cyclohexane	< 22.0
Dibromochloromethane	< 4.39
1,2-Dibromo-3-Chloropropane	< 22.0
1,2-Dibromoethane	< 4.39
1,2-Dichlorobenzene	< 4.39
1,3-Dichlorobenzene	< 4.39
1,4-Dichlorobenzene	< 4.39
Dichlorodifluoromethane	< 4.39
1,1-Dichloroethane	< 4.39
1,2-Dichloroethane	< 4.39
1,1-Dichloroethene	< 4.39
cis-1,2-Dichloroethene	J 3.43
trans-1,2-Dichloroethene	< 4.39

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.39
cis-1,3-Dichloropropene	< 4.39
trans-1,3-Dichloropropene	< 4.39
Ethylbenzene	J 2.34
Freon 113	< 4.39
2-Hexanone	< 11.0
Isopropylbenzene	< 4.39
Methyl acetate	< 4.39
Methyl tert-butyl Ether	< 4.39
Methylcyclohexane	< 4.39
Methylene chloride	< 11.0
4-Methyl-2-pentanone	< 11.0
Styrene	< 11.0
1,1,2,2-Tetrachloroethane	< 4.39
Tetrachloroethene	< 4.39
Toluene	4.43
1,2,3-Trichlorobenzene	< 11.0
1,2,4-Trichlorobenzene	< 11.0
1,1,1-Trichloroethane	< 4.39
1,1,2-Trichloroethane	< 4.39
Trichloroethene	J 2.75
Trichlorofluoromethane	< 4.39
Vinyl chloride	< 4.39
m,p-Xylene	5.25
o-Xylene	J 4.35

ELAP Number 10958

Method: EPA 8260B

Data File: V84769.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V8.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6316

Client Job Number: 2011.0066.00

Field Location: FAM-SPDUP-1

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	277
Benzene	< 4.52
Bromochloromethane	< 11.3
Bromodichloromethane	< 4.52
Bromoform	< 11.3
Bromomethane	< 4.52
2-Butanone	171
Carbon disulfide	< 4.52
Carbon Tetrachloride	< 4.52
Chlorobenzene	< 4.52
Chloroethane	< 4.52
Chloroform	< 4.52
Chloromethane	< 4.52
Cyclohexane	< 22.6
Dibromochloromethane	< 4.52
1,2-Dibromo-3-Chloropropane	< 22.6
1,2-Dibromoethane	< 4.52
1,2-Dichlorobenzene	< 4.52
1,3-Dichlorobenzene	< 4.52
1,4-Dichlorobenzene	< 4.52
Dichlorodifluoromethane	< 4.52
1,1-Dichloroethane	< 4.52
1,2-Dichloroethane	< 4.52
1,1-Dichloroethene	< 4.52
cis-1,2-Dichloroethene	< 4.52
trans-1,2-Dichloroethene	< 4.52

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.52
cis-1,3-Dichloropropene	< 4.52
trans-1,3-Dichloropropene	< 4.52
Ethylbenzene	< 4.52
Freon 113	< 4.52
2-Hexanone	< 11.3
Isopropylbenzene	< 4.52
Methyl acetate	< 4.52
Methyl tert-butyl Ether	< 4.52
Methylcyclohexane	< 4.52
Methylene chloride	16.9
4-Methyl-2-pentanone	< 11.3
Styrene	< 11.3
1,1,2,2-Tetrachloroethane	< 4.52
Tetrachloroethene	< 4.52
Toluene	< 4.52
1,2,3-Trichlorobenzene	< 11.3
1,2,4-Trichlorobenzene	< 11.3
1,1,1-Trichloroethane	< 4.52
1,1,2-Trichloroethane	< 4.52
Trichloroethene	< 4.52
Trichlorofluoromethane	< 4.52
Vinyl chloride	< 4.52
m,p-Xylene	< 4.52
o-Xylene	< 4.52

ELAP Number 10958

Method: EPA 8260B

Data File: V84770.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V9.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6317

Client Job Number: 2011.0066.00

Field Location: FAM-SP11-D78-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/10/2011

Date Received: 05/12/2011

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	346
Benzene	< 4.25
Bromochloromethane	< 10.6
Bromodichloromethane	< 4.25
Bromoform	< 10.6
Bromomethane	< 4.25
2-Butanone	217
Carbon disulfide	< 4.25
Carbon Tetrachloride	< 4.25
Chlorobenzene	< 4.25
Chloroethane	< 4.25
Chloroform	< 4.25
Chloromethane	< 4.25
Cyclohexane	< 21.3
Dibromochloromethane	< 4.25
1,2-Dibromo-3-Chloropropane	< 21.3
1,2-Dibromoethane	< 4.25
1,2-Dichlorobenzene	< 4.25
1,3-Dichlorobenzene	< 4.25
1,4-Dichlorobenzene	< 4.25
Dichlorodifluoromethane	< 4.25
1,1-Dichloroethane	< 4.25
1,2-Dichloroethane	< 4.25
1,1-Dichloroethene	< 4.25
cis-1,2-Dichloroethene	< 4.25
trans-1,2-Dichloroethene	< 4.25

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.25
cis-1,3-Dichloropropene	< 4.25
trans-1,3-Dichloropropene	< 4.25
Ethylbenzene	< 4.25
Freon 113	< 4.25
2-Hexanone	< 10.6
Isopropylbenzene	< 4.25
Methyl acetate	< 4.25
Methyl tert-butyl Ether	< 4.25
Methylcyclohexane	< 4.25
Methylene chloride	18.8
4-Methyl-2-pentanone	< 10.6
Styrene	< 10.6
1,1,2,2-Tetrachloroethane	< 4.25
Tetrachloroethene	< 4.25
Toluene	4.98
1,2,3-Trichlorobenzene	< 10.6
1,2,4-Trichlorobenzene	< 10.6
1,1,1-Trichloroethane	< 4.25
1,1,2-Trichloroethane	< 4.25
Trichloroethene	< 4.25
Trichlorofluoromethane	< 4.25
Vinyl chloride	< 4.25
m,p-Xylene	< 4.25
o-Xylene	< 4.25

ELAP Number 10958

Method: EPA 8260B

Data File: V84771.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869V0.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6318

Client Job Number: 2011.0066.00

Field Location: FAM-SP12-D1011-S-O

Date Sampled: 05/10/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 41.4
Benzene	< 4.25
Bromochloromethane	< 10.6
Bromodichloromethane	< 4.25
Bromoform	< 10.6
Bromomethane	< 4.25
2-Butanone	40.3
Carbon disulfide	< 4.25
Carbon Tetrachloride	< 4.25
Chlorobenzene	< 4.25
Chloroethane	< 4.25
Chloroform	< 4.25
Chloromethane	< 4.25
Cyclohexane	< 21.3
Dibromochloromethane	< 4.25
1,2-Dibromo-3-Chloropropane	< 21.3
1,2-Dibromoethane	< 4.25
1,2-Dichlorobenzene	< 4.25
1,3-Dichlorobenzene	< 4.25
1,4-Dichlorobenzene	< 4.25
Dichlorodifluoromethane	< 4.25
1,1-Dichloroethane	< 4.25
1,2-Dichloroethane	< 4.25
1,1-Dichloroethene	< 4.25
cis-1,2-Dichloroethene	< 4.25
trans-1,2-Dichloroethene	< 4.25

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.25
cis-1,3-Dichloropropene	< 4.25
trans-1,3-Dichloropropene	< 4.25
Ethylbenzene	< 4.25
Freon 113	< 4.25
2-Hexanone	< 10.6
Isopropylbenzene	< 4.25
Methyl acetate	< 4.25
Methyl tert-butyl Ether	< 4.25
Methylcyclohexane	< 4.25
Methylene chloride	13.4
4-Methyl-2-pentanone	< 10.6
Styrene	< 10.6
1,1,2,2-Tetrachloroethane	< 4.25
Tetrachloroethene	< 4.25
Toluene	< 4.25
1,2,3-Trichlorobenzene	< 10.6
1,2,4-Trichlorobenzene	< 10.6
1,1,1-Trichloroethane	< 4.25
1,1,2-Trichloroethane	< 4.25
Trichloroethene	< 4.25
Trichlorofluoromethane	< 4.25
Vinyl chloride	< 4.25
m,p-Xylene	< 4.25
o-Xylene	< 4.25

ELAP Number 10958

Method: EPA 8260B

Data File: V84772.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869W1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6319

Client Job Number: 2011.0066.00

Field Location: FAM-SP14-D1012-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 51.7
Benzene	< 4.03
Bromochloromethane	< 10.1
Bromodichloromethane	< 4.03
Bromoform	< 10.1
Bromomethane	< 4.03
2-Butanone	181
Carbon disulfide	< 4.03
Carbon Tetrachloride	< 4.03
Chlorobenzene	< 4.03
Chloroethane	< 4.03
Chloroform	< 4.03
Chloromethane	< 4.03
Cyclohexane	< 20.2
Dibromochloromethane	< 4.03
1,2-Dibromo-3-Chloropropane	< 20.2
1,2-Dibromoethane	< 4.03
1,2-Dichlorobenzene	< 4.03
1,3-Dichlorobenzene	< 4.03
1,4-Dichlorobenzene	< 4.03
Dichlorodifluoromethane	< 4.03
1,1-Dichloroethane	< 4.03
1,2-Dichloroethane	< 4.03
1,1-Dichloroethene	< 4.03
cis-1,2-Dichloroethene	< 4.03
trans-1,2-Dichloroethene	< 4.03

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.03
cis-1,3-Dichloropropene	< 4.03
trans-1,3-Dichloropropene	< 4.03
Ethylbenzene	< 4.03
Freon 113	< 4.03
2-Hexanone	< 10.1
Isopropylbenzene	< 4.03
Methyl acetate	< 4.03
Methyl tert-butyl Ether	< 4.03
Methylcyclohexane	< 4.03
Methylene chloride	26.0
4-Methyl-2-pentanone	< 10.1
Styrene	< 10.1
1,1,2,2-Tetrachloroethane	< 4.03
Tetrachloroethene	< 4.03
Toluene	< 4.03
1,2,3-Trichlorobenzene	< 10.1
1,2,4-Trichlorobenzene	< 10.1
1,1,1-Trichloroethane	< 4.03
1,1,2-Trichloroethane	< 4.03
Trichloroethene	< 4.03
Trichlorofluoromethane	< 4.03
Vinyl chloride	< 4.03
m,p-Xylene	< 4.03
o-Xylene	< 4.03

ELAP Number 10958

Method: EPA 8260B

Data File: V84773.D

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111869W2.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6320

Client Job Number: 2011.0066.00

Field Location: FAM-SP16-D34-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 141
Benzene	< 10.2
Bromochloromethane	< 25.5
Bromodichloromethane	< 10.2
Bromoform	< 25.5
Bromomethane	< 10.2
2-Butanone	154
Carbon disulfide	< 10.2
Carbon Tetrachloride	< 10.2
Chlorobenzene	< 10.2
Chloroethane	< 10.2
Chloroform	< 10.2
Chloromethane	< 10.2
Cyclohexane	J 50.9
Dibromochloromethane	< 10.2
1,2-Dibromo-3-Chloropropane	< 51.0
1,2-Dibromoethane	< 10.2
1,2-Dichlorobenzene	< 10.2
1,3-Dichlorobenzene	< 10.2
1,4-Dichlorobenzene	< 10.2
Dichlorodifluoromethane	< 10.2
1,1-Dichloroethane	< 10.2
1,2-Dichloroethane	< 10.2
1,1-Dichloroethene	< 10.2
cis-1,2-Dichloroethene	< 10.2
trans-1,2-Dichloroethene	< 10.2

Compound	Results in ug / Kg
1,2-Dichloropropane	< 10.2
cis-1,3-Dichloropropene	< 10.2
trans-1,3-Dichloropropene	< 10.2
Ethylbenzene	120
Freon 113	< 10.2
2-Hexanone	< 25.5
Isopropylbenzene	18.5
Methyl acetate	< 10.2
Methyl tert-butyl Ether	< 10.2
Methylcyclohexane	122
Methylene chloride	J 21.9
4-Methyl-2-pentanone	< 25.5
Styrene	< 25.5
1,1,2,2-Tetrachloroethane	< 10.2
Tetrachloroethene	< 10.2
Toluene	< 10.2
1,2,3-Trichlorobenzene	< 25.5
1,2,4-Trichlorobenzene	< 25.5
1,1,1-Trichloroethane	< 10.2
1,1,2-Trichloroethane	< 10.2
Trichloroethene	< 10.2
Trichlorofluoromethane	< 10.2
Vinyl chloride	< 10.2
m,p-Xylene	146
o-Xylene	J 5.32

ELAP Number 10958

Method: EPA 8260B

Data File: V84801.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869W3.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6321

Client Job Number: 2011.0066.00

Field Location: FAM-SP17-D78-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 33.0
Benzene	< 4.45
Bromochloromethane	< 11.1
Bromodichloromethane	< 4.45
Bromoform	< 11.1
Bromomethane	< 4.45
2-Butanone	57.9
Carbon disulfide	< 4.45
Carbon Tetrachloride	< 4.45
Chlorobenzene	< 4.45
Chloroethane	< 4.45
Chloroform	< 4.45
Chloromethane	< 4.45
Cyclohexane	< 22.2
Dibromochloromethane	< 4.45
1,2-Dibromo-3-Chloropropane	< 22.2
1,2-Dibromoethane	< 4.45
1,2-Dichlorobenzene	< 4.45
1,3-Dichlorobenzene	< 4.45
1,4-Dichlorobenzene	< 4.45
Dichlorodifluoromethane	< 4.45
1,1-Dichloroethane	< 4.45
1,2-Dichloroethane	< 4.45
1,1-Dichloroethene	< 4.45
cis-1,2-Dichloroethene	< 4.45
trans-1,2-Dichloroethene	< 4.45

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.45
cis-1,3-Dichloropropene	< 4.45
trans-1,3-Dichloropropene	< 4.45
Ethylbenzene	< 4.45
Freon 113	< 4.45
2-Hexanone	< 11.1
Isopropylbenzene	< 4.45
Methyl acetate	< 4.45
Methyl tert-butyl Ether	< 4.45
Methylcyclohexane	< 4.45
Methylene chloride	14.6
4-Methyl-2-pentanone	< 11.1
Styrene	< 11.1
1,1,2,2-Tetrachloroethane	< 4.45
Tetrachloroethene	< 4.45
Toluene	< 4.45
1,2,3-Trichlorobenzene	< 11.1
1,2,4-Trichlorobenzene	< 11.1
1,1,1-Trichloroethane	< 4.45
1,1,2-Trichloroethane	< 4.45
Trichloroethene	< 4.45
Trichlorofluoromethane	< 4.45
Vinyl chloride	< 4.45
m,p-Xylene	< 4.45
o-Xylene	< 4.45

ELAP Number 10958

Method: EPA 8260B

Data File: V84802.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869W4.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6322

Client Job Number: 2011.0066.00

Field Location: FAM-SPDUP-2

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 53.9
Benzene	< 4.14
Bromochloromethane	< 10.4
Bromodichloromethane	< 4.14
Bromoform	< 10.4
Bromomethane	< 4.14
2-Butanone	212
Carbon disulfide	< 4.14
Carbon Tetrachloride	< 4.14
Chlorobenzene	< 4.14
Chloroethane	< 4.14
Chloroform	< 4.14
Chloromethane	< 4.14
Cyclohexane	< 20.7
Dibromochloromethane	< 4.14
1,2-Dibromo-3-Chloropropane	< 20.7
1,2-Dibromoethane	< 4.14
1,2-Dichlorobenzene	< 4.14
1,3-Dichlorobenzene	< 4.14
1,4-Dichlorobenzene	< 4.14
Dichlorodifluoromethane	< 4.14
1,1-Dichloroethane	< 4.14
1,2-Dichloroethane	< 4.14
1,1-Dichloroethene	< 4.14
cis-1,2-Dichloroethene	< 4.14
trans-1,2-Dichloroethene	< 4.14

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.14
cis-1,3-Dichloropropene	< 4.14
trans-1,3-Dichloropropene	< 4.14
Ethylbenzene	< 4.14
Freon 113	< 4.14
2-Hexanone	< 10.4
Isopropylbenzene	< 4.14
Methyl acetate	< 4.14
Methyl tert-butyl Ether	< 4.14
Methylcyclohexane	< 4.14
Methylene chloride	14.9
4-Methyl-2-pentanone	< 10.4
Styrene	< 10.4
1,1,2,2-Tetrachloroethane	< 4.14
Tetrachloroethene	< 4.14
Toluene	< 4.14
1,2,3-Trichlorobenzene	< 10.4
1,2,4-Trichlorobenzene	< 10.4
1,1,1-Trichloroethane	< 4.14
1,1,2-Trichloroethane	< 4.14
Trichloroethene	< 4.14
Trichlorofluoromethane	< 4.14
Vinyl chloride	< 4.14
m,p-Xylene	J 2.23
o-Xylene	< 4.14

ELAP Number 10958

Method: EPA 8260B

Data File: V84803.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111869W5.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6323

Client Job Number: 2011.0066.00

Field Location: FAM-SP18-D23-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 31.5
Benzene	< 4.40
Bromochloromethane	< 11.0
Bromodichloromethane	< 4.40
Bromoform	< 11.0
Bromomethane	< 4.40
2-Butanone	45.3
Carbon disulfide	< 4.40
Carbon Tetrachloride	< 4.40
Chlorobenzene	< 4.40
Chloroethane	< 4.40
Chloroform	< 4.40
Chloromethane	< 4.40
Cyclohexane	< 22.0
Dibromochloromethane	< 4.40
1,2-Dibromo-3-Chloropropane	< 22.0
1,2-Dibromoethane	< 4.40
1,2-Dichlorobenzene	< 4.40
1,3-Dichlorobenzene	< 4.40
1,4-Dichlorobenzene	< 4.40
Dichlorodifluoromethane	< 4.40
1,1-Dichloroethane	< 4.40
1,2-Dichloroethane	< 4.40
1,1-Dichloroethene	< 4.40
cis-1,2-Dichloroethene	< 4.40
trans-1,2-Dichloroethene	< 4.40

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.40
cis-1,3-Dichloropropene	< 4.40
trans-1,3-Dichloropropene	< 4.40
Ethylbenzene	< 4.40
Freon 113	< 4.40
2-Hexanone	< 11.0
Isopropylbenzene	< 4.40
Methyl acetate	< 4.40
Methyl tert-butyl Ether	< 4.40
Methylcyclohexane	< 4.40
Methylene chloride	J 11.0
4-Methyl-2-pentanone	< 11.0
Styrene	< 11.0
1,1,2,2-Tetrachloroethane	< 4.40
Tetrachloroethene	< 4.40
Toluene	< 4.40
1,2,3-Trichlorobenzene	< 11.0
1,2,4-Trichlorobenzene	< 11.0
1,1,1-Trichloroethane	< 4.40
1,1,2-Trichloroethane	< 4.40
Trichloroethene	< 4.40
Trichlorofluoromethane	< 4.40
Vinyl chloride	< 4.40
m,p-Xylene	< 4.40
o-Xylene	< 4.40

ELAP Number 10958

Method: EPA 8260B

Data File: V84804.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869W6.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6324

Client Job Number: 2011.0066.00

Field Location: FAM-SP19-D1.5-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	J B 18.4
Benzene	< 4.32
Bromochloromethane	< 10.8
Bromodichloromethane	< 4.32
Bromoform	< 10.8
Bromomethane	< 4.32
2-Butanone	< 21.6
Carbon disulfide	< 4.32
Carbon Tetrachloride	< 4.32
Chlorobenzene	< 4.32
Chloroethane	< 4.32
Chloroform	< 4.32
Chloromethane	< 4.32
Cyclohexane	J 20.1
Dibromochloromethane	< 4.32
1,2-Dibromo-3-Chloropropane	< 21.6
1,2-Dibromoethane	< 4.32
1,2-Dichlorobenzene	< 4.32
1,3-Dichlorobenzene	< 4.32
1,4-Dichlorobenzene	< 4.32
Dichlorodifluoromethane	< 4.32
1,1-Dichloroethane	< 4.32
1,2-Dichloroethane	< 4.32
1,1-Dichloroethene	< 4.32
cis-1,2-Dichloroethene	< 4.32
trans-1,2-Dichloroethene	< 4.32

ELAP Number 10958

Method: EPA 8260B

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.32
cis-1,3-Dichloropropene	< 4.32
trans-1,3-Dichloropropene	< 4.32
Ethylbenzene	< 4.32
Freon 113	< 4.32
2-Hexanone	< 10.8
Isopropylbenzene	< 4.32
Methyl acetate	< 4.32
Methyl tert-butyl Ether	< 4.32
Methylcyclohexane	< 4.32
Methylene chloride	J 8.45
4-Methyl-2-pentanone	< 10.8
Styrene	< 10.8
1,1,2,2-Tetrachloroethane	< 4.32
Tetrachloroethene	< 4.32
Toluene	< 4.32
1,2,3-Trichlorobenzene	< 10.8
1,2,4-Trichlorobenzene	< 10.8
1,1,1-Trichloroethane	< 4.32
1,1,2-Trichloroethane	< 4.32
Trichloroethene	< 4.32
Trichlorofluoromethane	< 4.32
Vinyl chloride	< 4.32
m,p-Xylene	< 4.32
o-Xylene	< 4.32

Data File: V84805.D

Comments: ug / Kg = microgram per Kilogram

Internal Standard and Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

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111869W7.XLS

**PARADIGM**
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/SludgesClient: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6325

Client Job Number: 2011.0066.00

Field Location: FAM-SP20-D34-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 320
Benzene	< 41.4
Bromochloromethane	< 104
Bromodichloromethane	< 41.4
Bromoform	< 104
Bromomethane	< 41.4
2-Butanone	< 207
Carbon disulfide	< 41.4
Carbon Tetrachloride	< 41.4
Chlorobenzene	< 41.4
Chloroethane	< 41.4
Chloroform	< 41.4
Chloromethane	< 41.4
Cyclohexane	< 207
Dibromochloromethane	< 41.4
1,2-Dibromo-3-Chloropropane	< 207
1,2-Dibromoethane	< 41.4
1,2-Dichlorobenzene	< 41.4
1,3-Dichlorobenzene	< 41.4
1,4-Dichlorobenzene	< 41.4
Dichlorodifluoromethane	< 41.4
1,1-Dichloroethane	< 41.4
1,2-Dichloroethane	< 41.4
1,1-Dichloroethene	< 41.4
cis-1,2-Dichloroethene	< 41.4
trans-1,2-Dichloroethene	< 41.4

Compound	Results in ug / Kg
1,2-Dichloropropane	< 41.4
cis-1,3-Dichloropropene	< 41.4
trans-1,3-Dichloropropene	< 41.4
Ethylbenzene	385
Freon 113	< 41.4
2-Hexanone	< 104
Isopropylbenzene	335
Methyl acetate	< 41.4
Methyl tert-butyl Ether	< 41.4
Methylcyclohexane	385
Methylene chloride	J 79.9
4-Methyl-2-pentanone	< 104
Styrene	< 104
1,1,2,2-Tetrachloroethane	< 41.4
Tetrachloroethene	< 41.4
Toluene	< 41.4
1,2,3-Trichlorobenzene	< 104
1,2,4-Trichlorobenzene	< 104
1,1,1-Trichloroethane	< 41.4
1,1,2-Trichloroethane	< 41.4
Trichloroethene	< 41.4
Trichlorofluoromethane	< 41.4
Vinyl chloride	< 41.4
m,p-Xylene	84.4
o-Xylene	J 37.9

ELAP Number 10958

Method: EPA 8260B

Data File: V84806.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869W8.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: 6326

Client Job Number: 2011.0066.00

Field Location: FAM-SP21-D15-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 36.7
Benzene	< 3.99
Bromochloromethane	< 9.96
Bromodichloromethane	< 3.99
Bromoform	< 9.96
Bromomethane	< 3.99
2-Butanone	36.3
Carbon disulfide	< 3.99
Carbon Tetrachloride	< 3.99
Chlorobenzene	< 3.99
Chloroethane	< 3.99
Chloroform	< 3.99
Chloromethane	< 3.99
Cyclohexane	< 19.9
Dibromochloromethane	< 3.99
1,2-Dibromo-3-Chloropropane	< 19.9
1,2-Dibromoethane	< 3.99
1,2-Dichlorobenzene	< 3.99
1,3-Dichlorobenzene	< 3.99
1,4-Dichlorobenzene	< 3.99
Dichlorodifluoromethane	< 3.99
1,1-Dichloroethane	< 3.99
1,2-Dichloroethane	< 3.99
1,1-Dichloroethene	< 3.99
cis-1,2-Dichloroethene	< 3.99
trans-1,2-Dichloroethene	< 3.99

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.99
cis-1,3-Dichloropropene	< 3.99
trans-1,3-Dichloropropene	< 3.99
Ethylbenzene	< 3.99
Freon 113	< 3.99
2-Hexanone	< 9.96
Isopropylbenzene	< 3.99
Methyl acetate	< 3.99
Methyl tert-butyl Ether	< 3.99
Methylcyclohexane	< 3.99
Methylene chloride	16.4
4-Methyl-2-pentanone	< 9.96
Styrene	< 9.96
1,1,2,2-Tetrachloroethane	< 3.99
Tetrachloroethene	< 3.99
Toluene	< 3.99
1,2,3-Trichlorobenzene	< 9.96
1,2,4-Trichlorobenzene	< 9.96
1,1,1-Trichloroethane	< 3.99
1,1,2-Trichloroethane	< 3.99
Trichloroethene	< 3.99
Trichlorofluoromethane	< 3.99
Vinyl chloride	< 3.99
m,p-Xylene	< 3.99
o-Xylene	< 3.99

ELAP Number 10958

Method: EPA 8260B

Data File: V84807.D

Comments: ug / Kg = microgram per Kilogram

Internal Standard and Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111869W9.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: Soil LRB 05/18

Client Job Number: 2011.0066.00

Field Location: N/A

Date Sampled: N/A

Field ID Number: N/A

Date Received: N/A

Sample Type: Soil

Date Analyzed: 05/18/2011

Compound	Results in ug / Kg
Acetone	J 17.3
Benzene	< 4.00
Bromochloromethane	< 10.0
Bromodichloromethane	< 4.00
Bromoform	< 10.0
Bromomethane	< 4.00
2-Butanone	< 20.0
Carbon disulfide	< 4.00
Carbon Tetrachloride	< 4.00
Chlorobenzene	< 4.00
Chloroethane	< 4.00
Chloroform	< 4.00
Chloromethane	< 4.00
Cyclohexane	< 20.0
Dibromochloromethane	< 4.00
1,2-Dibromo-3-Chloropropane	< 20.0
1,2-Dibromoethane	< 4.00
1,2-Dichlorobenzene	< 4.00
1,3-Dichlorobenzene	< 4.00
1,4-Dichlorobenzene	< 4.00
Dichlorodifluoromethane	< 4.00
1,1-Dichloroethane	< 4.00
1,2-Dichloroethane	< 4.00
1,1-Dichloroethene	< 4.00
cis-1,2-Dichloroethene	< 4.00
trans-1,2-Dichloroethene	< 4.00

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.00
cis-1,3-Dichloropropene	< 4.00
trans-1,3-Dichloropropene	< 4.00
Ethylbenzene	< 4.00
Freon 113	< 4.00
2-Hexanone	< 10.0
Isopropylbenzene	< 4.00
Methyl acetate	< 4.00
Methyl tert-butyl Ether	< 4.00
Methylcyclohexane	< 4.00
Methylene chloride	< 10.0
4-Methyl-2-pentanone	< 10.0
Styrene	< 10.0
1,1,2,2-Tetrachloroethane	< 4.00
Tetrachloroethene	< 4.00
Toluene	< 4.00
1,2,3-Trichlorobenzene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
1,1,1-Trichloroethane	< 4.00
1,1,2-Trichloroethane	< 4.00
Trichloroethene	< 4.00
Trichlorofluoromethane	< 4.00
Vinyl chloride	< 4.00
m,p-Xylene	< 4.00
o-Xylene	< 4.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84748.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111869B1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1869A

Lab Sample Number: Soil LRB 05/19

Client Job Number: 2011.0066.00

Field Location: N/A

Date Sampled: N/A

Field ID Number: N/A

Date Received: N/A

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	J 18.2
Benzene	< 4.00
Bromochloromethane	< 10.0
Bromodichloromethane	< 4.00
Bromoform	< 10.0
Bromomethane	< 4.00
2-Butanone	< 20.0
Carbon disulfide	< 4.00
Carbon Tetrachloride	< 4.00
Chlorobenzene	< 4.00
Chloroethane	< 4.00
Chloroform	< 4.00
Chloromethane	< 4.00
Cyclohexane	< 20.0
Dibromochloromethane	< 4.00
1,2-Dibromo-3-Chloropropane	< 20.0
1,2-Dibromoethane	< 4.00
1,2-Dichlorobenzene	< 4.00
1,3-Dichlorobenzene	< 4.00
1,4-Dichlorobenzene	< 4.00
Dichlorodifluoromethane	< 4.00
1,1-Dichloroethane	< 4.00
1,2-Dichloroethane	< 4.00
1,1-Dichloroethene	< 4.00
cis-1,2-Dichloroethene	< 4.00
trans-1,2-Dichloroethene	< 4.00

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.00
cis-1,3-Dichloropropene	< 4.00
trans-1,3-Dichloropropene	< 4.00
Ethylbenzene	< 4.00
Freon 113	< 4.00
2-Hexanone	< 10.0
Isopropylbenzene	< 4.00
Methyl acetate	< 4.00
Methyl tert-butyl Ether	< 4.00
Methylcyclohexane	< 4.00
Methylene chloride	< 10.0
4-Methyl-2-pentanone	< 10.0
Styrene	< 10.0
1,1,2,2-Tetrachloroethane	< 4.00
Tetrachloroethene	< 4.00
Toluene	< 4.00
1,2,3-Trichlorobenzene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
1,1,1-Trichloroethane	< 4.00
1,1,2-Trichloroethane	< 4.00
Trichloroethene	< 4.00
Trichlorofluoromethane	< 4.00
Vinyl chloride	< 4.00
m,p-Xylene	< 4.00
o-Xylene	< 4.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84796.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111869B2.XLS

CHAIN OF CUSTODY



REPORT TO:		INVOICE TO:	
COMPANY: <u>TUGA</u>	COMPANY: <u>Same</u>	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: <u>620 Main Street</u>	ADDRESS:	<u>11-1869A</u>	<u>2011.066.000</u>
CITY: <u>Buffalo</u>	CITY:	TURNAROUND TIME: (WORKING DAYS)	
STATE: <u>NY</u>	STATE:	<u>per request EAH 5/12</u>	
ZIP: <u>14202</u>	ZIP:		
PHONE: <u>716 844 739</u>	PHONE:		
FAX:	FAX:		
ATTN: <u>J. Marzella</u>	ATTN:		
COMMENTS: <u>ASP Cat B per 50/5H. EAH 5/9</u>	Quotation # <u>5H021011</u> ☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐ 10 STD OTHER		

DATE	TIME	COMPOSITE	GRADES	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAMINANTS	TESTS	REMARKS	PARADIGM LAB SAMPLE NUMBER
15/10/11	1015	X		FAM-SP3-DH12-3-0	Soil	1	X X X	Per Request form, do 8260 TCL ASP 2008, 8270 ARN ASP 2008.	6308
2	1050	X		FAM-SP4-05-5-0	1	1	X X X		6309
3	1120	X		FAM-SP5-078-5-0	1	1	X X X		6310
4	1225	X		FAM-SP6-0152-5-0	1	1	X X X		6311
5	1300	X		FAM-SP7-01314-5-0	3	3	X X X	MS/MSD	6312
6	1345	X		FAM-SP8-02-5-0	1	1	X X X		6313
7	1430	X		FAM-SP9-034-5-0	1	1	X X X		6314
8	1500	X		FAM-SP10-034-5-0	1	1	X X X		6315
9	1520	X		FAM-SPDUP-1	1	1	X X X		6316
10	1540	X		FAM-SP11-078-5-0	1	1	X X X		6317

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/EAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	Y ☒ N ☐
Preservation:	Y ☐ N ☐
Holding Time:	Y ☒ N ☐
Temperature:	Y ☒ N ☐
Comments:	<u>On ice 5°C 5-12-11</u>

Sampled By	Date/Time	Total Cost
<u>Justin Baller</u>	<u>5/10/11</u>	
Relinquished By	Date/Time	
<u>David Collett</u>	<u>5/12/11</u>	
Received By	Date/Time	P.L.F.
<u>Elizabeth A. Honch</u>	<u>5/12/11 1450</u>	☐
Received @ Lab By	Date/Time	

Cooler Rec'd w/o Custody seals, but was sealed w/ tape. EAH 5/12

Per Request form, do 8260 TCL ASP 2008, 8270 ARN ASP 2008.

CHAIN OF CUSTODY



PROJECT NAME/SITE NAME:
A-1 Metals

REPORT TO:		INVOICE TO:	
COMPANY: <i>TUGA</i>	COMPANY: <i>Same</i>	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: <i>620 Main Street</i>	ADDRESS:	<i>11-18694 2011.0066.00</i>	
CITY: <i>Buffalo</i> STATE: <i>NY</i> ZIP: <i>14202</i>	CITY:	TURNAROUND TIME: (WORKING DAYS)	
PHONE: <i>716 849 8735</i> FAX:	PHONE:	<i>per quote</i>	
ATTN: <i>J. Manzella</i>	ATTN:	☐ 1 ☐ 2 ☐ 3 ☒ 5 ☐ 10 STD OTHER	
COMMENTS:			

REQUESTED ANALYSIS

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T T R I X	C O N T A I N M E N T B I N D E R S	TCL VOCs	TCL SVOCs	TAL Metals	TCL PCBs	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 5/10/11	1610		X	FAM-SP12-D1011-5-0	soil	1	X	X				6318
2 5/11/11	910		X	FAM-SP14-D1012-5-0		1	X	X	X			6319
3 5/11/11	910		X	FAM-SP16-034-5-0		1	X	X	X			6320
4	1025		X	FAM-SP17-078-5-0		1	X	X	X			6321
5	1120		X	FAM-SP17-078-5-0		1	X	X	X			6322
6	1200		X	FAM-SP19-D23-5-0		1	X	X	X			6323
7	1230		X	FAM-SP19-D23-5-0		1	X	X	X			6324
8	1300		X	FAM-SP19-D15-5-0		1	X	X	X			6325
9	1340		X	FAM-SP20-034-5-0		1	X	X	X			6326
10	1420		X	FAM-SP21-015-5-0		1	X	X	X			6327

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 2101241/2421243/244

Receipt Parameter	NELAC Compliance
Container Type:	☒ Y ☐ N
Preservation:	☐ Y ☐ N
Holding Time:	☒ Y ☐ N
Temperature:	☒ Y ☐ N
Comments:	<i>on ice 5°C 5-12-11 @ 1420</i>

Sampled By: <i>Lucy Kellum</i>	Date/Time: <i>5/11/11</i>	Total Cost:
Relinquished By: <i>Shirley Elliott</i>	Date/Time: <i>5/12/11</i>	
Received By: <i>Elizabeth A. Honick</i>	Date/Time: <i>5-12-11 9:25</i>	
Received @ Lab By:	Date/Time:	P.L.F.

2 ee
EPA
514



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1870A

Client Job Site: A&A Metals

Lab Sample No.: 6327

Client Job No.: 2011.0066.00

Sample Type: Soil

Field Location: FAM-SP22-D23-S-0

Date Sampled: 05/11/2011

Field ID No.: N/A

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	9900
Antimony	05/31/2011	SW846 3050/6010	< 6.53
Arsenic	05/31/2011	SW846 3050/6010	9.59
Barium	05/31/2011	SW846 3050/6010	42.2
Beryllium	05/31/2011	SW846 3050/6010	0.446 J
Cadmium	05/31/2011	SW846 3050/6010	0.294 J
Calcium	05/31/2011	SW846 3050/6010	16400
Chromium	05/31/2011	SW846 3050/6010	12.9
Cobalt	05/31/2011	SW846 3050/6010	8.51
Copper	05/31/2011	SW846 3050/6010	29.9
Iron	05/31/2011	SW846 3050/6010	20000
Lead	05/31/2011	SW846 3050/6010	15.3
Magnesium	05/31/2011	SW846 3050/6010	4180
Manganese	05/31/2011	SW846 3050/6010	314
Mercury	05/24/2011	SW846 7471	0.0217
Nickel	05/31/2011	SW846 3050/6010	22.3
Potassium	05/31/2011	SW846 3050/6010	908
Selenium	05/31/2011	SW846 3050/6010	< 1.09
Silver	05/31/2011	SW846 3050/6010	< 1.09
Sodium	05/31/2011	SW846 3050/6010	< 273
Thallium	05/31/2011	SW846 3050/6010	< 2.73
Vanadium	05/31/2011	SW846 3050/6010	18.2
Zinc	05/31/2011	SW846 3050/6010	85.4

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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including compliance with sample condition requirements upon receipt.

File ID:111870A.xls



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Lab Project No.: 11-1870A

Lab Sample No.: 6328

Client Job Site: A&A Metals

Sample Type: Soil

Client Job No.: 2011.0066.00

Date Sampled: 05/11/2011

Field Location: FAM-SP23-D78-S-0

Date Received: 05/12/2011

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	11800
Antimony	05/31/2011	SW846 3050/6010	< 6.10 M
Arsenic	05/31/2011	SW846 3050/6010	7.98 M
Barium	05/31/2011	SW846 3050/6010	21.6 M
Beryllium	05/31/2011	SW846 3050/6010	0.509 M
Cadmium	05/31/2011	SW846 3050/6010	< 0.509 M
Calcium	05/31/2011	SW846 3050/6010	6770 M
Chromium	05/31/2011	SW846 3050/6010	15.0 M
Cobalt	05/31/2011	SW846 3050/6010	11.4 M
Copper	05/31/2011	SW846 3050/6010	28.6
Iron	05/31/2011	SW846 3050/6010	23200
Lead	05/31/2011	SW846 3050/6010	18.5 M
Magnesium	05/31/2011	SW846 3050/6010	5570 M
Manganese	05/31/2011	SW846 3050/6010	289 DM
Mercury	05/24/2011	SW846 7471	0.0097 D
Nickel	05/31/2011	SW846 3050/6010	24.8 M
Potassium	05/31/2011	SW846 3050/6010	1060
Selenium	05/31/2011	SW846 3050/6010	< 1.02 M
Silver	05/31/2011	SW846 3050/6010	< 1.02 M
Sodium	05/31/2011	SW846 3050/6010	< 255
Thallium	05/31/2011	SW846 3050/6010	< 2.55 M
Vanadium	05/31/2011	SW846 3050/6010	16.3 M
Zinc	05/31/2011	SW846 3050/6010	69.3 M

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP24-D8-S-0

Field ID No.: N/A

Lab Project No.: 11-1870A

Lab Sample No.: 6329

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	8160
Antimony	05/31/2011	SW846 3050/6010	< 6.13
Arsenic	05/31/2011	SW846 3050/6010	9.48
Barium	05/31/2011	SW846 3050/6010	23.8
Beryllium	05/31/2011	SW846 3050/6010	0.357 J
Cadmium	05/31/2011	SW846 3050/6010	< 0.511
Calcium	05/31/2011	SW846 3050/6010	20600
Chromium	05/31/2011	SW846 3050/6010	11.1
Cobalt	05/31/2011	SW846 3050/6010	8.02
Copper	05/31/2011	SW846 3050/6010	26.2
Iron	05/31/2011	SW846 3050/6010	19100
Lead	05/31/2011	SW846 3050/6010	7.10
Magnesium	05/31/2011	SW846 3050/6010	6700
Manganese	05/31/2011	SW846 3050/6010	327
Mercury	05/24/2011	SW846 7471	0.0131
Nickel	05/31/2011	SW846 3050/6010	19.6
Potassium	05/31/2011	SW846 3050/6010	925
Selenium	05/31/2011	SW846 3050/6010	0.675 J
Silver	05/31/2011	SW846 3050/6010	< 1.02
Sodium	05/31/2011	SW846 3050/6010	< 256
Thallium	05/31/2011	SW846 3050/6010	< 2.56
Vanadium	05/31/2011	SW846 3050/6010	15.2
Zinc	05/31/2011	SW846 3050/6010	64.6

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP25-D910-S-0

Field ID No.: N/A

Lab Project No.: 11-1870A

Lab Sample No.: 6330

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	9170
Antimony	05/31/2011	SW846 3050/6010	< 6.99
Arsenic	05/31/2011	SW846 3050/6010	11.2
Barium	05/31/2011	SW846 3050/6010	39.1
Beryllium	05/31/2011	SW846 3050/6010	0.443 J
Cadmium	05/31/2011	SW846 3050/6010	0.373 J
Calcium	05/31/2011	SW846 3050/6010	17000
Chromium	05/31/2011	SW846 3050/6010	17.3
Cobalt	05/31/2011	SW846 3050/6010	9.72
Copper	05/31/2011	SW846 3050/6010	35.7
Iron	05/31/2011	SW846 3050/6010	23600
Lead	05/31/2011	SW846 3050/6010	17.8
Magnesium	05/31/2011	SW846 3050/6010	6110
Manganese	05/31/2011	SW846 3050/6010	463
Mercury	05/24/2011	SW846 7471	0.0988
Nickel	05/31/2011	SW846 3050/6010	25.2
Potassium	05/31/2011	SW846 3050/6010	13600
Selenium	05/31/2011	SW846 3050/6010	< 1.16
Silver	05/31/2011	SW846 3050/6010	< 1.16
Sodium	05/31/2011	SW846 3050/6010	< 291
Thallium	05/31/2011	SW846 3050/6010	< 2.91
Vanadium	05/31/2011	SW846 3050/6010	17.2
Zinc	05/31/2011	SW846 3050/6010	106

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111870A.xls



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SP26-D23-S-0
Field ID No.: N/A

Lab Project No.: 11-1870A

Lab Sample No.: 6331

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	11600
Antimony	05/31/2011	SW846 3050/6010	< 6.65
Arsenic	05/31/2011	SW846 3050/6010	4.83
Barium	05/31/2011	SW846 3050/6010	40.8
Beryllium	05/31/2011	SW846 3050/6010	0.389 J
Cadmium	05/31/2011	SW846 3050/6010	0.322 J
Calcium	05/31/2011	SW846 3050/6010	1270
Chromium	05/31/2011	SW846 3050/6010	12.5
Cobalt	05/31/2011	SW846 3050/6010	7.05
Copper	05/31/2011	SW846 3050/6010	11.2
Iron	05/31/2011	SW846 3050/6010	14700
Lead	05/31/2011	SW846 3050/6010	10.0
Magnesium	05/31/2011	SW846 3050/6010	2100
Manganese	05/31/2011	SW846 3050/6010	648
Mercury	05/24/2011	SW846 7471	0.0659
Nickel	05/31/2011	SW846 3050/6010	13.4
Potassium	05/31/2011	SW846 3050/6010	593
Selenium	05/31/2011	SW846 3050/6010	< 1.11
Silver	05/31/2011	SW846 3050/6010	< 1.11
Sodium	05/31/2011	SW846 3050/6010	< 278
Thallium	05/31/2011	SW846 3050/6010	< 2.78
Vanadium	05/31/2011	SW846 3050/6010	20.2
Zinc	05/31/2011	SW846 3050/6010	53.7

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111870A.xls

**Semi-Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1870A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 6327**Field Location:** FAM-SP22-D23-S-0**Date Sampled:** 05/11/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 316
Acenaphthylene	< 316
Acetophenone	< 316
Anthracene	< 316
Atrazine	< 316
Benzaldehyde	< 316
Benzo (a) anthracene	< 316
Benzo (a) pyrene	< 316
Benzo (b) fluoranthene	< 316
Benzo (g,h,i) perylene	< 316
Benzo (k) fluoranthene	< 316
Biphenyl	< 316
Bis (2-chloroethyl) ether	< 316
Bis (2-chloroethoxy) methane	< 316
Bis (2-ethylhexyl) phthalate	< 316
Bis (2-chloroisopropyl) ether	< 316
4-Bromophenyl phenyl ether	< 316
Butylbenzylphthalate	< 316
Caprolactam	< 316
Carbazole	< 316
4-Chloroaniline	< 316
4-Chloro-3-methylphenol	< 316
2-Chloronaphthalene	< 316
2-Chlorophenol	< 316
4-Chlorophenyl phenyl ether	< 316
Chrysene	< 316
1,3-Dichlorobenzene	< 316
1,4-Dichlorobenzene	< 316
1,2-Dichlorobenzene	< 316
Dibenz (a,h) anthracene	< 316
Dibenzofuran	< 316
3,3'-Dichlorobenzidine	< 316
2,4-Dichlorophenol	< 316
Diethyl phthalate	< 316
2,4-Dimethylphenol	< 316
Dimethyl phthalate	< 790

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 316
4,6-Dinitro-2-methylphenol	< 790
2,4-Dinitrophenol	< 790
2,4-Dinitrotoluene	< 316
2,6-Dinitrotoluene	< 316
Di-n-octylphthalate	< 316
Fluoranthene	< 316
Fluorene	< 316
Hexachlorobenzene	< 316
Hexachlorobutadiene	< 316
Hexachlorocyclopentadiene	< 316
Hexachloroethane	< 316
Indeno (1,2,3-cd) pyrene	< 316
Isophorone	< 316
2-Methylnaphthalene	< 316
2-Methylphenol	< 316
3&4-Methylphenol	< 316
Naphthalene	< 316
2-Nitroaniline	< 790
3-Nitroaniline	< 790
4-Nitroaniline	< 790
Nitrobenzene	< 316
2-Nitrophenol	< 316
4-Nitrophenol	< 790
N-Nitroso-di-n-propylamine	< 316
N-Nitrosodiphenylamine	< 316
Pentachlorophenol	< 790
Phenanthrene	< 316
Phenol	< 316
Pyrene	< 316
1,2,4-Trichlorobenzene	< 316
2,4,5-Trichlorophenol	< 790
2,4,6-Trichlorophenol	< 316
1,2,4,5-Tetrachlorobenzene	< 316
2,3,4,6-Tetrachlorophenol	< 316

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56856.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111870S1.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6328

Client Job Number: 2011.0066.00

Field Location: FAM-SP23-D78-S-0

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 322
Acenaphthylene	< 322
Acetophenone	< 322
Anthracene	< 322
Atrazine	< 322
Benzaldehyde	< 322
Benzo (a) anthracene	< 322
Benzo (a) pyrene	< 322
Benzo (b) fluoranthene	< 322
Benzo (g,h,i) perylene	< 322
Benzo (k) fluoranthene	< 322
Biphenyl	< 322
Bis (2-chloroethyl) ether	< 322
Bis (2-chloroethoxy) methane	< 322
Bis (2-ethylhexyl) phthalate	< 322
Bis (2-chloroisopropyl) ether	< 322
4-Bromophenyl phenyl ether	< 322
Butylbenzylphthalate	< 322
Caprolactam	< 322
Carbazole	< 322
4-Chloroaniline	< 322
4-Chloro-3-methylphenol	< 322
2-Chloronaphthalene	< 322
2-Chlorophenol	< 322
4-Chlorophenyl phenyl ether	< 322
Chrysene	< 322
1,3-Dichlorobenzene	< 322
1,4-Dichlorobenzene	< 322
1,2-Dichlorobenzene	< 322
Dibenz (a,h) anthracene	< 322
Dibenzofuran	< 322
3,3'-Dichlorobenzidine	< 322
2,4-Dichlorophenol	< 322
Diethyl phthalate	< 322
2,4-Dimethylphenol	< 322
Dimethyl phthalate	< 804

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 322
4,6-Dinitro-2-methylphenol	< 804
2,4-Dinitrophenol	< 804
2,4-Dinitrotoluene	< 322
2,6-Dinitrotoluene	< 322
Di-n-octylphthalate	< 322
Fluoranthene	< 322
Fluorene	< 322
Hexachlorobenzene	< 322
Hexachlorobutadiene	< 322
Hexachlorocyclopentadiene	< 322
Hexachloroethane	< 322
Indeno (1,2,3-cd) pyrene	< 322
Isophorone	< 322
2-Methylnapthalene	< 322
2-Methylphenol	< 322
3&4-Methylphenol	< 322
Naphthalene	< 322
2-Nitroaniline	< 804
3-Nitroaniline	< 804
4-Nitroaniline	< 804
Nitrobenzene	< 322
2-Nitrophenol	< 322
4-Nitrophenol	< 804
N-Nitroso-di-n-propylamine	< 322
N-Nitrosodiphenylamine	< 322
Pentachlorophenol	< 804
Phenanthrene	< 322
Phenol	< 322
Pyrene	< 322
1,2,4-Trichlorobenzene	< 322
2,4,5-Trichlorophenol	< 804
2,4,6-Trichlorophenol	< 322
1,2,4,5-Tetrachlorobenzene	< 322
2,3,4,6-Tetrachlorophenol	< 322

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56857.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111870S2.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6329

Client Job Number: 2011.0066.00

Field Location: FAM-SP24-D8-S-0

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/29/2011

Compound	Results in ug / Kg
Acenaphthene	< 320
Acenaphthylene	< 320
Acetophenone	< 320
Anthracene	< 320
Atrazine	< 320
Benzaldehyde	< 320
Benzo (a) anthracene	< 320
Benzo (a) pyrene	< 320
Benzo (b) fluoranthene	< 320
Benzo (g,h,i) perylene	< 320
Benzo (k) fluoranthene	< 320
Biphenyl	< 320
Bis (2-chloroethyl) ether	< 320
Bis (2-chloroethoxy) methane	< 320
Bis (2-ethylhexyl) phthalate	< 320
Bis (2-chloroisopropyl) ether	< 320
4-Bromophenyl phenyl ether	< 320
Butylbenzylphthalate	< 320
Caprolactam	< 320
Carbazole	< 320
4-Chloroaniline	< 320
4-Chloro-3-methylphenol	< 320
2-Chloronaphthalene	< 320
2-Chlorophenol	< 320
4-Chlorophenyl phenyl ether	< 320
Chrysene	< 320
1,3-Dichlorobenzene	< 320
1,4-Dichlorobenzene	< 320
1,2-Dichlorobenzene	< 320
Dibenz (a,h) anthracene	< 320
Dibenzofuran	< 320
3,3'-Dichlorobenzidine	< 320
2,4-Dichlorophenol	< 320
Diethyl phthalate	< 320
2,4-Dimethylphenol	< 320
Dimethyl phthalate	< 801

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 320
4,6-Dinitro-2-methylphenol	< 801
2,4-Dinitrophenol	< 801
2,4-Dinitrotoluene	< 320
2,6-Dinitrotoluene	< 320
Di-n-octylphthalate	< 320
Fluoranthene	< 320
Fluorene	< 320
Hexachlorobenzene	< 320
Hexachlorobutadiene	< 320
Hexachlorocyclopentadiene	< 320
Hexachloroethane	< 320
Indeno (1,2,3-cd) pyrene	< 320
Isophorone	< 320
2-Methylnaphthalene	< 320
2-Methylphenol	< 320
3&4-Methylphenol	< 320
Naphthalene	< 320
2-Nitroaniline	< 801
3-Nitroaniline	< 801
4-Nitroaniline	< 801
Nitrobenzene	< 320
2-Nitrophenol	< 320
4-Nitrophenol	< 801
N-Nitroso-di-n-propylamine	< 320
N-Nitrosodiphenylamine	< 320
Pentachlorophenol	< 801
Phenanthrene	< 320
Phenol	< 320
Pyrene	< 320
1,2,4-Trichlorobenzene	< 320
2,4,5-Trichlorophenol	< 801
2,4,6-Trichlorophenol	< 320
1,2,4,5-Tetrachlorobenzene	< 320
2,3,4,6-Tetrachlorophenol	< 320

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56858.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111870S3.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1870A**Lab Sample Number:** 6330**Client Job Number:** 2011.0066.00**Field Location:** FAM-SP25-D910-S-0**Date Sampled:** 05/11/2011**Field ID Number:** N/A**Date Received:** 05/12/2011**Sample Type:** Soil**Date Analyzed:** 05/31/2011

Compound	Results in ug / Kg
Acenaphthene	< 3,390
Acenaphthylene	< 3,390
Acetophenone	< 3,390
Anthracene	< 3,390
Atrazine	< 3,390
Benzaldehyde	< 3,390
Benzo (a) anthracene	< 3,390
Benzo (a) pyrene	< 3,390
Benzo (b) fluoranthene	< 3,390
Benzo (g,h,i) perylene	< 3,390
Benzo (k) fluoranthene	< 3,390
Biphenyl	< 3,390
Bis (2-chloroethyl) ether	< 3,390
Bis (2-chloroethoxy) methane	< 3,390
Bis (2-ethylhexyl) phthalate	< 3,390
Bis (2-chloroisopropyl) ether	< 3,390
4-Bromophenyl phenyl ether	< 3,390
Butylbenzylphthalate	< 3,390
Caprolactam	< 3,390
Carbazole	< 3,390
4-Chloroaniline	< 3,390
4-Chloro-3-methylphenol	< 3,390
2-Chloronaphthalene	< 3,390
2-Chlorophenol	< 3,390
4-Chlorophenyl phenyl ether	< 3,390
Chrysene	< 3,390
1,3-Dichlorobenzene	< 3,390
1,4-Dichlorobenzene	< 3,390
1,2-Dichlorobenzene	< 3,390
Dibenz (a,h) anthracene	< 3,390
Dibenzofuran	< 3,390
3,3'-Dichlorobenzidine	< 3,390
2,4-Dichlorophenol	< 3,390
Diethyl phthalate	< 3,390
2,4-Dimethylphenol	< 3,390
Dimethyl phthalate	< 8,480

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 3,390
4,6-Dinitro-2-methylphenol	< 8,480
2,4-Dinitrophenol	< 8,480
2,4-Dinitrotoluene	< 3,390
2,6-Dinitrotoluene	< 3,390
Di-n-octylphthalate	< 3,390
Fluoranthene	< 3,390
Fluorene	< 3,390
Hexachlorobenzene	< 3,390
Hexachlorobutadiene	< 3,390
Hexachlorocyclopentadiene	< 3,390
Hexachloroethane	< 3,390
Indeno (1,2,3-cd) pyrene	< 3,390
Isophorone	< 3,390
2-Methylnaphthalene	< 3,390
2-Methylphenol	< 3,390
3&4-Methylphenol	< 3,390
Naphthalene	< 3,390
2-Nitroaniline	< 8,480
3-Nitroaniline	< 8,480
4-Nitroaniline	< 8,480
Nitrobenzene	< 3,390
2-Nitrophenol	< 3,390
4-Nitrophenol	< 8,480
N-Nitroso-di-n-propylamine	< 3,390
N-Nitrosodiphenylamine	< 3,390
Pentachlorophenol	< 8,480
Phenanthrene	< 3,390
Phenol	< 3,390
Pyrene	< 3,390
1,2,4-Trichlorobenzene	48,500
2,4,5-Trichlorophenol	< 8,480
2,4,6-Trichlorophenol	< 3,390
1,2,4,5-Tetrachlorobenzene	7,740
2,3,4,6-Tetrachlorophenol	< 3,390

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56909.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111870S4.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6331

Client Job Number: 2011.0066.00

Field Location: FAM-SP26-D23-S-0

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/31/2011

Compound	Results in ug / Kg
Acenaphthene	1,040
Acenaphthylene	< 701
Acetophenone	< 701
Anthracene	2,810
Atrazine	< 701
Benzaldehyde	< 701
Benzo (a) anthracene	3,100
Benzo (a) pyrene	2,150
Benzo (b) fluoranthene	1,970
Benzo (g,h,i) perylene	1,330
Benzo (k) fluoranthene	1,580
Biphenyl	J 376
Bis (2-chloroethyl) ether	< 701
Bis (2-chloroethoxy) methane	< 701
Bis (2-ethylhexyl) phthalate	< 701
Bis (2-chloroisopropyl) ether	< 701
4-Bromophenyl phenyl ether	< 701
Butylbenzylphthalate	< 701
Caprolactam	< 701
Carbazole	J 483
4-Chloroaniline	< 701
4-Chloro-3-methylphenol	< 701
2-Chloronaphthalene	< 701
2-Chlorophenol	< 701
4-Chlorophenyl phenyl ether	< 701
Chrysene	3,080
1,3-Dichlorobenzene	< 701
1,4-Dichlorobenzene	< 701
1,2-Dichlorobenzene	< 701
Dibenz (a,h) anthracene	< 701
Dibenzofuran	868
3,3'-Dichlorobenzidine	< 701
2,4-Dichlorophenol	< 701
Diethyl phthalate	< 701
2,4-Dimethylphenol	< 701
Dimethyl phthalate	< 1,750

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 701
4,6-Dinitro-2-methylphenol	< 1,750
2,4-Dinitrophenol	< 1,750
2,4-Dinitrotoluene	< 701
2,6-Dinitrotoluene	< 701
Di-n-octylphthalate	< 701
Fluoranthene	6,670
Fluorene	1,450
Hexachlorobenzene	< 701
Hexachlorobutadiene	< 701
Hexachlorocyclopentadiene	< 701
Hexachloroethane	< 701
Indeno (1,2,3-cd) pyrene	1,070
Isophorone	< 701
2-Methylnaphthalene	2,160
2-Methylphenol	< 701
3&4-Methylphenol	< 701
Naphthalene	2,130
2-Nitroaniline	< 1,750
3-Nitroaniline	< 1,750
4-Nitroaniline	< 1,750
Nitrobenzene	< 701
2-Nitrophenol	< 701
4-Nitrophenol	< 1,750
N-Nitroso-di-n-propylamine	< 701
N-Nitrosodiphenylamine	< 701
Pentachlorophenol	< 1,750
Phenanthrene	11,000
Phenol	< 701
Pyrene	6,950
1,2,4-Trichlorobenzene	< 701
2,4,5-Trichlorophenol	< 1,750
2,4,6-Trichlorophenol	< 701
1,2,4,5-Tetrachlorobenzene	< 701
2,3,4,6-Tetrachlorophenol	< 701

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56910.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870S5.XLS



Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6327

Client Job Number: 2011.0066.00

Field Location: FAM-SP22-D23-S-O

Field ID Number: N/A

Sample Type: Soil

Date Sampled: 05/11/2011

Date Received: 05/12/2011

Date Analyzed: 05/21/2011

Compound	Results in ug / Kg
Acetone	J B 43.0
Benzene	< 9.08
Bromochloromethane	< 22.7
Bromodichloromethane	< 9.08
Bromoform	< 22.7
Bromomethane	< 9.08
2-Butanone	101
Carbon disulfide	< 9.08
Carbon Tetrachloride	< 9.08
Chlorobenzene	< 9.08
Chloroethane	< 9.08
Chloroform	< 9.08
Chloromethane	< 9.08
Cyclohexane	< 45.4
Dibromochloromethane	< 9.08
1,2-Dibromo-3-Chloropropane	< 45.4
1,2-Dibromoethane	< 9.08
1,2-Dichlorobenzene	< 9.08
1,3-Dichlorobenzene	< 9.08
1,4-Dichlorobenzene	< 9.08
Dichlorodifluoromethane	< 9.08
1,1-Dichloroethane	< 9.08
1,2-Dichloroethane	< 9.08
1,1-Dichloroethene	< 9.08
cis-1,2-Dichloroethene	15.0
trans-1,2-Dichloroethene	< 9.08

Compound	Results in ug / Kg
1,2-Dichloropropane	< 9.08
cis-1,3-Dichloropropene	< 9.08
trans-1,3-Dichloropropene	< 9.08
Ethylbenzene	< 9.08
Freon 113	< 9.08
2-Hexanone	< 22.7
Isopropylbenzene	< 9.08
Methyl acetate	< 9.08
Methyl tert-butyl Ether	< 9.08
Methylcyclohexane	< 9.08
Methylene chloride	J 17.7
4-Methyl-2-pentanone	< 22.7
Styrene	< 22.7
1,1,2,2-Tetrachloroethane	< 9.08
Tetrachloroethene	< 9.08
Toluene	< 9.08
1,2,3-Trichlorobenzene	< 22.7
1,2,4-Trichlorobenzene	< 22.7
1,1,1-Trichloroethane	< 9.08
1,1,2-Trichloroethane	< 9.08
Trichloroethene	609
Trichlorofluoromethane	< 9.08
Vinyl chloride	< 9.08
m,p-Xylene	< 9.08
o-Xylene	< 9.08

ELAP Number 10958

Method: EPA 8260B

Data File: V84867.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870V1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Client Job Number: 2011.0066.00

Lab Sample Number: 6328

Field Location: FAM-SP23-D78-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 63.0
Benzene	< 4.17
Bromochloromethane	< 10.4
Bromodichloromethane	< 4.17
Bromoform	< 10.4
Bromomethane	< 4.17
2-Butanone	391
Carbon disulfide	< 4.17
Carbon Tetrachloride	< 4.17
Chlorobenzene	< 4.17
Chloroethane	< 4.17
Chloroform	< 4.17
Chloromethane	< 4.17
Cyclohexane	< 20.9
Dibromochloromethane	< 4.17
1,2-Dibromo-3-Chloropropane	< 20.9
1,2-Dibromoethane	< 4.17
1,2-Dichlorobenzene	< 4.17
1,3-Dichlorobenzene	< 4.17
1,4-Dichlorobenzene	< 4.17
Dichlorodifluoromethane	< 4.17
1,1-Dichloroethane	< 4.17
1,2-Dichloroethane	< 4.17
1,1-Dichloroethene	< 4.17
cis-1,2-Dichloroethene	< 4.17
trans-1,2-Dichloroethene	< 4.17

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.17
cis-1,3-Dichloropropene	< 4.17
trans-1,3-Dichloropropene	< 4.17
Ethylbenzene	< 4.17
Freon 113	< 4.17
2-Hexanone	< 10.4
Isopropylbenzene	< 4.17
Methyl acetate	< 4.17
Methyl tert-butyl Ether	< 4.17
Methylcyclohexane	< 4.17
Methylene chloride	12.2
4-Methyl-2-pentanone	< 10.4
Styrene	< 10.4
1,1,2,2-Tetrachloroethane	< 4.17
Tetrachloroethene	J 3.57
Toluene	< 4.17
1,2,3-Trichlorobenzene	< 10.4
1,2,4-Trichlorobenzene	< 10.4
1,1,1-Trichloroethane	< 4.17
1,1,2-Trichloroethane	< 4.17
Trichloroethene	52.9
Trichlorofluoromethane	< 4.17
Vinyl chloride	< 4.17
m,p-Xylene	J 2.51
o-Xylene	< 4.17

ELAP Number 10958

Method: EPA 8260B

Data File: V84809.D

Comments: ug / Kg = microgram per Kilogram

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111870V2.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6329

Client Job Number: 2011.0066.00

Field Location: FAM-SP24-D8-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/19/2011

Compound	Results in ug / Kg
Acetone	B 36.4
Benzene	< 3.86
Bromochloromethane	< 9.65
Bromodichloromethane	< 3.86
Bromoform	< 9.65
Bromomethane	< 3.86
2-Butanone	114
Carbon disulfide	< 3.86
Carbon Tetrachloride	< 3.86
Chlorobenzene	< 3.86
Chloroethane	< 3.86
Chloroform	< 3.86
Chloromethane	< 3.86
Cyclohexane	< 19.3
Dibromochloromethane	< 3.86
1,2-Dibromo-3-Chloropropane	< 19.3
1,2-Dibromoethane	< 3.86
1,2-Dichlorobenzene	< 3.86
1,3-Dichlorobenzene	< 3.86
1,4-Dichlorobenzene	< 3.86
Dichlorodifluoromethane	< 3.86
1,1-Dichloroethane	< 3.86
1,2-Dichloroethane	< 3.86
1,1-Dichloroethene	< 3.86
cis-1,2-Dichloroethene	< 3.86
trans-1,2-Dichloroethene	< 3.86

Compound	Results in ug / Kg
1,2-Dichloropropane	< 3.86
cis-1,3-Dichloropropene	< 3.86
trans-1,3-Dichloropropene	< 3.86
Ethylbenzene	< 3.86
Freon 113	< 3.86
2-Hexanone	< 9.65
Isopropylbenzene	< 3.86
Methyl acetate	< 3.86
Methyl tert-butyl Ether	< 3.86
Methylcyclohexane	< 3.86
Methylene chloride	9.94
4-Methyl-2-pentanone	< 9.65
Styrene	< 9.65
1,1,2,2-Tetrachloroethane	< 3.86
Tetrachloroethene	< 3.86
Toluene	< 3.86
1,2,3-Trichlorobenzene	< 9.65
1,2,4-Trichlorobenzene	< 9.65
1,1,1-Trichloroethane	< 3.86
1,1,2-Trichloroethane	< 3.86
Trichloroethene	J 2.18
Trichlorofluoromethane	< 3.86
Vinyl chloride	< 3.86
m,p-Xylene	< 3.86
o-Xylene	< 3.86

ELAP Number 10958

Method: EPA 8260B

Data File: V84812.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870V3.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6330

Client Job Number: 2011.0066.00

Field Location: FAM-SP25-D910-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/23/2011

Compound	Results in ug / Kg
Acetone	< 33,100
Benzene	< 6,610
Bromochloromethane	< 16,500
Bromodichloromethane	< 6,610
Bromoform	< 16,500
Bromomethane	< 6,610
2-Butanone	< 33,100
Carbon disulfide	< 6,610
Carbon Tetrachloride	< 6,610
Chlorobenzene	< 6,610
Chloroethane	< 6,610
Chloroform	< 6,610
Chloromethane	< 6,610
Cyclohexane	< 33,100
Dibromochloromethane	< 6,610
1,2-Dibromo-3-Chloropropane	< 33,100
1,2-Dibromoethane	< 6,610
1,2-Dichlorobenzene	< 6,610
1,3-Dichlorobenzene	< 6,610
1,4-Dichlorobenzene	< 6,610
Dichlorodifluoromethane	< 6,610
1,1-Dichloroethane	< 6,610
1,2-Dichloroethane	< 6,610
1,1-Dichloroethene	< 6,610
cis-1,2-Dichloroethene	< 6,610
trans-1,2-Dichloroethene	< 6,610

Compound	Results in ug / Kg
1,2-Dichloropropane	< 6,610
cis-1,3-Dichloropropene	< 6,610
trans-1,3-Dichloropropene	< 6,610
Ethylbenzene	< 6,610
Freon 113	< 6,610
2-Hexanone	< 16,500
Isopropylbenzene	< 6,610
Methyl acetate	< 6,610
Methyl tert-butyl Ether	< 6,610
Methylcyclohexane	< 6,610
Methylene chloride	< 16,500
4-Methyl-2-pentanone	< 16,500
Styrene	< 16,500
1,1,2,2-Tetrachloroethane	< 6,610
Tetrachloroethene	< 6,610
Toluene	< 6,610
1,2,3-Trichlorobenzene	J 13,900
1,2,4-Trichlorobenzene	101,000
1,1,1-Trichloroethane	< 6,610
1,1,2-Trichloroethane	< 6,610
Trichloroethene	< 6,610
Trichlorofluoromethane	< 6,610
Vinyl chloride	< 6,610
m,p-Xylene	< 6,610
o-Xylene	< 6,610

ELAP Number 10958

Method: EPA 8260B

Data File: V84881.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870V4.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1870A

Lab Sample Number: 6331

Client Job Number: 2011.0066.00

Field Location: FAM-SP26-D23-S-O

Date Sampled: 05/11/2011

Field ID Number: N/A

Date Received: 05/12/2011

Sample Type: Soil

Date Analyzed: 05/21/2011

Compound	Results in ug / Kg
Acetone	< 22.8
Benzene	< 4.56
Bromochloromethane	< 11.4
Bromodichloromethane	< 4.56
Bromoform	< 11.4
Bromomethane	< 4.56
2-Butanone	26.2
Carbon disulfide	< 4.56
Carbon Tetrachloride	< 4.56
Chlorobenzene	< 4.56
Chloroethane	< 4.56
Chloroform	< 4.56
Chloromethane	< 4.56
Cyclohexane	< 22.8
Dibromochloromethane	< 4.56
1,2-Dibromo-3-Chloropropane	< 22.8
1,2-Dibromoethane	< 4.56
1,2-Dichlorobenzene	< 4.56
1,3-Dichlorobenzene	< 4.56
1,4-Dichlorobenzene	< 4.56
Dichlorodifluoromethane	< 4.56
1,1-Dichloroethane	< 4.56
1,2-Dichloroethane	< 4.56
1,1-Dichloroethene	< 4.56
cis-1,2-Dichloroethene	< 4.56
trans-1,2-Dichloroethene	< 4.56

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.56
cis-1,3-Dichloropropene	< 4.56
trans-1,3-Dichloropropene	< 4.56
Ethylbenzene	< 4.56
Freon 113	< 4.56
2-Hexanone	< 11.4
Isopropylbenzene	< 4.56
Methyl acetate	< 4.56
Methyl tert-butyl Ether	< 4.56
Methylcyclohexane	< 4.56
Methylene chloride	J 8.81
4-Methyl-2-pentanone	< 11.4
Styrene	< 11.4
1,1,2,2-Tetrachloroethane	< 4.56
Tetrachloroethene	< 4.56
Toluene	< 4.56
1,2,3-Trichlorobenzene	< 11.4
1,2,4-Trichlorobenzene	< 11.4
1,1,1-Trichloroethane	< 4.56
1,1,2-Trichloroethane	< 4.56
Trichloroethene	< 4.56
Trichlorofluoromethane	< 4.56
Vinyl chloride	< 4.56
m,p-Xylene	< 4.56
o-Xylene	< 4.56

ELAP Number 10958

Method: EPA 8260B

Data File: V84868.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870V5.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1870A**Lab Sample Number:** Soil LRB 05/19**Client Job Number:** 2011.0066.00**Field Location:** N/A**Date Sampled:** N/A**Field ID Number:** N/A**Date Received:** N/A**Sample Type:** Soil**Date Analyzed:** 05/19/2011

Compound	Results in ug / Kg
Acetone	J 18.2
Benzene	< 4.00
Bromochloromethane	< 10.0
Bromodichloromethane	< 4.00
Bromoform	< 10.0
Bromomethane	< 4.00
2-Butanone	< 20.0
Carbon disulfide	< 4.00
Carbon Tetrachloride	< 4.00
Chlorobenzene	< 4.00
Chloroethane	< 4.00
Chloroform	< 4.00
Chloromethane	< 4.00
Cyclohexane	< 20.0
Dibromochloromethane	< 4.00
1,2-Dibromo-3-Chloropropane	< 20.0
1,2-Dibromoethane	< 4.00
1,2-Dichlorobenzene	< 4.00
1,3-Dichlorobenzene	< 4.00
1,4-Dichlorobenzene	< 4.00
Dichlorodifluoromethane	< 4.00
1,1-Dichloroethane	< 4.00
1,2-Dichloroethane	< 4.00
1,1-Dichloroethene	< 4.00
cis-1,2-Dichloroethene	< 4.00
trans-1,2-Dichloroethene	< 4.00

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.00
cis-1,3-Dichloropropene	< 4.00
trans-1,3-Dichloropropene	< 4.00
Ethylbenzene	< 4.00
Freon 113	< 4.00
2-Hexanone	< 10.0
Isopropylbenzene	< 4.00
Methyl acetate	< 4.00
Methyl tert-butyl Ether	< 4.00
Methylcyclohexane	< 4.00
Methylene chloride	< 10.0
4-Methyl-2-pentanone	< 10.0
Styrene	< 10.0
1,1,2,2-Tetrachloroethane	< 4.00
Tetrachloroethene	< 4.00
Toluene	< 4.00
1,2,3-Trichlorobenzene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
1,1,1-Trichloroethane	< 4.00
1,1,2-Trichloroethane	< 4.00
Trichloroethene	< 4.00
Trichlorofluoromethane	< 4.00
Vinyl chloride	< 4.00
m,p-Xylene	< 4.00
o-Xylene	< 4.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84796.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870B1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1870A**Lab Sample Number:** Soil LRB 05/20**Client Job Number:** 2011.0066.00**Field Location:** N/A**Date Sampled:** N/A**Field ID Number:** N/A**Date Received:** N/A**Sample Type:** Soil**Date Analyzed:** 05/20/2011

Compound	Results in ug / Kg
Acetone	J 10.2
Benzene	< 4.00
Bromochloromethane	< 10.0
Bromodichloromethane	< 4.00
Bromoform	< 10.0
Bromomethane	< 4.00
2-Butanone	< 20.0
Carbon disulfide	< 4.00
Carbon Tetrachloride	< 4.00
Chlorobenzene	< 4.00
Chloroethane	< 4.00
Chloroform	< 4.00
Chloromethane	< 4.00
Cyclohexane	< 20.0
Dibromochloromethane	< 4.00
1,2-Dibromo-3-Chloropropane	< 20.0
1,2-Dibromoethane	< 4.00
1,2-Dichlorobenzene	< 4.00
1,3-Dichlorobenzene	< 4.00
1,4-Dichlorobenzene	< 4.00
Dichlorodifluoromethane	< 4.00
1,1-Dichloroethane	< 4.00
1,2-Dichloroethane	< 4.00
1,1-Dichloroethene	< 4.00
cis-1,2-Dichloroethene	< 4.00
trans-1,2-Dichloroethene	< 4.00

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 4.00
cis-1,3-Dichloropropene	< 4.00
trans-1,3-Dichloropropene	< 4.00
Ethylbenzene	< 4.00
Freon 113	< 4.00
2-Hexanone	< 10.0
Isopropylbenzene	< 4.00
Methyl acetate	< 4.00
Methyl tert-butyl Ether	< 4.00
Methylcyclohexane	< 4.00
Methylene chloride	< 10.0
4-Methyl-2-pentanone	< 10.0
Styrene	< 10.0
1,1,2,2-Tetrachloroethane	< 4.00
Tetrachloroethene	< 4.00
Toluene	< 4.00
1,2,3-Trichlorobenzene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
1,1,1-Trichloroethane	< 4.00
1,1,2-Trichloroethane	< 4.00
Trichloroethene	< 4.00
Trichlorofluoromethane	< 4.00
Vinyl chloride	< 4.00
m,p-Xylene	< 4.00
o-Xylene	< 4.00

Method: EPA 8260B

Data File: V84849.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111870B2.XLS

CHAIN OF CUSTODY



REPORT TO: COMPANY: TUGA ADDRESS: 620 Main Street CITY: Buffalo STATE: NY ZIP: 14222 PHONE: 716 349 8787 FAX: ATTN: J. Menzella

INVOICE TO: COMPANY: Same ADDRESS: CITY: STATE: ZIP: PHONE: FAX: ATTN:

LAB PROJECT #: 11-1870A **CLIENT PROJECT #:** 2011.0066.00

TURNAROUND TIME: (WORKING DAYS) per quote

Quotation # 1 2 3 5 10

REQUESTED ANALYSIS ASP2008 BZCOTCL, 8270ABU ASP
doos per request form.
EAH 5/12

DATE	TIME	COMPOSITE	GRADES	SAMPLE LOCATION/FIELD ID	MATERIALS	CONTAMINANTS	TCL VOCs	TCL SVOCs	TAL Metals	REMARKS	PARADIGM LAB SAMPLE NUMBER
15/11/11	1500	X		FAM-SP22-D23-5-0	501	1	X	X	X		6327
2	1530	X		FAM-SP23-D78-5-0		3	X	X	X		6328
3	1600	X		FAM-SP24-D24-5-0		1	X	X	X		6329
4	1635	X		FAM-SP25-D910-5-0		1	X	X	X		6330
5	1710	X		FAM-SP26-D23-5-0		1	X	X	X		6331
6											
7											
8											
9											
10											

****LAB USE ONLY BELOW THIS LINE****

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter: NELAC Compliance

Container Type: Y ☒ N ☐

Preservation: NA Y ☐ N ☐

Holding Time: Y ☒ N ☐

Temperature: 5°C iced Y ☒ N ☐

Comments: COOLANT 5/12/11

Sampled By: James Collett **Date/Time:** 5/11/11 **Total Cost:**

Relinquished By: James Collett **Date/Time:** 5/12/11

Received By: Elizabeth A. Thomas **Date/Time:** 5/12/11 1510 **P.I.F.:**

Received @ Lab By: ee **Date/Time:** 5/12



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7379

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW6-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	0.314
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	< 0.010
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	71.7
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	0.336
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	15.4
Manganese	06/16/2011	SW846 3005/6010	0.065
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.47 J
Selenium	06/16/2011	SW846 3005/6010	0.008 J
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	23.0
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7380

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-GWDUP-GW

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.007 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	72.3
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	0.150
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	15.6
Manganese	06/16/2011	SW846 3005/6010	0.061
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.39 J
Selenium	06/16/2011	SW846 3005/6010	0.012
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	23.2
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7381

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW5-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	1.55
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.019
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	120
Chromium	06/16/2011	SW846 3005/6010	0.030
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	10.8
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	14.2
Manganese	06/16/2011	SW846 3005/6010	8.83
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.56
Selenium	06/16/2011	SW846 3005/6010	0.008 J
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	41.8
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.250
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7382

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW4-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	1.29
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.007 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	88.9
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	2.07
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	17.2
Manganese	06/16/2011	SW846 3005/6010	0.527
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	7.38
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	31.4
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7382

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW4-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.005 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	85.0
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	0.068 J
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	16.1
Manganese	06/16/2011	SW846 3005/6010	0.484
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	6.60
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	29.9
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7383

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW3-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	7.04
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.008 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	51.8
Chromium	06/16/2011	SW846 3005/6010	0.008 J
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	9.94
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	12.5
Manganese	06/16/2011	SW846 3005/6010	0.736
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	5.50
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	7.97
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7383

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW3-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	< 0.010
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	51.0
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	0.069
Iron	06/16/2011	SW846 3005/6010	< 0.100
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	10.7
Manganese	06/16/2011	SW846 3005/6010	0.610
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	3.54
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	8.29
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	0.345

ELAP ID No.:10958

Comments: Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7384

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW2-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	3.53
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	< 0.010
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	166
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	7.75
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	20.5
Manganese	06/16/2011	SW846 3005/6010	5.16
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.38 J
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	8.60
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7385

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW1-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	2.18 DM
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.006 DJ
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005 M
Calcium	06/16/2011	SW846 3005/6010	122
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	3.19 D
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	19.4
Manganese	06/16/2011	SW846 3005/6010	3.10
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	0.021 JM
Potassium	06/16/2011	SW846 3005/6010	2.70
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	6.76
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments:

Approved By: _____

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7386

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW11-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	1.76
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.006 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	86.8
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	1.98
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	21.0
Manganese	06/16/2011	SW846 3005/6010	0.159
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.86
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	12.1
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7386

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW11-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	< 0.010
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	85.2
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	< 0.100
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	20.3
Manganese	06/16/2011	SW846 3005/6010	0.134
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.14 J
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	11.7
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.
Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7387

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW10-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	3.45
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.007 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	72.0
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	5.05
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	20.0
Manganese	06/16/2011	SW846 3005/6010	1.82
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	4.95
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	8.71
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7387

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW10-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	< 0.010
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	66.5
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	0.029
Iron	06/16/2011	SW846 3005/6010	< 0.100
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	17.7
Manganese	06/16/2011	SW846 3005/6010	1.62
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	3.89
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	8.98
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	0.153

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.
Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7388

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW7-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	2.69
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.007 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	0.015
Calcium	06/16/2011	SW846 3005/6010	77.7
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	3.25
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	15.9
Manganese	06/16/2011	SW846 3005/6010	0.373
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	2.98
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	6.17
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.

Approved By: _____

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7389

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW8-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	22.6
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.021
Barium	06/16/2011	SW846 3005/6010	0.132
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	98.1
Chromium	06/16/2011	SW846 3005/6010	0.027
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	0.027
Iron	06/16/2011	SW846 3005/6010	34.5
Lead	06/16/2011	SW846 3005/6010	0.010
Magnesium	06/16/2011	SW846 3005/6010	26.3
Manganese	06/16/2011	SW846 3005/6010	0.934
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	0.039]
Potassium	06/16/2011	SW846 3005/6010	9.82
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	11.4
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	0.034
Zinc	06/16/2011	SW846 3005/6010	0.071

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.

Approved By: _____

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7389

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW8-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.009 J
Barium	06/16/2011	SW846 3005/6010	< 0.100
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	82.9
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	< 0.100
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	17.5
Manganese	06/16/2011	SW846 3005/6010	0.465
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	4.80
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	11.1
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.
Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7390

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW9-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	12.3
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.011
Barium	06/16/2011	SW846 3005/6010	0.151
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	97.1
Chromium	06/16/2011	SW846 3005/6010	0.013
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	0.016 J
Iron	06/16/2011	SW846 3005/6010	18.9
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	25.9
Manganese	06/16/2011	SW846 3005/6010	0.357
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	0.024 J
Potassium	06/16/2011	SW846 3005/6010	9.35
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	7.80
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	0.020 J
Zinc	06/16/2011	SW846 3005/6010	0.041 J

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA Consultants

Lab Project No.: 11-2196A

Client Job Site: A&A Metals

Lab Sample No.: 7390

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-MW9-GW-0

Date Sampled: 06/01/2011

Field ID No.: N/A

Date Received: 06/02/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	06/16/2011	SW846 3005/6010	< 0.200
Antimony	06/16/2011	SW846 3005/6010	< 0.060
Arsenic	06/16/2011	SW846 3005/6010	0.009 J
Barium	06/16/2011	SW846 3005/6010	0.086 J
Beryllium	06/16/2011	SW846 3005/6010	< 0.005
Cadmium	06/16/2011	SW846 3005/6010	< 0.005
Calcium	06/16/2011	SW846 3005/6010	80.2
Chromium	06/16/2011	SW846 3005/6010	< 0.010
Cobalt	06/16/2011	SW846 3005/6010	< 0.050
Copper	06/16/2011	SW846 3005/6010	< 0.025
Iron	06/16/2011	SW846 3005/6010	< 0.100
Lead	06/16/2011	SW846 3005/6010	< 0.010
Magnesium	06/16/2011	SW846 3005/6010	19.7
Manganese	06/16/2011	SW846 3005/6010	0.062
Mercury	06/09/2011	SW846 7470	< 0.0002
Nickel	06/16/2011	SW846 3005/6010	< 0.040
Potassium	06/16/2011	SW846 3005/6010	5.80
Selenium	06/16/2011	SW846 3005/6010	< 0.010
Silver	06/16/2011	SW846 3005/6010	< 0.010
Sodium	06/16/2011	SW846 3005/6010	7.47
Thallium	06/16/2011	SW846 3005/6010	< 0.025
Vanadium	06/16/2011	SW846 3005/6010	< 0.025
Zinc	06/16/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and/or spike duplicate was outside QC limits for Ag, Cd, Mn and Zn. Sample was filtered prior to digestion per client.

Approved By: _____

Bruce Hoogesteger, Technical Director

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**PHC Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7382**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW4-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

PHC Classification	Results in ug / L
Medium Weight PHC as: Diesel Fuel	4,860

ELAP Number 10958

Analytical Method: NYSDOH 310.13

Prep Method: EPA 3510C

Comments: PHC = Petroleum Hydrocarbon
ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196H1.XLS



Semi -Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Client Job Number: 2011.0066.00

Lab Sample Number: 7379

Field Location: FAM-MW6-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/09/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	J 5.69
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57141.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196S1.XLS

**Semi -Volatile Analysis Report for Non-potable Water****Client: TVGA Consultants**

Client Job Site: A & A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-GWDUP-GW
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 11-2196A
Lab Sample Number: 7380
Date Sampled: 06/01/2011
Date Received: 06/02/2011
Date Analyzed: 06/09/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57142.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196S2



Semi -Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7381

Client Job Number: 2011.0066.00

Field Location: FAM-MW5-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/09/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57143.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196S3.XLS



Semi -Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7382

Client Job Number: 2011.0066.00

Field Location: FAM-MW4-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/09/2011

Compound	Results in ug / L
Acenaphthene	< 20.0
Acenaphthylene	< 20.0
Acetophenone	< 20.0
Anthracene	< 20.0
Atrazine	< 20.0
Benzaldehyde	< 20.0
Benzo (a) anthracene	< 20.0
Benzo (a) pyrene	< 20.0
Benzo (b) fluoranthene	< 20.0
Benzo (g,h,i) perylene	< 20.0
Benzo (k) fluoranthene	< 20.0
Biphenyl	< 20.0
Bis (2-chloroethyl) ether	< 20.0
Bis (2-chloroethoxy) methane	< 20.0
Bis (2-ethylhexyl) phthalate	< 20.0
Bis (2-chloroisopropyl) ether	< 20.0
4-Bromophenyl phenyl ether	< 20.0
Butylbenzylphthalate	< 20.0
Caprolactam	< 20.0
Carbazole	< 20.0
4-Chloroaniline	< 20.0
4-Chloro-3-methylphenol	< 20.0
2-Chloronaphthalene	< 20.0
2-Chlorophenol	< 20.0
4-Chlorophenyl phenyl ether	< 20.0
Chrysene	< 20.0
1,3-Dichlorobenzene	< 20.0
1,4-Dichlorobenzene	< 20.0
1,2-Dichlorobenzene	< 20.0
Dibenz (a,h) anthracene	< 20.0
Dibenzofuran	< 20.0
3,3'-Dichlorobenzidine	< 20.0
2,4-Dichlorophenol	< 20.0
Diethyl phthalate	< 20.0
2,4-Dimethylphenol	< 20.0
Dimethyl phthalate	< 50.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 20.0
4,6-Dinitro-2-methylphenol	< 50.0
2,4-Dinitrophenol	< 50.0
2,4-Dinitrotoluene	< 20.0
2,6-Dinitrotoluene	< 20.0
Di-n-octylphthalate	< 20.0
Fluoranthene	< 20.0
Fluorene	< 20.0
Hexachlorobenzene	< 20.0
Hexachlorobutadiene	< 20.0
Hexachlorocyclopentadiene	< 20.0
Hexachloroethane	< 20.0
Indeno (1,2,3-cd) pyrene	< 20.0
Isophorone	< 20.0
2-Methylnaphthalene	108
2-Methylphenol	< 20.0
3&4-Methylphenol	< 20.0
Naphthalene	< 20.0
2-Nitroaniline	< 50.0
3-Nitroaniline	< 50.0
4-Nitroaniline	< 50.0
Nitrobenzene	< 20.0
2-Nitrophenol	< 20.0
4-Nitrophenol	< 50.0
N-Nitroso-di-n-propylamine	< 20.0
N-Nitrosodiphenylamine	< 20.0
Pentachlorophenol	< 50.0
Phenanthrene	34.7
Phenol	< 20.0
Pyrene	< 20.0
1,2,4-Trichlorobenzene	< 20.0
2,4,5-Trichlorophenol	< 50.0
2,4,6-Trichlorophenol	< 20.0
1,2,4,5-Tetrachlorobenzene	< 20.0
2,3,4,6-Tetrachlorophenol	< 20.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57144.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

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112196S4.XLS

**Semi -Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7383**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW3-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/09/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57145.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196S5.XLS

**Semi-Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants

Client Job Site: A & A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-MW2-GW-O
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 11-2196A
Lab Sample Number: 7384
Date Sampled: 06/01/2011
Date Received: 06/02/2011
Date Analyzed: 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57146.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196S6.XLS



Semi-Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants
Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7385

Client Job Number: 2011.0066.00

Field Location: FAM-MW1-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	15.6
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	J 5.26
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57150.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature:


Bruce Hoogesteger, Technical Director

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112196S7.XLS

**Semi -Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 7386**Field Location:** FAM-MW11-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57153.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196S8.XLS



Semi -Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7387

Client Job Number: 2011.0066.00

Field Location: FAM-MW10-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57154.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196S9.XLS

**Semi-Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 7388**Field Location:** FAM-MW7-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57155.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196S0.XLS

**Semi-Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 7389**Field Location:** FAM-MW8-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57156.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196T1.XLS

**Semi-Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7390**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW9-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S57157.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196T2.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7379**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW6-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85449.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196V1.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants

Client Job Site: A & A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-GWDUP-GW
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 11-2196A
Lab Sample Number: 7380

Date Sampled: 06/01/2011
Date Received: 06/02/2011
Date Analyzed: 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V85450.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V2.XLS



Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7381

Client Job Number: 2011.0066.00

Field Location: FAM-MW5-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V85451.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V3.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7382**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW4-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	J 0.429
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	J 1.27
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	2.45
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85452.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196V4.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7383**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW3-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	10.4
1,1,2-Trichloroethane	< 2.00
Trichloroethene	10.9
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85453.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V5.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7384**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW2-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V85454.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196V8.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 7385**Field Location:** FAM-MW1-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/10/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	2.02
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	6.14
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	3.67
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	6.78
1,1,2-Trichloroethane	< 2.00
Trichloroethene	43.0
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85455.D

Comments: ug / L = microgram per Liter

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V7.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7386**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW11-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/13/2011

Compound	Results in ug / L
Acetone	< 50.0
Benzene	< 3.50
Bromochloromethane	< 25.0
Bromodichloromethane	< 10.0
Bromoform	< 25.0
Bromomethane	< 10.0
2-Butanone	< 50.0
Carbon disulfide	< 10.0
Carbon Tetrachloride	< 10.0
Chlorobenzene	< 10.0
Chloroethane	< 10.0
Chloroform	< 10.0
Chloromethane	< 10.0
Cyclohexane	< 50.0
Dibromochloromethane	< 10.0
1,2-Dibromo-3-Chloropropane	< 50.0
1,2-Dibromoethane	< 10.0
1,2-Dichlorobenzene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
Dichlorodifluoromethane	< 10.0
1,1-Dichloroethane	< 10.0
1,2-Dichloroethane	< 10.0
1,1-Dichloroethene	< 10.0
cis-1,2-Dichloroethene	50.4
trans-1,2-Dichloroethene	< 10.0

Compound	Results in ug / L
1,2-Dichloropropane	< 10.0
cis-1,3-Dichloropropene	< 10.0
trans-1,3-Dichloropropene	< 10.0
Ethylbenzene	< 10.0
Freon 113	< 10.0
2-Hexanone	< 25.0
Isopropylbenzene	< 10.0
Methyl acetate	< 10.0
Methyl tert-butyl Ether	< 10.0
Methylcyclohexane	< 10.0
Methylene chloride	< 25.0
4-Methyl-2-pentanone	< 25.0
Styrene	< 25.0
1,1,2,2-Tetrachloroethane	< 10.0
Tetrachloroethene	< 10.0
Toluene	< 10.0
1,2,3-Trichlorobenzene	< 25.0
1,2,4-Trichlorobenzene	< 25.0
1,1,1-Trichloroethane	J 6.93
1,1,2-Trichloroethane	< 10.0
Trichloroethene	576
Trichlorofluoromethane	< 10.0
Vinyl chloride	23.2
m,p-Xylene	< 10.0
o-Xylene	< 10.0

ELAP Number 10958

Method: EPA 8260B

Data File: V85499.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V8.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7387**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW10-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/13/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	7.62
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	J 1.15
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85498.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196V9.XLS



Volatile Analysis Report for Non-potable Water

Client: TVGA Consultants

Client Job Site: A & A Metals

Lab Project Number: 11-2196A

Lab Sample Number: 7388

Client Job Number: 2011.0066.00

Field Location: FAM-MW7-GW-O

Date Sampled: 06/01/2011

Field ID Number: N/A

Date Received: 06/02/2011

Sample Type: Water

Date Analyzed: 06/11/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V85460.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196V0.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Client Job Number:** 2011.0066.00**Lab Sample Number:** 7389**Field Location:** FAM-MW8-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/11/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V85461.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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112196W1.XLS

**Volatile Analysis Report for Non-potable Water****Client:** TVGA Consultants**Client Job Site:** A & A Metals**Lab Project Number:** 11-2196A**Lab Sample Number:** 7390**Client Job Number:** 2011.0066.00**Field Location:** FAM-MW9-GW-O**Date Sampled:** 06/01/2011**Field ID Number:** N/A**Date Received:** 06/02/2011**Sample Type:** Water**Date Analyzed:** 06/11/2011

Compound	Results in ug / L
Acetone	< 10.0
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V85462.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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112196W2.XLS



CHAIN OF CUSTODY

PROJECT NAME/SITE NAME: **A & A Metals**

REPORT TO:		INVOICE TO:	
COMPANY: TIGA Consultants	ADDRESS: 1020 Main St.	COMPANY: Same	LAB PROJECT #: 11-2196A
CITY: Buffalo	STATE: NY	ADDRESS: 	CLIENT PROJECT #: 2011.006600
PHONE: 716 4948735	ZIP: 14202	CITY: 	TURNAROUND TIME: (WORKING DAYS)
FAX: 716 556 0981		STATE: 	
ATTN: J. Menzella		ZIP: 	
COMMENTS: ASP Cut & package needed, per site history.		REQUESTED ANALYSIS: TCL VOCs, TCL SVOCs, TAL Metals, Dissolved metals 310, 13	
DATE: 6/12		TIME: 1430	
C O M P O S I T E		M A T R I X	
G R A B		C O N T A I N E R S	
SAMPLE LOCATION/FIELD ID		TCL VOCs	
		TCL SVOCs	
		TAL Metals	
		Dissolved metals	
		310, 13	
		Report ASP 2008 8260TCL + 8270 ABU Lists, per Request Form.	
		REMARKS: ETM 6/12	
		PARADIGM LAB SAMPLE NUMBER	

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R S	TCL VOCs	TCL SVOCs	TAL Metals	Dissolved metals	310, 13	Report ASP 2008 8260TCL + 8270 ABU Lists, per Request Form.	REMARKS	PARADIGM LAB SAMPLE NUMBER
16/11/11	1530	X	X	FAM-HU06-GUO-D	AQ	4	X	X	X					7379
2	1545	X	X	FAM-GUDDOP-GUO		4	X	X	X					7380
3	1550	X	X	FAM-HU05-GUO-D		4	X	X	X					7381
4	1610	X	X	FAM-HU04-GUO-D		6	X	X	X	X				7382
5	1615	X	X	FAM-GUDDOP-GUO-D		5	X	X	X					7383
6	1630	X	X	FAM-HU02-GUO-D		4	X	X	X					7384
7	1640	X	X	FAM-HU01-GUO-D		4	X	X	X					7385
8	1700	X	X	FAM-HU11-GUO-D		5	X	X	X					7386
9	1715	X	X	FAM-HU10-GUO-D		5	X	X	X					7387
10	1730	X	X	FAM-HU07-GUO-D		4	X	X	X					7388

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	☒ Y ☐ N
Comments:	
Preservation:	☒ Y ☐ N
Comments: MWS added HNO3 to metals @ 1/2	
Holding Time:	☒ Y ☐ N
Comments:	
Temperature:	☒ Y ☐ N
Comments: 8°Ciced @ 1400 6/12	

Sampled By: A. B. Butler	Date/Time: 6/11 1750	Total Cost: EAH 6/12
Relinquished By: Sharon A. Condit	Date/Time: 6/21/11 9:10	
Received By: Sharon A. Condit	Date/Time: 6/21/11	
Received @ Lab By: Sharon A. Condit	Date/Time: 6/21/11 1430	
P.L.F. ☐		

Coolers sealed w/signed custody seals.

CHAIN OF CUSTODY



PROJECT NAME/SITE NAME: A & A Metals

REPORT TO:		INVOICE TO:	
COMPANY: <u>TUCA Consultants</u>	COMPANY: <u>Same</u>	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: <u>600 Main St.</u>	ADDRESS:	11-2190A	2011.0066.00
CITY: <u>Buffalo</u>	CITY:	STATE: <u>NY</u>	ZIP: <u>14202</u>
PHONE: <u>716 849 8739</u>	PHONE:	FAX: <u>716 856 8781</u>	FAX:
ATTN: <u>J. Menzella</u>	ATTN:	TURNAROUND TIME: (WORKING DAYS)	STD <u>10</u> OTHER <u>10</u>
COMMENTS: <u>J. Menzella</u>		Quotation #	

DATE	TIME	COMPOSITE	GRADES	SAMPLE LOCATION/FIELD ID	ANALYST	CONTAMINANTS	TCL VOCs	TCL SVOCs	TAL Metals	Dissolved Metals	REMARKS	PARADIGM LAB SAMPLE NUMBER
10/11/11	1530	X		EAM-H08-A00-0	A0	S	X	X	X	X	Consolidated Metals by Lab prior to Analysis	7389
20/11/11	1750	X		EAM-H09-A00-0	A0	S	X	X	X	X	Consolidated Metals by Lab prior to Analysis	7390
3												
4												
5												
6												
7												
8												
9												
10												

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance
Container Type:	☒ Y ☐ N
Preservation:	☐ Y ☒ N
Holding Time:	☐ Y ☒ N
Temperature:	☐ Y ☒ N
Comments:	<u>5°C Cooled @ 1400</u>

Sampled By: <u>[Signature]</u>	Date/Time: <u>6/2/11</u>	1750
Relinquished By: <u>[Signature]</u>	Date/Time: <u>6/2/11</u>	9:10
Received By: <u>[Signature]</u>	Date/Time: <u>6/2/11</u>	1430
Received @ Lab By: <u>[Signature]</u>	Date/Time: <u>6/2/11</u>	1430
Total Cost:	P.L.F.	

Adirondack Environmental Services, Inc

Date: 25-May-11

CLIENT: Paradigm Environmental
Project: Analysis of Samples

LabWork Order: 110516015
PO#:

Lab SampleID: 110516015-004 Collection Date: 5/12/2011
Client Sample ID: 11-1898A-6433/FAM-Sed 3-Sed Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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MOISURE CONTENT ASTM D2216 D2216 Analyst: PF

Percent Moisture	30.8	0.1		wt%	1	5/17/2011
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TOTAL ORGANIC CARBON LLOYD KAHN Analyst: PL

Total Organic Carbon	12200	200		µg/g-dry	1	5/24/2011
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Lab SampleID: 110516015-005 Collection Date: 5/12/2011
Client Sample ID: 11-1898A-6436/FAM-Sed 4-Sed Matrix: SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
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MOISURE CONTENT ASTM D2216 D2216 Analyst: PF

Percent Moisture	78.9	0.1		wt%	1	5/17/2011
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TOTAL ORGANIC CARBON LLOYD KAHN Analyst: PL

Total Organic Carbon	49300	200		µg/g-dry	1	5/24/2011
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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SED1-SED-0
Field ID No.: N/A

Lab Project No.: 11-1898A
Lab Sample No.: 6428

Sample Type: Sediment

Date Sampled: 05/12/2011
Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	6600
Antimony	05/31/2011	SW846 3050/6010	< 8.81
Arsenic	05/31/2011	SW846 3050/6010	13.6
Barium	05/31/2011	SW846 3050/6010	122
Beryllium	05/31/2011	SW846 3050/6010	< 0.735
Cadmium	05/31/2011	SW846 3050/6010	0.397 J
Calcium	05/31/2011	SW846 3050/6010	56700
Chromium	05/31/2011	SW846 3050/6010	22.9
Cobalt	05/31/2011	SW846 3050/6010	8.23
Copper	05/31/2011	SW846 3050/6010	28.6
Iron	05/31/2011	SW846 3050/6010	28000
Lead	05/31/2011	SW846 3050/6010	40.3
Magnesium	05/31/2011	SW846 3050/6010	6460
Manganese	05/31/2011	SW846 3050/6010	4620
Mercury	05/24/2011	SW846 7471	< 0.0119
Nickel	05/31/2011	SW846 3050/6010	90.2
Potassium	05/31/2011	SW846 3050/6010	571
Selenium	05/31/2011	SW846 3050/6010	1.13 J
Silver	05/31/2011	SW846 3050/6010	1.43 J
Sodium	05/31/2011	SW846 3050/6010	< 367
Thallium	05/31/2011	SW846 3050/6010	3.98
Vanadium	05/31/2011	SW846 3050/6010	15.1
Zinc	05/31/2011	SW846 3050/6010	107

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogeneger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SEDDUP-SED-0

Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6429

Sample Type: Sediment

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	8340
Antimony	05/31/2011	SW846 3050/6010	< 9.24
Arsenic	05/31/2011	SW846 3050/6010	14.9
Barium	05/31/2011	SW846 3050/6010	132
Beryllium	05/31/2011	SW846 3050/6010	0.431 J
Cadmium	05/31/2011	SW846 3050/6010	0.553 J
Calcium	05/31/2011	SW846 3050/6010	53200
Chromium	05/31/2011	SW846 3050/6010	33.2
Cobalt	05/31/2011	SW846 3050/6010	10.2
Copper	05/31/2011	SW846 3050/6010	38.7
Iron	05/31/2011	SW846 3050/6010	39500
Lead	05/31/2011	SW846 3050/6010	43.9
Magnesium	05/31/2011	SW846 3050/6010	5520
Manganese	05/31/2011	SW846 3050/6010	7080
Mercury	05/24/2011	SW846 7471	0.0492
Nickel	05/31/2011	SW846 3050/6010	155
Potassium	05/31/2011	SW846 3050/6010	824
Selenium	05/31/2011	SW846 3050/6010	< 1.54
Silver	05/31/2011	SW846 3050/6010	1.61
Sodium	05/31/2011	SW846 3050/6010	< 385
Thallium	05/31/2011	SW846 3050/6010	7.58
Vanadium	05/31/2011	SW846 3050/6010	19.3
Zinc	05/31/2011	SW846 3050/6010	151

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111898A.xls



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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SED2-SED-0
Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6431

Sample Type: Sediment

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	14800
Antimony	05/31/2011	SW846 3050/6010	< 8.67
Arsenic	05/31/2011	SW846 3050/6010	7.78
Barium	05/31/2011	SW846 3050/6010	64.2
Beryllium	05/31/2011	SW846 3050/6010	0.577 J
Cadmium	05/31/2011	SW846 3050/6010	0.362 J
Calcium	05/31/2011	SW846 3050/6010	17400
Chromium	05/31/2011	SW846 3050/6010	18.5
Cobalt	05/31/2011	SW846 3050/6010	10.1
Copper	05/31/2011	SW846 3050/6010	24.7
Iron	05/31/2011	SW846 3050/6010	24300
Lead	05/31/2011	SW846 3050/6010	32.4
Magnesium	05/31/2011	SW846 3050/6010	11000
Manganese	05/31/2011	SW846 3050/6010	812
Mercury	05/24/2011	SW846 7471	0.0604
Nickel	05/31/2011	SW846 3050/6010	26.6
Potassium	05/31/2011	SW846 3050/6010	1160
Selenium	05/31/2011	SW846 3050/6010	< 1.44
Silver	05/31/2011	SW846 3050/6010	< 1.44
Sodium	05/31/2011	SW846 3050/6010	< 362
Thallium	05/31/2011	SW846 3050/6010	< 3.62
Vanadium	05/31/2011	SW846 3050/6010	21.8
Zinc	05/31/2011	SW846 3050/6010	101

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SED3-SED-0

Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6433

Sample Type: Sediment

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	9890 D
Antimony	05/31/2011	SW846 3050/6010	< 9.54 M
Arsenic	05/31/2011	SW846 3050/6010	14.6 DM
Barium	05/31/2011	SW846 3050/6010	55.2 M
Beryllium	05/31/2011	SW846 3050/6010	0.747 JDM
Cadmium	05/31/2011	SW846 3050/6010	1.26 DM
Calcium	05/31/2011	SW846 3050/6010	2270 M
Chromium	05/31/2011	SW846 3050/6010	59.9
Cobalt	05/31/2011	SW846 3050/6010	10.3 DM
Copper	05/31/2011	SW846 3050/6010	48.3 D
Iron	05/31/2011	SW846 3050/6010	34300 D
Lead	05/31/2011	SW846 3050/6010	58.1 D
Magnesium	05/31/2011	SW846 3050/6010	3070 DM
Manganese	05/31/2011	SW846 3050/6010	647 DM
Mercury	05/24/2011	SW846 7471	0.218 M
Nickel	05/31/2011	SW846 3050/6010	32.3 DM
Potassium	05/31/2011	SW846 3050/6010	591
Selenium	05/31/2011	SW846 3050/6010	< 1.59
Silver	05/31/2011	SW846 3050/6010	1.66 DM
Sodium	05/31/2011	SW846 3050/6010	< 397 M
Thallium	05/31/2011	SW846 3050/6010	< 3.97 M
Vanadium	05/31/2011	SW846 3050/6010	23.5 DM
Zinc	05/31/2011	SW846 3050/6010	581 DM

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN SOLIDS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SED4-SED-0
Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6436

Sample Type: Sediment

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	05/31/2011	SW846 3050/6010	8830
Antimony	05/31/2011	SW846 3050/6010	< 23.6
Arsenic	05/31/2011	SW846 3050/6010	55.3
Barium	05/31/2011	SW846 3050/6010	63.5
Beryllium	05/31/2011	SW846 3050/6010	< 1.96
Cadmium	05/31/2011	SW846 3050/6010	< 1.96
Calcium	05/31/2011	SW846 3050/6010	8170
Chromium	05/31/2011	SW846 3050/6010	15.8
Cobalt	05/31/2011	SW846 3050/6010	< 19.6
Copper	05/31/2011	SW846 3050/6010	33.9
Iron	05/31/2011	SW846 3050/6010	26700
Lead	05/31/2011	SW846 3050/6010	25.3
Magnesium	05/31/2011	SW846 3050/6010	3250
Manganese	05/31/2011	SW846 3050/6010	761
Mercury	05/24/2011	SW846 7471	0.0538
Nickel	05/31/2011	SW846 3050/6010	21.0
Potassium	05/31/2011	SW846 3050/6010	1160
Selenium	05/31/2011	SW846 3050/6010	3.22 J
Silver	05/31/2011	SW846 3050/6010	< 3.92
Sodium	05/31/2011	SW846 3050/6010	< 980
Thallium	05/31/2011	SW846 3050/6010	< 9.80
Vanadium	05/31/2011	SW846 3050/6010	16.6
Zinc	05/31/2011	SW846 3050/6010	102

ELAP ID No.:10958

Comments: The laboratory control spike was outside QC limits for Ag.

Approved By: _____

Bruce Hoogesteger, Technical Director

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179 Lake Avenue, Rochester, NY 14608 Office: (585) 647-2530 Fax: (585) 647-3311

LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: **TVGA**

Lab Project No.: 11-1898A

Client Job Site: A&A Metals

Lab Sample No.: 6427

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-SW1-SW-0

Date Sampled: 05/12/2011

Field ID No.: N/A

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	05/26/2011	SW846 3005/6010	1.42
Antimony	05/26/2011	SW846 3005/6010	< 0.060
Arsenic	05/26/2011	SW846 3005/6010	< 0.010
Barium	05/26/2011	SW846 3005/6010	< 0.100
Beryllium	05/26/2011	SW846 3005/6010	< 0.005
Cadmium	05/26/2011	SW846 3005/6010	< 0.005
Calcium	05/26/2011	SW846 3005/6010	79.2
Chromium	05/26/2011	SW846 3005/6010	0.010 B
Cobalt	05/26/2011	SW846 3005/6010	< 0.050
Copper	05/26/2011	SW846 3005/6010	< 0.025
Iron	05/26/2011	SW846 3005/6010	2.38
Lead	05/26/2011	SW846 3005/6010	0.005 J
Magnesium	05/26/2011	SW846 3005/6010	13.3
Manganese	05/26/2011	SW846 3005/6010	0.258
Mercury	05/18/2011	SW846 7470	< 0.0002
Nickel	05/26/2011	SW846 3005/6010	< 0.040
Potassium	05/31/2011	SW846 3005/6010	2.29 J
Selenium	05/31/2011	SW846 3005/6010	< 0.010
Silver	05/26/2011	SW846 3005/6010	< 0.010
Sodium	05/26/2011	SW846 3005/6010	25.2
Thallium	05/26/2011	SW846 3005/6010	< 0.025
Vanadium	05/26/2011	SW846 3005/6010	< 0.025
Zinc	05/26/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ba, Cd, Mn, Ni and Zn. The laboratory control spike duplicate was outside QC limits for Al, Mg, and V.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LABORATORY REPORT FOR METAL ANALYSIS IN WATER

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SW2-SW-1

Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6430

Sample Type: Water

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	05/26/2011	SW846 3005/6010	<0.200
Antimony	05/26/2011	SW846 3005/6010	<0.060
Arsenic	05/26/2011	SW846 3005/6010	<0.010
Barium	05/26/2011	SW846 3005/6010	<0.100
Beryllium	05/26/2011	SW846 3005/6010	<0.005
Cadmium	05/26/2011	SW846 3005/6010	<0.005
Calcium	05/26/2011	SW846 3005/6010	90.9
Chromium	05/26/2011	SW846 3005/6010	<0.010
Cobalt	05/26/2011	SW846 3005/6010	<0.050
Copper	05/26/2011	SW846 3005/6010	<0.025
Iron	05/26/2011	SW846 3005/6010	0.097 J
Lead	05/26/2011	SW846 3005/6010	<0.010
Magnesium	05/26/2011	SW846 3005/6010	18.2
Manganese	05/26/2011	SW846 3005/6010	0.040
Mercury	05/26/2011	SW846 7470	<0.0002
Nickel	05/26/2011	SW846 3005/6010	<0.040
Potassium	05/31/2011	SW846 3005/6010	2.14 J
Selenium	05/31/2011	SW846 3005/6010	<0.010
Silver	05/26/2011	SW846 3005/6010	<0.010
Sodium	05/26/2011	SW846 3005/6010	63.4
Thallium	05/26/2011	SW846 3005/6010	<0.025
Vanadium	05/26/2011	SW846 3005/6010	<0.025
Zinc	05/18/2011	SW846 3005/6010	<0.060

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ba, Cd, Mn, Ni and Zn.
The laboratory control duplicate was outside QC limits for Al, Mg, and V.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA

Lab Project No.: 11-1898A

Client Job Site: A&A Metals

Lab Sample No.: 6432

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-SE3-SW-0

Date Sampled: 05/12/2011

Field ID No.: N/A

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	05/26/2011	SW846 3005/6010	0.506
Antimony	05/26/2011	SW846 3005/6010	< 0.060
Arsenic	05/26/2011	SW846 3005/6010	< 0.010
Barium	05/26/2011	SW846 3005/6010	< 0.100
Beryllium	05/26/2011	SW846 3005/6010	< 0.005
Cadmium	05/26/2011	SW846 3005/6010	< 0.005
Calcium	05/26/2011	SW846 3005/6010	61.3
Chromium	05/26/2011	SW846 3005/6010	0.010 JB
Cobalt	05/26/2011	SW846 3005/6010	< 0.050
Copper	05/26/2011	SW846 3005/6010	< 0.025
Iron	05/26/2011	SW846 3005/6010	1.43
Lead	05/26/2011	SW846 3005/6010	< 0.010
Magnesium	05/26/2011	SW846 3005/6010	10.4
Manganese	05/26/2011	SW846 3005/6010	0.264
Mercury	05/18/2011	SW846 7470	< 0.0002
Nickel	05/26/2011	SW846 3005/6010	< 0.040
Potassium	05/31/2011	SW846 3005/6010	1.54 J
Selenium	05/31/2011	SW846 3005/6010	0.009 J
Silver	05/26/2011	SW846 3005/6010	< 0.010
Sodium	05/26/2011	SW846 3005/6010	4.85
Thallium	05/26/2011	SW846 3005/6010	< 0.025
Vanadium	05/26/2011	SW846 3005/6010	< 0.025
Zinc	05/26/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ba, Cd, Mn, Ni and Zn. The laboratory control spike duplicate was outside QC limits for Al, Mg, and V.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA

Client Job Site: A&A Metals

Client Job No.: 2011.0066.00

Field Location: FAM-SWDUP-SW-0
Field ID No.: N/A

Lab Project No.: 11-1898A

Lab Sample No.: 6434

Sample Type: Water

Date Sampled: 05/12/2011

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	05/26/2011	SW846 3005/6010	< 0.200
Antimony	05/26/2011	SW846 3005/6010	< 0.060
Arsenic	05/26/2011	SW846 3005/6010	0.010 J
Barium	05/26/2011	SW846 3005/6010	< 0.100
Beryllium	05/26/2011	SW846 3005/6010	< 0.005
Cadmium	05/26/2011	SW846 3005/6010	< 0.005
Calcium	05/26/2011	SW846 3005/6010	27.6
Chromium	05/26/2011	SW846 3005/6010	< 0.010
Cobalt	05/26/2011	SW846 3005/6010	< 0.050
Copper	05/26/2011	SW846 3005/6010	< 0.025
Iron	05/26/2011	SW846 3005/6010	2.05
Lead	05/26/2011	SW846 3005/6010	< 0.010
Magnesium	05/26/2011	SW846 3005/6010	5.23
Manganese	05/26/2011	SW846 3005/6010	0.283
Mercury	05/18/2011	SW846 7470	< 0.0002
Nickel	05/26/2011	SW846 3005/6010	< 0.040
Potassium	05/31/2011	SW846 3005/6010	< 2.50
Selenium	05/31/2011	SW846 3005/6010	< 0.010
Silver	05/26/2011	SW846 3005/6010	< 0.010
Sodium	05/26/2011	SW846 3005/6010	3.18
Thallium	05/26/2011	SW846 3005/6010	< 0.025
Vanadium	05/26/2011	SW846 3005/6010	< 0.025
Zinc	05/26/2011	SW846 3005/6010	< 0.060

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ba, Cd, Mn, Ni and Zn.
The laboratory control spike duplicate was outside QC limits for Al, Mg, and V.

Approved By: _____

Bruce Hoogesteger, Technical Director

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LAB REPORT FOR TAL METALS ANALYSIS IN WATERS

Client: TVGA

Lab Project No.: 11-1898A

Client Job Site: A&A Metals

Lab Sample No.: 6435

Client Job No.: 2011.0066.00

Sample Type: Water

Field Location: FAM-SW4-SW-0

Date Sampled: 05/12/2011

Field ID No.: N/A

Date Received: 05/13/2011

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Aluminum	05/26/2011	SW846 3005/6010	< 0.200
Antimony	05/26/2011	SW846 3005/6010	< 0.060
Arsenic	05/26/2011	SW846 3005/6010	0.011 D
Barium	05/26/2011	SW846 3005/6010	< 0.100 M
Beryllium	05/26/2011	SW846 3005/6010	< 0.005
Cadmium	05/26/2011	SW846 3005/6010	< 0.005 M
Calcium	05/26/2011	SW846 3005/6010	28.1
Chromium	05/26/2011	SW846 3005/6010	< 0.010
Cobalt	05/26/2011	SW846 3005/6010	< 0.050
Copper	05/26/2011	SW846 3005/6010	< 0.025
Iron	05/26/2011	SW846 3005/6010	2.12
Lead	05/26/2011	SW846 3005/6010	< 0.010
Magnesium	05/26/2011	SW846 3005/6010	5.34 M
Manganese	05/26/2011	SW846 3005/6010	0.288 M
Mercury	05/18/2011	SW846 7470	< 0.0002
Nickel	05/26/2011	SW846 3005/6010	< 0.040 M
Potassium	05/31/2011	SW846 3005/6010	< 2.50
Selenium	05/31/2011	SW846 3005/6010	< 0.010
Silver	05/26/2011	SW846 3005/6010	< 0.010 M
Sodium	05/26/2011	SW846 3005/6010	3.16
Thallium	05/26/2011	SW846 3005/6010	< 0.025
Vanadium	05/26/2011	SW846 3005/6010	< 0.025
Zinc	05/26/2011	SW846 3005/6010	< 0.060 M

ELAP ID No.:10958

Comments: The laboratory control spike and spike duplicate was outside QC limits for Ba, Cd, Mn, Ni and Zn. The laboratory control spike duplicate was outside QC limits for Al, Mg, and V.

Approved By: _____

Bruce Hoogesteger, Technical Director

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File ID:111898A.xls

**Volatile Analysis Report for Non-potable Water****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6427**Client Job Number:** 2011.0066.00**Field Location:** FAM-SW1-SW-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Water**Date Analyzed:** 05/24/2011

Compound	Results in ug / L
Acetone	14.9
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

ELAP Number 10958

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

Method: EPA 8260B

Data File: V84924.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V1.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6428

Client Job Number: 2011.0066.00

Field Location: FAM-SED1-SED-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Sediment

Date Analyzed: 05/21/2011

Compound	Results in ug / Kg
Acetone	< 28.6
Benzene	< 5.73
Bromochloromethane	< 14.3
Bromodichloromethane	< 5.73
Bromoform	< 14.3
Bromomethane	< 5.73
2-Butanone	< 28.6
Carbon disulfide	< 5.73
Carbon Tetrachloride	< 5.73
Chlorobenzene	< 5.73
Chloroethane	< 5.73
Chloroform	< 5.73
Chloromethane	< 5.73
Cyclohexane	< 28.6
Dibromochloromethane	< 5.73
1,2-Dibromo-3-Chloropropane	< 28.6
1,2-Dibromoethane	< 5.73
1,2-Dichlorobenzene	< 5.73
1,3-Dichlorobenzene	< 5.73
1,4-Dichlorobenzene	< 5.73
Dichlorodifluoromethane	< 5.73
1,1-Dichloroethane	< 5.73
1,2-Dichloroethane	< 5.73
1,1-Dichloroethene	< 5.73
cis-1,2-Dichloroethene	< 5.73
trans-1,2-Dichloroethene	< 5.73

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 5.73
cis-1,3-Dichloropropene	< 5.73
trans-1,3-Dichloropropene	< 5.73
Ethylbenzene	< 5.73
Freon 113	< 5.73
2-Hexanone	< 14.3
Isopropylbenzene	< 5.73
Methyl acetate	< 5.73
Methyl tert-butyl Ether	< 5.73
Methylcyclohexane	< 5.73
Methylene chloride	< 14.3
4-Methyl-2-pentanone	< 14.3
Styrene	< 14.3
1,1,2,2-Tetrachloroethane	< 5.73
Tetrachloroethene	< 5.73
Toluene	< 5.73
1,2,3-Trichlorobenzene	< 14.3
1,2,4-Trichlorobenzene	< 14.3
1,1,1-Trichloroethane	< 5.73
1,1,2-Trichloroethane	< 5.73
Trichloroethene	< 5.73
Trichlorofluoromethane	< 5.73
Vinyl chloride	< 5.73
m,p-Xylene	< 5.73
o-Xylene	< 5.73

Method: EPA 8260B

Data File: V84869.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V6

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6429**Client Job Number:** 2011.0066.00**Field Location:** FAM-SEDDUP-SED-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Sediment**Date Analyzed:** 05/21/2011

Compound	Results in ug / Kg
Acetone	< 36.1
Benzene	< 7.23
Bromochloromethane	< 18.1
Bromodichloromethane	< 7.23
Bromoform	< 18.1
Bromomethane	< 7.23
2-Butanone	< 36.1
Carbon disulfide	< 7.23
Carbon Tetrachloride	< 7.23
Chlorobenzene	< 7.23
Chloroethane	< 7.23
Chloroform	< 7.23
Chloromethane	< 7.23
Cyclohexane	< 36.1
Dibromochloromethane	< 7.23
1,2-Dibromo-3-Chloropropane	< 36.1
1,2-Dibromoethane	< 7.23
1,2-Dichlorobenzene	< 7.23
1,3-Dichlorobenzene	< 7.23
1,4-Dichlorobenzene	< 7.23
Dichlorodifluoromethane	< 7.23
1,1-Dichloroethane	< 7.23
1,2-Dichloroethane	< 7.23
1,1-Dichloroethene	< 7.23
cis-1,2-Dichloroethene	< 7.23
trans-1,2-Dichloroethene	< 7.23

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 7.23
cis-1,3-Dichloropropene	< 7.23
trans-1,3-Dichloropropene	< 7.23
Ethylbenzene	< 7.23
Freon 113	< 7.23
2-Hexanone	< 18.1
Isopropylbenzene	< 7.23
Methyl acetate	< 7.23
Methyl tert-butyl Ether	< 7.23
Methylcyclohexane	< 7.23
Methylene chloride	< 18.1
4-Methyl-2-pentanone	< 18.1
Styrene	< 18.1
1,1,2,2-Tetrachloroethane	< 7.23
Tetrachloroethene	< 7.23
Toluene	< 7.23
1,2,3-Trichlorobenzene	< 18.1
1,2,4-Trichlorobenzene	< 18.1
1,1,1-Trichloroethane	< 7.23
1,1,2-Trichloroethane	< 7.23
Trichloroethene	< 7.23
Trichlorofluoromethane	< 7.23
Vinyl chloride	< 7.23
m,p-Xylene	< 7.23
o-Xylene	< 7.23

Method: EPA 8260B

Data File: V84870.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V7

**Volatile Analysis Report for Non-potable Water****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6430**Client Job Number:** 2011.0066.00**Field Location:** FAM-SW2-SW-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Water**Date Analyzed:** 05/24/2011

Compound	Results in ug / L
Acetone	19.6
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84925.D

Comments: ug / L = microgram per Liter

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V2.XLS

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6431**Client Job Number:** 2011.0066.00**Field Location:** FAM-SED2-SED-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Sediment**Date Analyzed:** 05/21/2011

Compound	Results in ug / Kg
Acetone	< 29.5
Benzene	< 5.91
Bromochloromethane	< 14.8
Bromodichloromethane	< 5.91
Bromoform	< 14.8
Bromomethane	< 5.91
2-Butanone	< 29.5
Carbon disulfide	< 5.91
Carbon Tetrachloride	< 5.91
Chlorobenzene	< 5.91
Chloroethane	< 5.91
Chloroform	< 5.91
Chloromethane	< 5.91
Cyclohexane	< 29.5
Dibromochloromethane	< 5.91
1,2-Dibromo-3-Chloropropane	< 29.5
1,2-Dibromoethane	< 5.91
1,2-Dichlorobenzene	< 5.91
1,3-Dichlorobenzene	< 5.91
1,4-Dichlorobenzene	< 5.91
Dichlorodifluoromethane	< 5.91
1,1-Dichloroethane	< 5.91
1,2-Dichloroethane	< 5.91
1,1-Dichloroethene	< 5.91
cis-1,2-Dichloroethene	< 5.91
trans-1,2-Dichloroethene	< 5.91

Compound	Results in ug / Kg
1,2-Dichloropropane	< 5.91
cis-1,3-Dichloropropene	< 5.91
trans-1,3-Dichloropropene	< 5.91
Ethylbenzene	< 5.91
Freon 113	< 5.91
2-Hexanone	< 14.8
Isopropylbenzene	< 5.91
Methyl acetate	< 5.91
Methyl tert-butyl Ether	< 5.91
Methylcyclohexane	< 5.91
Methylene chloride	< 14.8
4-Methyl-2-pentanone	< 14.8
Styrene	< 14.8
1,1,2,2-Tetrachloroethane	< 5.91
Tetrachloroethene	< 5.91
Toluene	< 5.91
1,2,3-Trichlorobenzene	< 14.8
1,2,4-Trichlorobenzene	< 14.8
1,1,1-Trichloroethane	< 5.91
1,1,2-Trichloroethane	< 5.91
Trichloroethene	< 5.91
Trichlorofluoromethane	< 5.91
Vinyl chloride	< 5.91
m,p-Xylene	< 5.91
o-Xylene	< 5.91

ELAP Number 10958

Method: EPA 8260B

Data File: V84871.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V8

**Volatile Analysis Report for Non-potable Water****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6432**Client Job Number:** 2011.0066.00**Field Location:** FAM-SW3-SW-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Water**Date Analyzed:** 05/24/2011

Compound	Results in ug / L
Acetone	13.6
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	< 2.00
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84928.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V3

**Volatile Analysis Report for Soils/Solids/Sludges****Client:** TVGA**Client Job Site:** A + A Metals**Lab Project Number:** 11-1898A**Lab Sample Number:** 6433**Client Job Number:** 2011.0066.00**Field Location:** FAM-SED3-SED-O**Date Sampled:** 05/12/2011**Field ID Number:** N/A**Date Received:** 05/13/2011**Sample Type:** Sediment**Date Analyzed:** 05/20/2011

Compound	Results in ug / Kg
Acetone	< 27.9
Benzene	< 5.59
Bromochloromethane	< 14.0
Bromodichloromethane	< 5.59
Bromoform	< 14.0
Bromomethane	< 5.59
2-Butanone	< 27.9
Carbon disulfide	< 5.59
Carbon Tetrachloride	< 5.59
Chlorobenzene	< 5.59
Chloroethane	< 5.59
Chloroform	< 5.59
Chloromethane	< 5.59
Cyclohexane	< 27.9
Dibromochloromethane	< 5.59
1,2-Dibromo-3-Chloropropane	< 27.9
1,2-Dibromoethane	< 5.59
1,2-Dichlorobenzene	< 5.59
1,3-Dichlorobenzene	< 5.59
1,4-Dichlorobenzene	< 5.59
Dichlorodifluoromethane	< 5.59
1,1-Dichloroethane	< 5.59
1,2-Dichloroethane	< 5.59
1,1-Dichloroethene	< 5.59
cis-1,2-Dichloroethene	< 5.59
trans-1,2-Dichloroethene	< 5.59

ELAP Number 10958

Compound	Results in ug / Kg
1,2-Dichloropropane	< 5.59
cis-1,3-Dichloropropene	< 5.59
trans-1,3-Dichloropropene	< 5.59
Ethylbenzene	< 5.59
Freon 113	< 5.59
2-Hexanone	< 14.0
Isopropylbenzene	< 5.59
Methyl acetate	< 5.59
Methyl tert-butyl Ether	< 5.59
Methylcyclohexane	< 5.59
Methylene chloride	22.6
4-Methyl-2-pentanone	< 14.0
Styrene	< 14.0
1,1,2,2-Tetrachloroethane	< 5.59
Tetrachloroethene	< 5.59
Toluene	< 5.59
1,2,3-Trichlorobenzene	< 14.0
1,2,4-Trichlorobenzene	< 14.0
1,1,1-Trichloroethane	< 5.59
1,1,2-Trichloroethane	< 5.59
Trichloroethene	J 3.03
Trichlorofluoromethane	< 5.59
Vinyl chloride	< 5.59
m,p-Xylene	< 5.59
o-Xylene	< 5.59

Data File: V84818.D

Method: EPA 8260B

Comments: ug / Kg = microgram per Kilogram

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V9.XLS

**Volatile Analysis Report for Non-potable Water**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6434

Client Job Number: 2011.0066.00

Field Location: FAM-SWDUP-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/24/2011

Compound	Results in ug / L
Acetone	18.5
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	8.93
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84929.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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111898V4.XLS

**Volatile Analysis Report for Non-potable Water**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6435

Client Job Number: 2011.0066.00

Field Location: FAM-SW4-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/24/2011

Compound	Results in ug / L
Acetone	18.1
Benzene	< 0.700
Bromochloromethane	< 5.00
Bromodichloromethane	< 2.00
Bromoform	< 5.00
Bromomethane	< 2.00
2-Butanone	< 10.0
Carbon disulfide	< 2.00
Carbon Tetrachloride	< 2.00
Chlorobenzene	< 2.00
Chloroethane	< 2.00
Chloroform	< 2.00
Chloromethane	< 2.00
Cyclohexane	< 10.0
Dibromochloromethane	< 2.00
1,2-Dibromo-3-Chloropropane	< 10.0
1,2-Dibromoethane	< 2.00
1,2-Dichlorobenzene	< 2.00
1,3-Dichlorobenzene	< 2.00
1,4-Dichlorobenzene	< 2.00
Dichlorodifluoromethane	< 2.00
1,1-Dichloroethane	< 2.00
1,2-Dichloroethane	< 2.00
1,1-Dichloroethene	< 2.00
cis-1,2-Dichloroethene	9.21
trans-1,2-Dichloroethene	< 2.00

Compound	Results in ug / L
1,2-Dichloropropane	< 2.00
cis-1,3-Dichloropropene	< 2.00
trans-1,3-Dichloropropene	< 2.00
Ethylbenzene	< 2.00
Freon 113	< 2.00
2-Hexanone	< 5.00
Isopropylbenzene	< 2.00
Methyl acetate	< 2.00
Methyl tert-butyl Ether	< 2.00
Methylcyclohexane	< 2.00
Methylene chloride	< 5.00
4-Methyl-2-pentanone	< 5.00
Styrene	< 5.00
1,1,2,2-Tetrachloroethane	< 2.00
Tetrachloroethene	< 2.00
Toluene	< 2.00
1,2,3-Trichlorobenzene	< 5.00
1,2,4-Trichlorobenzene	< 5.00
1,1,1-Trichloroethane	< 2.00
1,1,2-Trichloroethane	< 2.00
Trichloroethene	< 2.00
Trichlorofluoromethane	< 2.00
Vinyl chloride	< 2.00
m,p-Xylene	< 2.00
o-Xylene	< 2.00

ELAP Number 10958

Method: EPA 8260B

Data File: V84930.D

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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111898V5.XLS

**Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A + A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6436

Client Job Number: 2011.0066.00

Field Location: FAM-SED4-SED-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Sediment

Date Analyzed: 05/20/2011

Compound	Results in ug / Kg
Acetone	< 89.4
Benzene	< 17.9
Bromochloromethane	< 44.7
Bromodichloromethane	< 17.9
Bromoform	< 44.7
Bromomethane	< 17.9
2-Butanone	< 89.4
Carbon disulfide	< 17.9
Carbon Tetrachloride	< 17.9
Chlorobenzene	< 17.9
Chloroethane	< 17.9
Chloroform	< 17.9
Chloromethane	< 17.9
Cyclohexane	< 89.4
Dibromochloromethane	< 17.9
1,2-Dibromo-3-Chloropropane	< 89.4
1,2-Dibromoethane	< 17.9
1,2-Dichlorobenzene	< 17.9
1,3-Dichlorobenzene	< 17.9
1,4-Dichlorobenzene	< 17.9
Dichlorodifluoromethane	< 17.9
1,1-Dichloroethane	< 17.9
1,2-Dichloroethane	< 17.9
1,1-Dichloroethene	< 17.9
cis-1,2-Dichloroethene	24.3
trans-1,2-Dichloroethene	< 17.9

Compound	Results in ug / Kg
1,2-Dichloropropane	< 17.9
cis-1,3-Dichloropropene	< 17.9
trans-1,3-Dichloropropene	< 17.9
Ethylbenzene	< 17.9
Freon 113	< 17.9
2-Hexanone	< 44.7
Isopropylbenzene	< 17.9
Methyl acetate	< 17.9
Methyl tert-butyl Ether	< 17.9
Methylcyclohexane	< 17.9
Methylene chloride	J 42.2
4-Methyl-2-pentanone	< 44.7
Styrene	< 44.7
1,1,2,2-Tetrachloroethane	< 17.9
Tetrachloroethene	< 17.9
Toluene	< 17.9
1,2,3-Trichlorobenzene	< 44.7
1,2,4-Trichlorobenzene	< 44.7
1,1,1-Trichloroethane	< 17.9
1,1,2-Trichloroethane	< 17.9
Trichloroethene	159
Trichlorofluoromethane	< 17.9
Vinyl chloride	< 17.9
m,p-Xylene	< 17.9
o-Xylene	< 17.9

ELAP Number 10958

Method: EPA 8260B

Data File: V84821.D

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogestener, Technical Director

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111898V0



Semi-Volatile Analysis Report for Non-potable Water

Client: TVGA

Client Job Site: A&A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SW1-SW-O
Field ID Number: N/A
Sample Type: Water

Lab Project Number: 11-1898A
Lab Sample Number: 6427
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 05/20/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56594.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature:


Bruce Hoogesteger, Technical Director

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111898S1.XLS

**Semi-Volatile Analysis Report for Soils/Solids/Sludges**Client: **TVGA**

Client Job Site: A&A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SED1-SED-O
Field ID Number: N/A
Sample Type: Sediment

Lab Project Number: 11-1898A
Lab Sample Number: 6428
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 06/01/2011

Compound	Results in ug / Kg
Acenaphthene	< 919
Acenaphthylene	< 919
Acetophenone	< 919
Anthracene	< 919
Atrazine	< 919
Benzaldehyde	< 919
Benzo (a) anthracene	J 627
Benzo (a) pyrene	J 630
Benzo (b) fluoranthene	J 674
Benzo (g,h,i) perylene	< 919
Benzo (k) fluoranthene	J 701
Biphenyl	< 919
Bis (2-chloroethyl) ether	< 919
Bis (2-chloroethoxy) methane	< 919
Bis (2-ethylhexyl) phthalate	< 919
Bis (2-chloroisopropyl) ether	< 919
4-Bromophenyl phenyl ether	< 919
Butylbenzylphthalate	< 919
Caprolactam	< 919
Carbazole	< 919
4-Chloroaniline	< 919
4-Chloro-3-methylphenol	< 919
2-Chloronaphthalene	< 919
2-Chlorophenol	< 919
4-Chlorophenyl phenyl ether	< 919
Chrysene	J 838
1,3-Dichlorobenzene	< 919
1,4-Dichlorobenzene	< 919
1,2-Dichlorobenzene	< 919
Dibenz (a,h) anthracene	< 919
Dibenzofuran	< 919
3,3'-Dichlorobenzidine	< 919
2,4-Dichlorophenol	< 919
Diethyl phthalate	< 919
2,4-Dimethylphenol	< 919
Dimethyl phthalate	< 2,300

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 919
4,6-Dinitro-2-methylphenol	< 2,300
2,4-Dinitrophenol	< 2,300
2,4-Dinitrotoluene	< 919
2,6-Dinitrotoluene	< 919
Di-n-octylphthalate	< 919
Fluoranthene	1,510
Fluorene	< 919
Hexachlorobenzene	< 919
Hexachlorobutadiene	< 919
Hexachlorocyclopentadiene	< 919
Hexachloroethane	< 919
Indeno (1,2,3-cd) pyrene	< 919
Isophorone	< 919
2-Methylnaphthalene	< 919
2-Methylphenol	< 919
3&4-Methylphenol	< 919
Naphthalene	< 919
2-Nitroaniline	< 2,300
3-Nitroaniline	< 2,300
4-Nitroaniline	< 2,300
Nitrobenzene	< 919
2-Nitrophenol	< 919
4-Nitrophenol	< 2,300
N-Nitroso-di-n-propylamine	< 919
N-Nitrosodiphenylamine	< 919
Pentachlorophenol	< 2,300
Phenanthrene	J 798
Phenol	< 919
Pyrene	1,310
1,2,4-Trichlorobenzene	< 919
2,4,5-Trichlorophenol	< 2,300
2,4,6-Trichlorophenol	< 919
1,2,4,5-Tetrachlorobenzene	< 919
2,3,4,6-Tetrachlorophenol	< 919

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56934.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111898S2.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6429

Client Job Number: 2011.0066.00

Field Location: FAM-SEDDUP-SED-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Sediment

Date Analyzed: 06/01/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,080
Acenaphthylene	< 1,080
Acetophenone	< 1,080
Anthracene	< 1,080
Atrazine	< 1,080
Benzaldehyde	< 1,080
Benzo (a) anthracene	J 777
Benzo (a) pyrene	J 678
Benzo (b) fluoranthene	J 899
Benzo (g,h,i) perylene	< 1,080
Benzo (k) fluoranthene	J 700
Biphenyl	< 1,080
Bis (2-chloroethyl) ether	< 1,080
Bis (2-chloroethoxy) methane	< 1,080
Bis (2-ethylhexyl) phthalate	< 1,080
Bis (2-chloroisopropyl) ether	< 1,080
4-Bromophenyl phenyl ether	< 1,080
Butylbenzylphthalate	< 1,080
Caprolactam	< 1,080
Carbazole	< 1,080
4-Chloroaniline	< 1,080
4-Chloro-3-methylphenol	< 1,080
2-Chloronaphthalene	< 1,080
2-Chlorophenol	< 1,080
4-Chlorophenyl phenyl ether	< 1,080
Chrysene	J 950
1,3-Dichlorobenzene	< 1,080
1,4-Dichlorobenzene	< 1,080
1,2-Dichlorobenzene	< 1,080
Dibenz (a,h) anthracene	< 1,080
Dibenzofuran	< 1,080
3,3'-Dichlorobenzidine	< 1,080
2,4-Dichlorophenol	< 1,080
Diethyl phthalate	< 1,080
2,4-Dimethylphenol	< 1,080
Dimethyl phthalate	< 2,710

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,080
4,6-Dinitro-2-methylphenol	< 2,710
2,4-Dinitrophenol	< 2,710
2,4-Dinitrotoluene	< 1,080
2,6-Dinitrotoluene	< 1,080
Di-n-octylphthalate	< 1,080
Fluoranthene	1,390
Fluorene	< 1,080
Hexachlorobenzene	< 1,080
Hexachlorobutadiene	< 1,080
Hexachlorocyclopentadiene	< 1,080
Hexachloroethane	< 1,080
Indeno (1,2,3-cd) pyrene	< 1,080
Isophorone	< 1,080
2-Methylnaphthalene	< 1,080
2-Methylphenol	< 1,080
3&4-Methylphenol	< 1,080
Naphthalene	< 1,080
2-Nitroaniline	< 2,710
3-Nitroaniline	< 2,710
4-Nitroaniline	< 2,710
Nitrobenzene	< 1,080
2-Nitrophenol	< 1,080
4-Nitrophenol	< 2,710
N-Nitroso-di-n-propylamine	< 1,080
N-Nitrosodiphenylamine	< 1,080
Pentachlorophenol	< 2,710
Phenanthrene	J 700
Phenol	< 1,080
Pyrene	1,240
1,2,4-Trichlorobenzene	< 1,080
2,4,5-Trichlorophenol	< 2,710
2,4,6-Trichlorophenol	< 1,080
1,2,4,5-Tetrachlorobenzene	< 1,080
2,3,4,6-Tetrachlorophenol	< 1,080

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56935.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Signature: _____

Bruce Hoogesteger, Technical Director

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111898S3.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

Semi-Volatile Analysis Report for Non-potable Water

Client: TVGA

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6430

Client Job Number: 2011.0066.00

Field Location: FAM-SW2-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/20/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56595.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger, Technical Director

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111898S4.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A&A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SED2-SED-O
Field ID Number: N/A
Sample Type: Sediment

Lab Project Number: 11-1898A
Lab Sample Number: 6431
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 06/01/2011

Compound	Results in ug / Kg
Acenaphthene	< 446
Acenaphthylene	< 446
Acetophenone	< 446
Anthracene	< 446
Atrazine	< 446
Benzaldehyde	< 446
Benzo (a) anthracene	< 446
Benzo (a) pyrene	< 446
Benzo (b) fluoranthene	< 446
Benzo (g,h,i) perylene	< 446
Benzo (k) fluoranthene	< 446
Biphenyl	< 446
Bis (2-chloroethyl) ether	< 446
Bis (2-chloroethoxy) methane	< 446
Bis (2-ethylhexyl) phthalate	< 446
Bis (2-chloroisopropyl) ether	< 446
4-Bromophenyl phenyl ether	< 446
Butylbenzylphthalate	< 446
Caprolactam	< 446
Carbazole	< 446
4-Chloroaniline	< 446
4-Chloro-3-methylphenol	< 446
2-Chloronaphthalene	< 446
2-Chlorophenol	< 446
4-Chlorophenyl phenyl ether	< 446
Chrysene	< 446
1,3-Dichlorobenzene	< 446
1,4-Dichlorobenzene	< 446
1,2-Dichlorobenzene	< 446
Dibenz (a,h) anthracene	< 446
Dibenzofuran	< 446
3,3'-Dichlorobenzidine	< 446
2,4-Dichlorophenol	< 446
Diethyl phthalate	< 446
2,4-Dimethylphenol	< 446
Dimethyl phthalate	< 1,110

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 446
4,6-Dinitro-2-methylphenol	< 1,110
2,4-Dinitrophenol	< 1,110
2,4-Dinitrotoluene	< 446
2,6-Dinitrotoluene	< 446
Di-n-octylphthalate	< 446
Fluoranthene	< 446
Fluorene	< 446
Hexachlorobenzene	< 446
Hexachlorobutadiene	< 446
Hexachlorocyclopentadiene	< 446
Hexachloroethane	< 446
Indeno (1,2,3-cd) pyrene	< 446
Isophorone	< 446
2-Methylnaphthalene	< 446
2-Methylphenol	< 446
3&4-Methylphenol	< 446
Naphthalene	< 446
2-Nitroaniline	< 1,110
3-Nitroaniline	< 1,110
4-Nitroaniline	< 1,110
Nitrobenzene	< 446
2-Nitrophenol	< 446
4-Nitrophenol	< 1,110
N-Nitroso-di-n-propylamine	< 446
N-Nitrosodiphenylamine	< 446
Pentachlorophenol	< 1,110
Phenanthrene	< 446
Phenol	< 446
Pyrene	< 446
1,2,4-Trichlorobenzene	< 446
2,4,5-Trichlorophenol	< 1,110
2,4,6-Trichlorophenol	< 446
1,2,4,5-Tetrachlorobenzene	< 446
2,3,4,6-Tetrachlorophenol	< 446

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56945.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Sample was prepped outside of holding time, results should be considered estimated.

Signature:

Bruce Hoogesteger: Technical Director

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111898S5.XLS

**Semi -Volatile Analysis Report for Non-potable Water**Client: **TVGA**

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6432

Client Job Number: 2011.0066.00

Field Location: FAM-SW3-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/20/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56598.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

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111898S6.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6433

Client Job Number: 2011.0066.00

Field Location: FAM-SED3-SED-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Sediment

Date Analyzed: 06/01/2011

Compound	Results in ug / Kg
Acenaphthene	< 922
Acenaphthylene	J 573
Acetophenone	< 922
Anthracene	1,080
Atrazine	< 922
Benzaldehyde	< 922
Benzo (a) anthracene	3,030
Benzo (a) pyrene	2,420
Benzo (b) fluoranthene	2,300
Benzo (g,h,i) perylene	1,340
Benzo (k) fluoranthene	2,220
Biphenyl	< 922
Bis (2-chloroethyl) ether	< 922
Bis (2-chloroethoxy) methane	< 922
Bis (2-ethylhexyl) phthalate	< 922
Bis (2-chloroisopropyl) ether	< 922
4-Bromophenyl phenyl ether	< 922
Butylbenzylphthalate	< 922
Caprolactam	< 922
Carbazole	< 922
4-Chloroaniline	< 922
4-Chloro-3-methylphenol	< 922
2-Chloronaphthalene	< 922
2-Chlorophenol	< 922
4-Chlorophenyl phenyl ether	< 922
Chrysene	2,950
1,3-Dichlorobenzene	< 922
1,4-Dichlorobenzene	< 922
1,2-Dichlorobenzene	< 922
Dibenz (a,h) anthracene	< 922
Dibenzofuran	< 922
3,3'-Dichlorobenzidine	< 922
2,4-Dichlorophenol	< 922
Diethyl phthalate	< 922
2,4-Dimethylphenol	< 922
Dimethyl phthalate	< 2,310

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 922
4,6-Dinitro-2-methylphenol	< 2,310
2,4-Dinitrophenol	< 2,310
2,4-Dinitrotoluene	< 922
2,6-Dinitrotoluene	< 922
Di-n-octylphthalate	< 922
Fluoranthene	6,130
Fluorene	< 922
Hexachlorobenzene	< 922
Hexachlorobutadiene	< 922
Hexachlorocyclopentadiene	< 922
Hexachloroethane	< 922
Indeno (1,2,3-cd) pyrene	1,070
Isophorone	< 922
2-Methylnaphthalene	< 922
2-Methylphenol	< 922
3&4-Methylphenol	< 922
Naphthalene	< 922
2-Nitroaniline	< 2,310
3-Nitroaniline	< 2,310
4-Nitroaniline	< 2,310
Nitrobenzene	< 922
2-Nitrophenol	< 922
4-Nitrophenol	< 2,310
N-Nitroso-di-n-propylamine	< 922
N-Nitrosodiphenylamine	< 922
Pentachlorophenol	< 2,310
Phenanthrene	4,580
Phenol	< 922
Pyrene	5,510
1,2,4-Trichlorobenzene	< 922
2,4,5-Trichlorophenol	< 2,310
2,4,6-Trichlorophenol	< 922
1,2,4,5-Tetrachlorobenzene	< 922
2,3,4,6-Tetrachlorophenol	< 922

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56936.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Matrix Spike outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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11189837.XLS



Semi -Volatile Analysis Report for Non-potable Water

Client: TVGA

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6434

Client Job Number: 2011.0066.00

Field Location: FAM-SWDUP-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/20/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56599.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111898S8.XLS



Semi-Volatile Analysis Report for Non-potable Water

Client: TVGA

Client Job Site: A&A Metals

Lab Project Number: 11-1898A

Lab Sample Number: 6435

Client Job Number: 2011.0066.00

Field Location: FAM-SW4-SW-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Water

Date Analyzed: 05/20/2011

Compound	Results in ug / L
Acenaphthene	< 10.0
Acenaphthylene	< 10.0
Acetophenone	< 10.0
Anthracene	< 10.0
Atrazine	< 10.0
Benzaldehyde	< 10.0
Benzo (a) anthracene	< 10.0
Benzo (a) pyrene	< 10.0
Benzo (b) fluoranthene	< 10.0
Benzo (g,h,i) perylene	< 10.0
Benzo (k) fluoranthene	< 10.0
Biphenyl	< 10.0
Bis (2-chloroethyl) ether	< 10.0
Bis (2-chloroethoxy) methane	< 10.0
Bis (2-ethylhexyl) phthalate	< 10.0
Bis (2-chloroisopropyl) ether	< 10.0
4-Bromophenyl phenyl ether	< 10.0
Butylbenzylphthalate	< 10.0
Caprolactam	< 10.0
Carbazole	< 10.0
4-Chloroaniline	< 10.0
4-Chloro-3-methylphenol	< 10.0
2-Chloronaphthalene	< 10.0
2-Chlorophenol	< 10.0
4-Chlorophenyl phenyl ether	< 10.0
Chrysene	< 10.0
1,3-Dichlorobenzene	< 10.0
1,4-Dichlorobenzene	< 10.0
1,2-Dichlorobenzene	< 10.0
Dibenz (a,h) anthracene	< 10.0
Dibenzofuran	< 10.0
3,3'-Dichlorobenzidine	< 10.0
2,4-Dichlorophenol	< 10.0
Diethyl phthalate	< 10.0
2,4-Dimethylphenol	< 10.0
Dimethyl phthalate	< 25.0

Compound	Results in ug / L
Di-n-butyl phthalate	< 10.0
4,6-Dinitro-2-methylphenol	< 25.0
2,4-Dinitrophenol	< 25.0
2,4-Dinitrotoluene	< 10.0
2,6-Dinitrotoluene	< 10.0
Di-n-octylphthalate	< 10.0
Fluoranthene	< 10.0
Fluorene	< 10.0
Hexachlorobenzene	< 10.0
Hexachlorobutadiene	< 10.0
Hexachlorocyclopentadiene	< 10.0
Hexachloroethane	< 10.0
Indeno (1,2,3-cd) pyrene	< 10.0
Isophorone	< 10.0
2-Methylnaphthalene	< 10.0
2-Methylphenol	< 10.0
3&4-Methylphenol	< 10.0
Naphthalene	< 10.0
2-Nitroaniline	< 25.0
3-Nitroaniline	< 25.0
4-Nitroaniline	< 25.0
Nitrobenzene	< 10.0
2-Nitrophenol	< 10.0
4-Nitrophenol	< 25.0
N-Nitroso-di-n-propylamine	< 10.0
N-Nitrosodiphenylamine	< 10.0
Pentachlorophenol	< 25.0
Phenanthrene	< 10.0
Phenol	< 10.0
Pyrene	< 10.0
1,2,4-Trichlorobenzene	< 10.0
2,4,5-Trichlorophenol	< 25.0
2,4,6-Trichlorophenol	< 10.0
1,2,4,5-Tetrachlorobenzene	< 10.0
2,3,4,6-Tetrachlorophenol	< 10.0

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56600.D

Prep Method: EPA 3510C

Comments: ug / L = microgram per Liter

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111898S9.XLS



Semi-Volatile Analysis Report for Soils/Solids/Sludges

Client: TVGA

Client Job Site: A&A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-SED4-SED-O
Field ID Number: N/A
Sample Type: Sediment

Lab Project Number: 11-1898A
Lab Sample Number: 6436
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 06/01/2011

Compound	Results in ug / Kg
Acenaphthene	< 1,440
Acenaphthylene	< 1,440
Acetophenone	< 1,440
Anthracene	< 1,440
Atrazine	< 1,440
Benzaldehyde	< 1,440
Benzo (a) anthracene	< 1,440
Benzo (a) pyrene	< 1,440
Benzo (b) fluoranthene	< 1,440
Benzo (g,h,i) perylene	< 1,440
Benzo (k) fluoranthene	< 1,440
Biphenyl	< 1,440
Bis (2-chloroethyl) ether	< 1,440
Bis (2-chloroethoxy) methane	< 1,440
Bis (2-ethylhexyl) phthalate	< 1,440
Bis (2-chloroisopropyl) ether	< 1,440
4-Bromophenyl phenyl ether	< 1,440
Butylbenzylphthalate	< 1,440
Caprolactam	< 1,440
Carbazole	< 1,440
4-Chloroaniline	< 1,440
4-Chloro-3-methylphenol	< 1,440
2-Chloronaphthalene	< 1,440
2-Chlorophenol	< 1,440
4-Chlorophenyl phenyl ether	< 1,440
Chrysene	< 1,440
1,3-Dichlorobenzene	< 1,440
1,4-Dichlorobenzene	< 1,440
1,2-Dichlorobenzene	< 1,440
Dibenz (a,h) anthracene	< 1,440
Dibenzofuran	< 1,440
3,3'-Dichlorobenzidine	< 1,440
2,4-Dichlorophenol	< 1,440
Diethyl phthalate	< 1,440
2,4-Dimethylphenol	< 1,440
Dimethyl phthalate	< 3,610

Compound	Results in ug / Kg
Di-n-butyl phthalate	< 1,440
4,6-Dinitro-2-methylphenol	< 3,610
2,4-Dinitrophenol	< 3,610
2,4-Dinitrotoluene	< 1,440
2,6-Dinitrotoluene	< 1,440
Di-n-octylphthalate	< 1,440
Fluoranthene	< 1,440
Fluorene	< 1,440
Hexachlorobenzene	< 1,440
Hexachlorobutadiene	< 1,440
Hexachlorocyclopentadiene	< 1,440
Hexachloroethane	< 1,440
Indeno (1,2,3-cd) pyrene	< 1,440
Isophorone	< 1,440
2-Methylnaphthalene	< 1,440
2-Methylphenol	< 1,440
3&4-Methylphenol	< 1,440
Naphthalene	< 1,440
2-Nitroaniline	< 3,610
3-Nitroaniline	< 3,610
4-Nitroaniline	< 3,610
Nitrobenzene	< 1,440
2-Nitrophenol	< 1,440
4-Nitrophenol	< 3,610
N-Nitroso-di-n-propylamine	< 1,440
N-Nitrosodiphenylamine	< 1,440
Pentachlorophenol	< 3,610
Phenanthrene	< 1,440
Phenol	< 1,440
Pyrene	< 1,440
1,2,4-Trichlorobenzene	< 1,440
2,4,5-Trichlorophenol	< 3,610
2,4,6-Trichlorophenol	< 1,440
1,2,4,5-Tetrachlorobenzene	< 1,440
2,3,4,6-Tetrachlorophenol	< 1,440

ELAP Number 10958

Analytical Method: EPA 8270C

Data File: S56923.D

Prep Method: EPA 3550C

Comments: ug / Kg = microgram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

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111898S0.XLS



CHAIN OF CUSTODY

PROJECT NAME/SITE NAME: <i>A4 Metals</i>		REPORT TO:		INVOICE TO:	
COMPANY: <i>TUGA</i>		COMPANY: <i>Same</i>		LAB PROJECT #: <i>11-1898A</i>	
ADDRESS: <i>630 McLean Street</i>		ADDRESS:		CLIENT PROJECT #: <i>2011-0066-00</i>	
CITY: <i>Rochester</i> STATE: <i>NY</i> ZIP: <i>14602</i>		CITY:		TURNAROUND TIME: (WORKING DAYS)	
PHONE: <i>716 644-8739</i> FAX:		PHONE:		STD ☐ OTHER ☐	
ATTN: <i>J. Nemzella</i>		ATTN:		1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐	
COMMENTS: <i>ASP cat B per SD/SH. 5/13 EAH</i>		REQUESTED ANALYSIS		Quotation # <i>JH021011</i>	

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	TCL PCBs	TCL VOCs	TCL SVOCs	TAL Metals	TOC	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/12/11	1340	X	X	FAM-BU63-TIO-01L-0	OLC	1	X					→ Logged in as a separate project. See 11-1899A	6427
2	1400	X	X	FAM-SW1-SW-0	WATER	4	X	X	X			EAH 5/13	6428
3	1410	X	X	FAM-SED1-SED-0	SED	2	X	X	X				6429
4	1415	X	X	FAM-SED DUP-SED-0	SED	2	X	X	X				6430
5	1420	X	X	FAM-SW2-SW-0	WATER	12	X	X	X			MS/MSD	6431
6	1430	X	X	FAM-SED2-SED-0	SED	2	X	X	X				6432
7	1440	X	X	FAM-SW3-SW-0	WATER	4	X	X	X				6433
8	1450	X	X	FAM-SED3-SED-0	SED	6	X	X	X			MS/MSD	6434
9	1455	X	X	FAM-SED DUP-SED-0	SED	6	X	X	X				6435
10	1500	X	X	FAM-SW DUP-SW-0	WATER	4	X	X	X				6436

Cooler Rec'd

Sealed w/ tape.

EAH 5/13

Total Cost:

Sample Condition: Per NELAC/ELAP 210/241/242/243/244	
Receipt Parameter	NELAC Compliance
Container Type:	☒ Y ☐ N
Comments:	
Preservation:	☒ Y ☐ N
Comments:	
Holding Time:	☒ Y ☐ N
Comments:	
Temperature:	☒ Y ☐ N
Comments:	

Sampled By: <i>David J. Scott</i>	Date/Time: <i>5/13/11 9:07</i>
Relinquished By: <i>David J. Scott</i>	Date/Time: <i>5-13-11 9:00</i>
Received By: <i>Elizabeth A. Honick</i>	Date/Time: <i>5/13/11 1405</i>
Received @ Lab By:	Date/Time:
P.I.F.	

CHAIN OF CUSTODY



PROJECT NAME/ SITE NAME: A+A Metals

REPORT TO:		INVOICE TO:	
COMPANY: <u>TUGA</u>	COMPANY: <u>Same</u>	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: <u>1020 Main Street</u>	ADDRESS:	<u>11-1898A</u>	<u>2011.006600</u>
CITY: <u>Buffalo</u>	CITY:	TURNAROUND TIME: (WORKING DAYS)	
STATE: <u>NY</u>	STATE:		
ZIP: <u>14202</u>	ZIP:		
PHONE: <u>716 849 8739</u>	PHONE:		
FAX:	FAX:		
ATTN: <u>J. Mervella</u>	ATTN:		
COMMENTS:	Quotation # <u>1</u> <u>2</u> <u>3</u> <u>4</u> <u>5</u> <u>10</u>		

REQUESTED ANALYSIS

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	T L V O L S	T L S U C C S	T A L M e t a l s	T O C	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 5/12/11	1500		X	FAM-SW4-SW-O	WATER	4	X	X	X			6435
2 1	1510		X	FAM-SED4-SED-O	SED	2	X	X	X			6436
3												
4												
5												
6												
7												
8												
9												
10												

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

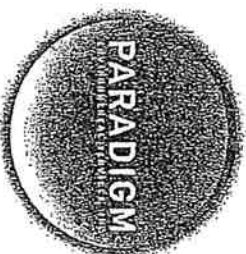
Receipt Parameter	NELAC Compliance
Container Type:	Y ☒ N ☐
Preservation:	Y ☒ N ☐
Holding Time:	Y ☒ N ☐
Temperature:	Y ☒ N ☐
Comments:	Temperature: <u>6°C</u> @ <u>1250</u> <u>5/13</u> <u>from samples</u>

Sampled By	Date/Time	Total Cost:
<u>James J. Collett</u>	<u>5/12/11 9:10</u>	
Relinquished By	Date/Time	
<u>Elizabeth A. Horne</u>	<u>5-13-11 9:05</u>	
Received @ Lab By	Date/Time	P.L.F.
		☐

1105/6015
179 Lake Avenue, Rochester, NY 14600 Office (585) 647-2530 Fax (585) 647-3311

CHAIN OF CUSTODY

Adk 1061



REPORT TO:		INVOICE TO:	
COMPANY:	Paradigm Environmental	COMPANY:	Same
ADDRESS:		ADDRESS:	
CITY:	STATE:	CITY:	STATE:
PHONE:	FAX:	PHONE:	FAX:
ATTN:	Jane Dalola	ATTN:	Mendith Dillman
COMMENTS:	Please email results to khansen@paradigmenv.com and jdalola@paradigmenv.com		
PROJECT NAME/SITE NAME:			
LAB PROJECT #:	CLIENT PROJECT #:		
TURNAROUND TIME: (WORKING DAYS)	Date Due: 5/31/11		
1	2	3	5
STD OTHER			

DATE	TIME	C O M P O S I T E	G R A B	SAMPLE LOCATION/FIELD ID	M A T R I X	C O N T A I N E R	REQUESTED ANALYSIS	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/24/11	14:0			11-1898A-6428	Soil	1	X	ASP Cat B package needed, SDG closed, 846 HTS, Client ID:	001
2	14:5			6429		1		FAM-Sed 1-Sed-O	002
3	14:30			6431		1		FAM-Sed Dup-Sed-O	003
4	14:50			6433		1		FAM-Sed 2-Sed-O	004
5	15:0			6436		1		FAM-Sed 3-Sed-O	005
6								FAM-Sed 4-Sed-O	006
7	EAH 5/13								
8									
9									
10									

LAB USE ONLY: BELOW THIS LINE

Sample Condition: Per NELAP 210241242/243/244

Receipt Parameter

Container Type: Y ☐ N ☐

Comments:

Preservation: Y ☐ N ☐

Comments:

Holding Time: Y ☐ N ☐

Comments:

Temperature: 12°C Y ☐ N ☐

Comments:

Client	Date/Time	Total Cost:
Sampled By: Elizabeth A. Honick	5/13/11 1600	
Relinquished By:	Date/Time	
Received By: J. Michien	Date/Time: 5/16/11 9:26 AM	P.I.F. ☐
Received @ Lab By:	Date/Time	

Adirondack Environmental Services, Inc

Date: 25-May-11

CLIENT: Paradigm Environmental
Project: Analysis of SamplesLabWork Order: 110516015
PO#:

Lab SampleID:	110516015-001	Collection Date:	5/12/2011
Client Sample ID:	11-1898A-6428/FAM-Sed 1-Sed	Matrix:	SOIL
Analyses	Result	PQL Qual Units	DF Date Analyzed
MOISURE CONTENT ASTM D2216 D2216			Analyst: PF
Percent Moisture	56.3	0.1 wt%	1 5/17/2011
TOTAL ORGANIC CARBON LLOYD KAHN			Analyst: PL
Total Organic Carbon	25900	200 M µg/g-dry	1 5/24/2011
Lab SampleID:	110516015-002	Collection Date:	5/12/2011
Client Sample ID:	11-1898A-6429/FAM-Sed Dup-	Matrix:	SOIL
Analyses	Result	PQL Qual Units	DF Date Analyzed
MOISURE CONTENT ASTM D2216 D2216			Analyst: PF
Percent Moisture	50.8	0.1 wt%	1 5/17/2011
TOTAL ORGANIC CARBON LLOYD KAHN			Analyst: PL
Total Organic Carbon	29100	200 µg/g-dry	1 5/24/2011
Lab SampleID:	110516015-003	Collection Date:	5/12/2011
Client Sample ID:	11-1898A-6431/FAM-Sed 2-Sed	Matrix:	SOIL
Analyses	Result	PQL Qual Units	DF Date Analyzed
MOISURE CONTENT ASTM D2216 D2216			Analyst: PF
Percent Moisture	37.7	0.1 wt%	1 5/17/2011
TOTAL ORGANIC CARBON LLOYD KAHN			Analyst: PL
Total Organic Carbon	17300	200 µg/g-dry	1 5/24/2011



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Client Job Number: 2011.0066.00

Lab Sample Number: 6437

Field Location: FAM-BLDG2-T1-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/27/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.982
Aroclor 1221	< 0.982
Aroclor 1232	< 0.982
Aroclor 1242	< 0.982
Aroclor 1248	< 0.982
Aroclor 1254	< 0.982
Aroclor 1260	< 0.982

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____


Bruce Hoogesteger: Technical Director

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111899P1.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Client Job Number: 2011.0066.00

Lab Sample Number: 6438

Field Location: FAM-BLDG2-T2-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/27/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.962
Aroclor 1221	< 0.962
Aroclor 1232	< 0.962
Aroclor 1242	< 0.962
Aroclor 1248	< 0.962
Aroclor 1254	1.88
Aroclor 1260	< 0.962

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____


Bruce Hoogesteger: Technical Director

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111899P2.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-BLDG2-T3-OIL-O
Field ID Number: N/A
Sample Type: Oil

Lab Project Number: 11-1899A
Lab Sample Number: 6439
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 05/28/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.971
Aroclor 1221	< 0.971
Aroclor 1232	< 0.971
Aroclor 1242	< 0.971
Aroclor 1248	< 0.971
Aroclor 1254	2.62
Aroclor 1260	< 0.971

ELAP Number 10958

Analytical Method: EPA 8082A
Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram
Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger, Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111899P3.XLS



PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Client Job Number: 2011.0066.00

Lab Sample Number: 6440

Field Location: FAM-BLDG2-DUP-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/31/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 9.75
Aroclor 1221	< 9.75
Aroclor 1232	< 9.75
Aroclor 1242	< 9.75
Aroclor 1248	< 9.75
Aroclor 1254	< 9.75
Aroclor 1260	54.7

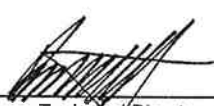
ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____


Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111899P4.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-BLDG2-T4-OIL-O
Field ID Number: N/A
Sample Type: Oil

Lab Project Number: 11-1899A
Lab Sample Number: 6441
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 05/31/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 9.63
Aroclor 1221	< 9.63
Aroclor 1232	< 9.63
Aroclor 1242	< 9.63
Aroclor 1248	< 9.63
Aroclor 1254	< 9.63
Aroclor 1260	53.9

ELAP Number 10958

Analytical Method: EPA 8082A
Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111899P5.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Client Job Number: 2011.0066.00

Lab Sample Number: 6442

Field Location: FAM-BLDG2-T5-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/31/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 9.75
Aroclor 1221	< 9.75
Aroclor 1232	< 9.75
Aroclor 1242	< 9.75
Aroclor 1248	< 9.75
Aroclor 1254	< 9.75
Aroclor 1260	48.6

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111899P6.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Lab Sample Number: 6443

Client Job Number: 2011.0066.00

Field Location: FAM-BLDG2-T6-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/31/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 9.63
Aroclor 1221	< 9.63
Aroclor 1232	< 9.63
Aroclor 1242	< 9.63
Aroclor 1248	< 9.63
Aroclor 1254	< 9.63
Aroclor 1260	47.5

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____


Bruce Hoogesteger, Technical Director

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111899P7.XLS



PARADIGM
ENVIRONMENTAL SERVICES, LLC

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Lab Sample Number: 6444

Client Job Number: 2011.0066.00

Field Location: FAM-BLDG3-T7-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/28/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.924
Aroclor 1221	< 0.924
Aroclor 1232	< 0.924
Aroclor 1242	< 0.924
Aroclor 1248	< 0.924
Aroclor 1254	< 0.924
Aroclor 1260	< 0.924

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____

Bruce Hoogesteger: Technical Director

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111699P8.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Lab Sample Number: 6445

Client Job Number: 2011.0066.00

Field Location: FAM-BLDG3-T8-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/28/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 1.00
Aroclor 1221	< 1.00
Aroclor 1232	< 1.00
Aroclor 1242	< 1.00
Aroclor 1248	< 1.00
Aroclor 1254	< 1.00
Aroclor 1260	2.35

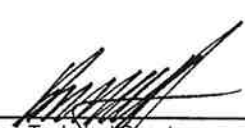
ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Signature: _____


Bruce Hoogesteger, Technical Director

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111899P9.XLS



PARADIGM
ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 (585) 647 - 2530 FAX (585) 647 - 3311

PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals
Client Job Number: 2011.0066.00
Field Location: FAM-BLDG3-T9-OIL-O
Field ID Number: N/A
Sample Type: Oil

Lab Project Number: 11-1899A
Lab Sample Number: 6446
Date Sampled: 05/12/2011
Date Received: 05/13/2011
Date Analyzed: 05/28/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.992
Aroclor 1221	< 0.992
Aroclor 1232	< 0.992
Aroclor 1242	< 0.992
Aroclor 1248	< 0.992
Aroclor 1254	< 0.992
Aroclor 1260	< 0.992

ELAP Number 10958

Analytical Method: EPA 8082A
Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram
Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

This report is part of a multipage document and should only be evaluated in its entirety. Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt.

111899R1.XLS



PCB Analysis Report for Oils

Client: TVGA

Client Job Site: A + A Metals

Lab Project Number: 11-1899A

Lab Sample Number: 6447

Client Job Number: 2011.0066.00

Field Location: FAM-BLDG3-T10-OIL-O

Date Sampled: 05/12/2011

Field ID Number: N/A

Date Received: 05/13/2011

Sample Type: Oil

Date Analyzed: 05/28/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.947
Aroclor 1221	< 0.947
Aroclor 1232	< 0.947
Aroclor 1242	< 0.947
Aroclor 1248	< 0.947
Aroclor 1254	< 0.947
Aroclor 1260	< 0.947

ELAP Number 10958

Analytical Method: EPA 8082A

Prep Method: EPA 3580C

Comments: mg / Kg = milligram per Kilogram

Surrogate outliers indicate probable matrix interference

Signature: _____

Bruce Hoogesteger: Technical Director

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111899P0.XLS

CHAIN OF CUSTODY

PROJECT NAME/SITE NAME:

A-A Metals

REPORT TO:

INVOICE TO:

COMPANY: TUGA	COMPANY: Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS: 620 Main Street	ADDRESS:	11-1899A	2011.006600
CITY: Buffalo	CITY:	TURNAROUND TIME: (WORKING DAYS)	
STATE: NY	STATE:		
ZIP: 14202	ZIP:		
PHONE: 716 849 4709	PHONE:		
FAX:	FAX:		
ATTN: J. Mancellia	ATTN:		

COMMENTS:

ASP Cat B per JH/SD
EAH S113.

REQUESTED ANALYSIS

Quotation # JH021011

1	2	3	4	5	6	7	8	9	10

STD, OTHER

DATE	TIME	COMPOSITION	GRADES	SAMPLE LOCATION/FIELD ID	MATERIALS	CONTAMINANTS	TESTS	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/12/11	1130	X	FAM-BLDG2-T1-OIL-O	OIL	1	X	TLL PCBs		6437
2	1145	X	FAM-BLDG2-T2-OIL-O	OIL	1	X			6438
3	1200	X	FAM-BLDG2-T3-OIL-O	OIL	1	X			6439
4	1215	X	FAM-BLDG2-DUP-OIL-O	OIL	1	X			6440
5	1230	X	FAM-BLDG2-T4-OIL-O	OIL	1	X			6441
6	1245	X	FAM-BLDG2-T5-OIL-O	OIL	1	X			6442
7	1300	X	FAM-BLDG2-T6-OIL-O	OIL	1	X			6443
8	1310	X	FAM-BLDG2-T7-OIL-O	OIL	1	X			6444
9	1320	X	FAM-BLDG2-T8-OIL-O	OIL	3	X			6445
10	1330	X	FAM-BLDG2-T9-OIL-O	OIL	1	X			6446

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 2101241/242243/244

Receipt Parameter NELAC Compliance

Comments: Container Type: Y ☒ N ☐Comments: Preservation: A/A Y ☐ N ☐Comments: Holding Time: Y ☒ N ☐Comments: Temperature: 14°C @ 1300 S113 Y ☐ N ☒

iced - from samples

Sampled By

Date/Time

Total Cost:

Relinquished By

Date/Time

Received By

Date/Time

P.I.F.

Received @ Lab By

Date/Time

CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

PROJECT NAME/SITE NAME:

A + A Metals

COMPANY:	TVC A	COMPANY:	Same	LAB PROJECT #:	11-1899A	CLIENT PROJECT #:	2011-0000-00
ADDRESS:	620 Main Street	ADDRESS:		TURNAROUND TIME: (WORKING DAYS)			
CITY:	Buffalo	CITY:		STATE:		ZIP:	
PHONE:	716 849-8739	PHONE:		FAX:			
ATTN:	J. Menzella	ATTN:					
COMMENTS:							

REQUESTED ANALYSIS

Quotation #

DATE	TIME	COMPOSITION	GRADES	SAMPLE LOCATION/FIELD ID	ANALYSIS	CONCENTRATION	TCL PCBs	TCL VOCs	TCL SVOCs	TAL Metals	TOC	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/12/11	1340		X	FAM-BUD3-TIO-01L-O	OLC	1	X						6447
	1400		X	FAM-SW1-SW-O	WATER	4	X	X	X				
	1410		X	FAM-SED1-SED-O	SED	2	X	X	X	X			
	1415		X	FAM-SEDDUP-SED-O	SED	2	X	X	X	X			
	1420		X	FAM-SW2-SW-O	WATER	12	X	X	X				
	1430		X	FAM-SED2-SED-O	SED	2	X	X	X	X			
	1440		X	FAM-SW3-SW-O	WATER	4	X	X	X				
	1450		X	FAM-SED3-SED-O	SED	6	X	X	X	X			
	1455		X	FAM-SEDDUP-SED-O	SED	6	X	X	X	X			
	1500		X	FAM-SW DUP-SW-O	WATER	4	X	X	X				

LAB USE ONLY BELOW THIS LINE**

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter

NELAC Compliance

Container Type:

Y ☒ N ☐

Comments:

Preservation:

N/A Y ☐ N ☐

Comments:

Holding Time:

Y ☒ N ☐

Comments:

Temperature:

Y ☐ N ☒

Comments:

14°C iced @ 1250 5/13 - See 11-1899A

14°C iced @ 1300 5/13 - for 01

Sampled By

Date/Time

Total Cost

Relinquished By

Date/Time

Received By

Date/Time

P.L.F.

Received @ Lab By

Date/Time

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