

VOLUNTEERS OF AMERICA – BACK LOT REMEDIAL INVESTIGATION REPORT



214 Lake Avenue – Back Lot Rochester, NY Site C828126

BCA Index #B 8-0688-05-04

Submitted to: New York State Department of Environmental Conservation

Prepared for: Volunteers of America of Western New York

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Certification of Remedial Investigation Report

Report Title:	Volunteers of America – Back Lot		
	Remedial Investigation Report (Revised August 3, 2012)		
	214 Lake Avenue (Back Lot) Rochester, New York		
Site Identification Number:	C828126		
BCA Index Number:	B 8-0688-05-04		

I Stephen J. DeMeo certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with DER Technical Guidance for Site Investigation and Remediation (DER-10).

Stephen J. DeMeo

Hegest 3,2012

Date

This report certification must remain attached to this report.



1.0 INTRODUCTION

This Remedial Investigation Report (RIR) presents the results from implementation of the August 2006 Remedial Investigation Work Plan (RIWP) and the Supplemental Investigation Work Plan, dated February 18, 2010 for 214 Lake Avenue, Rochester, New York Back Lot Site (Site). The project Site includes the eastern portion of Parcel A from the centerline of Haidt Place eastward and Parcel B located at 214 Lake Avenue, Rochester, New York (Site). See aerial photo of the Site in Attachment 1. The Remedial Investigation and the Supplemental Investigation (RI) was conducted on behalf of Volunteers of America of Western New York (VOA) pursuant to the Brownfield Cleanup Program (BCP) Agreement between VOA and the New York State Department of Environmental Conservation (NYSDEC) (NYSDEC BCP Index No. B 8-0688-05-04, Site No. C828126.

The subject site (Site) is located on Tax Map No.105.600-0002-001.0020000. The Site is located east of the centerline of Haidt Place and VOA's Office Building, Thrift Store and Day Care Center (VOA's Human Services Complex), which is a fully remediated and redeveloped former Brownfield site that was cleaned up under the NYSDEC Spills program. The Site is located north of Ambrose Street, west of the former Raeco Oil Superfund Site, and south of a contractor's equipment storage yard and building and a Monroe County right-of-way to the Pure Waters Tunnel Structure 41. The size of this Site, as defined in the Brownfield Cleanup Agreement (BCA) is approximately 3 acres. The Site is comprised of portions of two tax parcels of land, which are referred to as the eastern portion of Parcel A and all of Parcel B. The majority of the Site is a largely undeveloped parking lot area and roadway. On the east side of the site, soil berms and former bio-cells, now with vegetation cover, is present to block the view of the Raeco Oil Superfund Site. The Site location and surrounding vicinity are shown on Figure 1 - Site Vicinity Map. The approximate limits of the Site area are shown on Figure 2 - Site Plan.

1.1 Project Background

The Site was at one time the southernmost portion of RG&E's approximately 20-plus-acre parcel known as the Ambrose Street or Lake Avenue Coal Yard. The part of the Ambrose Street Coal Yard that is currently VOA's property was used for surface coal storage from approximately 1918 through the mid-1960's. Subsequent to the use of the property for coal storage the northeast portion of the Site was used by automobile dealerships from at least 1971 through 1997 for parking/storage of vehicles. Kaplan Container, a drum cleaning company was also present on the adjoining (off-site) western portion of Parcel A, see Figures 1 and 2. Prior to 1918, portions of the property had residential structures, which appear to have been demolished on the Site into a large deep ravine which traverses approximately the middle of the Site. This large ravine was historically filled, see Figure 2a. References to the lower and upper historic fill layers in the ravine will be made throughout this report. Collectively, the lower and upper fill layers will be referenced as the "historic fill". Railroad tracks were then constructed on top of the historic fill to allow for the transport of the coal. Aerial photographs of the property are in Attachment 1- Aerial Photographs, which show coal piles and railroad tracks.

A June 1996 Phase II ESA performed by GZA GeoEnvironmental (GZA 1996 Report) for a prior prospective purchaser of both Parcel A and B revealed semi-volatile and heavy metal contaminants at the Site. These contaminants may be associated with the previous historical uses and operations, including the automobile dealerships, coal pile storage, land filling activities, barrel reconditioning/storage, and/or automobile storage. A January 1997 Supplemental Phase II ESA performed by GZA GeoEnvironmental (GZA 1997 Report) further revealed petroleum, semi-volatile and heavy metal contaminants on Parcels A and B. Predominantly, petroleum related compounds



were found on the western portion of the Parcel A associated with a former gasoline station and automobile dealership located at that site.

In November 1997, VOA purchased Parcel A and Parcel B, in reliance upon the new Voluntary Cleanup Program ("VCP"), which was designed to facilitate the remediation and redevelopment of Brownfield sites and provide a liability release. The parcels were well situated on a major bus route, convenient for their future Human Services client, see Figure 2. In August 1998, Parcel A was sold to the County of Monroe Industrial Development Agency (COMIDA) in order to secure bond financing for the project on Parcel A. VOA retained ownership of Parcel B. However, VOA withdrew from the VCP before executing a Voluntary Cleanup Agreement (VCA) and proceeded with the remediation under the Petroleum Spill Program due to a new onerous liability release re-opener provision that had been added to the VCA model form at that time. At the request of the NYSDEC, VOA performed additional investigative work and remediation to complete the investigation of Parcel A under the Petroleum Spill Program, which was the only Parcel on which redevelopment activities were planned at the time. The Parcel A portion of the site proceeded under the Spills Program, and subsequent work in this Program included investigation, pre-remedial design, and remediation that was summarized in the May 1998 Remedial Action Plan (1998 RAP). The remediation was completed and a no further action letter was issued by the department, which allowed the planned daycare center/thrift store reuse to occur.

A gasoline release from underground storage tanks associated with a former gas station and automobile dealership located on Parcel A from approximately 1928 to 1966 caused petroleum (gasoline) contamination of the soil and overburden groundwater on Parcel A. This petroleum contamination as well as contamination associated with the car dealership operation from sudden and accidental discharges to sewers, has been remediated under the NYSDEC Spills Program. A NYSDEC spill inactivation letter was issued on April 23, 2002 for the petroleum spill on Parcel A, which indicates no further remedial action is required for Spill No. 9604935. Parcel A was safe for the day care and other uses planned for Parcel A based on indoor air testing results that were provided to the Monroe County Health Department.

In June 2005, VOA entered the Brownfield Cleanup Program for the eastern portion of Parcel A and Parcel B, which together comprise the Site subject to this Remedial Investigation Report ("RIR"). Brownfield Cleanup Agreement Index No. B 8-0688-05-04, Site No. C828126 was executed on June 15, 2005. Since the western portion of Parcel A, which was previously remediated under the Spills Program, is up-gradient from the Site, the Remedial Investigation was designed to not only investigate contamination from prior historic uses on the Site, but also to evaluate if the former car dealership on Parcel A had impacts on Parcel B. The historic fill on Parcel B has resulted in Site contamination described throughout this RIR.

1.2 **Project Objective**

In accordance with Part 375.3 of Title 6 of the Codes, Rules, and Regulations of the State of New York (6NYCRR) - Brownfield Cleanup Program regulation, and the NYSDEC Division of Environmental Remediation Technical; Guidance for Site Investigation and Remediation (DER-10), dated May 2010, the purpose of the Remedial Investigation ("RI") is to:

- 1) Define the nature and extent of site contaminants of concern (COCs).
- 2) Identify COC source area.
- 3) Assess COC fate and transport.
- 4) Generate sufficient data to develop an acceptable Remedial Work Plan (RWP).

This RI has adequately characterized the nature and extent of surface soil, subsurface soil, and groundwater conditions at the Site. The data provided in this RI report (RIR) is sufficient to develop a



Remedial Action Work Plan (RAWP), which will analyze alternative remedies to address the identified contamination in each of the impacted media within the Site, and select a preferred remedy for the intended ground floor commercial senior day care/upper floor senior residential use.

1.3 RIR Outline

The remainder of this RIR contains the following Sections:

- Section 2.0 describes the Site setting and the physical characteristics of the Site.
- Section 3.0 describes the Site background including results of previous investigations and identified areas of concern described in the RIWP.
- Section 4.0 presents the RI field procedures completed.
- Section 5.0 presents the sampling results by media.
- Section 6.0 presents the nature and extent of contamination in all site media as determined through the field investigation and analysis of environmental samples.
- Section 7.0 presents a qualitative human health exposure assessment and addresses the fish and wildlife resource exposure assessment.
- Section 8.0 summarizes the results of the investigation and presents conclusions and recommendations.

2.0 SITE PHYSICAL CHARACTERISTICS

2.1 Site Setting

The Site, which has been described as the eastern portion of Parcel A and Parcel B, or the "Back Lot" Site, is located at the rear of Parcel A on 214 Lake Avenue, accessed via Lake Avenue and Ambrose Street in the Edgerton neighborhood of the northwest quadrant of Rochester, New York, at approximate East/Longitude 1403870/-77.6253124 and North/Latitude 1155935/ 43.1684563. The Site is located east of the centerline of the former Haidt Place eastward, west of the Former Raeco Products Site (active State Superfund Site), south of a construction storage yard, and a Monroe County right-of-way to the Pure Waters Tunnel Structure 41, and north of Ambrose Street. The size of the Site is approximately 3 acres as shown on Figure 2. The Site is located on Tax Map No.105.600-0002-001.0020000 in the City of Rochester.

The Site is vacant, with portions of paved parking areas, an access roadway and berms of soil to block the view of the Raeco Superfund Site. The Site is fenced along the north, south and east sides. The western portion of the Parcel A Site (offsite), which has already been remediated and redeveloped, is occupied by the VOA Human Service Complex Buildings (See Figure 2). Improvements on the 214 Lake Avenue side of Parcel A include two buildings: an 88,000 square foot building currently used by VOA as a thrift store and a child care center (day care), which was a former automobile dealer facility, and a 20,000 square foot building currently used as VOA's administrative offices, which was a former automobile body shop. An outside fenced playground area is present behind the day care center portion, which is present in the southeast end of the main building near Ambrose Street. The remainder of the Parcel A Site is improved with asphalt parking lots, roadways, and green spaces.



2.1.1 Topography

The Site ground surface is generally flat and slops gently towards the east. There are two large soil piles near the southeast side of the Site that are approximately 8 to 10 feet higher than the ground surface elevation. In addition, three former bio-cells, which now contain remediated soil, are located along the northeast side of the Site and are approximately 2 to 3 feet higher in elevation than the ground surface. Generally, the ground surface elevation ranges from approximately elevation 490 along the west side of the Site and slopes to approximately elevation 482.5 long the east side of the Site.

2.1.2 Surface Water and Drainage

The Site is partially covered by semi - impervious pavement surfaces for the parking lot areas parking, and roadway areas, which is used for the adjacent VOA Human Services Complex. It appears that sheet flow from the parking areas flows towards the east onto the majority of the Site that is covered with sparse grassy vegetation, shrubs and saplings that have grown in the former bio-cells. Surface drainage is towards the east. Infiltration of on-site precipitation to the groundwater water table occurs primarily in unpaved portions of the Site. Run-off water on vegetative portions temporarily pools, evaporates or infiltrates into the Site subsurface. Surface water is not present on the Site.

2.2 Geologic Conditions

2.2.1 Regional Geology

According to available United States Geologic Survey (USGS) Geologic Maps and historic topographic maps, the geology of the Site consists of unconsolidated glacial soils overlying carbonate bedrock. Geologic maps of the Rochester region indicate that the unconsolidated glacial soils consist of lacustrine silts and clays deposited in the Late Pleistocene. The bedrock under the Site is Lockport Group Dolomite that consists of massive to medium-bedded, argillaceous dolomite with minor amounts of dolomite limestone and shale.

2.2.2 Site Geology

In general, site geology consists of historic fill from the ground surface down to depths ranging from 14 to greater than 45 feet below ground surface. The majority of the historic fill at the ground surface consists of gravel and coal fragments as further described below. A portion of the western side of the Site ground surface is covered with pavement, see Figure 2. A former, deep ravine, which extends through roughly the center of the Site from south to north, has been backfilled with the historic fill. The former ravine extends off-site to the north and appears to eventually extend to the Genesee River based on historic maps. The approximate location of the former ravine is shown in Attachment 2 -Historic Topographic Maps and Figure 2a. One area of black stained sandy soil, which was not representative of the other historic fill on the Site, was encountered during the Supplemental RI at the north end of the Site, and is further described below. A native Glacial till deposit was encountered below the historic fill and overlies the bedrock formation. The Glacial Till was described as very dense and was encountered at depths of 22, 34 and 44 feet below ground surface at test boring locations MW-101, MW-102 and MW-105. Each of these geological layers of the site are further described below and in the Geologic Cross sections presenting the inferred occurrence of Historic fill and native soil across the site are presented in Figures 3 - Geologic Cross Section A to A' and Figure 4 -Geologic Cross Section B to B'. The locations of the cross section lines are shown on Figure 5 -Geologic Section Line Plan.

Coal Containing Surface Cover Material

A mixture of gravel and coal fragments were encountered in approximately the top one to two feet from ground surface at 22 test pit locations, five (5) monitoring well locations and one (1) surface soil sample location.

Historic Fill

Collectively, references throughout this report to "historic fill" encompasses the following definitions of "upper fill" and "lower fill" and the composition is consistent with "Historic Fill" as noted in NYSDEC DER-10.

- **Upper Fill:** In general, the upper historic fill deposit consisted of primarily gravel, sand, silt, cinders, slag, ash, coal, coke, wood, glass, and metal from the ground surface to approximately 14 to 22 feet. In general, according to the test boring logs / test pit logs, the upper fill deposit description ranges from Brown to gray GRAVEL and COAL, with concrete, wood, and metal fragments to Gray to green CINDERS and ASH with fused black and brown materials to Very dense black CINDERS and SLAG with brick fragments. The upper fill deposit overlies the lower fill deposit and was generally denser than the underlying lower fill deposit. The upper fill deposit varies in grain size and composition: see Appendix B Test Boring Logs and Environmental Test Pit Logs.
- Lower Fill: The lower historic fill deposit was encountered from approximately 14 ft. (14 ft. in TP-104 and TP-105) feet to approximately 22 to 24 ft. at other subsurface explorations. The thickness ranged from approximately 2.5 ft. (MW-102/MWR-102) to approximately 12 ft. (MW-101/MWR-101 and greater than 45 feet in the deepest sections of the former ravine portion of the Site. Lower Fill consisted primarily of cinders and ash with old bottles, shoe soles, clam shells, metal and some gravel. The lower historic fill deposit is less dense than the upper historic fill deposit. In general, according to the test boring logs and test pit logs, the lower fill deposit description ranges from Gray to white CINDERS and ASH with old bottles, shell, and leather fragments to Loose gray to white CINDERS and ASH. The test boring logs and environmental test pit logs present the description of the lower fill deposit at each sample depth interval.

The Upper fill and lower fill deposit varies in grain size and composition; see Appendix B- Test boring logs and Environmental Test Pit Logs). Site subsurface cross-sections depicting the historic fill deposits are presented on Figures 3 and 4.

Generally, the historic fill deposits indicate exceedances of standards, criteria, and guidance (SCGs) by SVOCs and metals. In general, the thickness of historic fill decreased at test boring locations located along the east and west sides of the Site. The thickness of the historic fill at test boring along the west side of the Site is approximately 36.0 ft. at the MW-101 / MWR-101 locations and 27 ft. at the MW-102 / MWR-102 locations. The depth of historic fill along the east side of the Site is approximately 14.0 ft. at the MW-105 location.

Black Stained Sandy Soils

One unusual area of black stained sandy soil, which was not representative of the other historic fill on the Site, was encountered during the Supplemental RI at the north end of the Site. This area is approximately 35 ft by 35 ft. and these soils were encountered at approximately 6 to 8 feet below the ground surface in test pits TP-131 and TP-132. The extent of these soils extends to depths greater than 20 feet and is centered on test pit location TP-132. The total organic vapors detected from the



black stained sandy soils ranges from approximately 19.8 ppm to 84 ppm in TP-131 and 59 ppm to 440 ppm in TP-132. Total organic vapors were measured with a Photoionization detector in accordance with the soil screening procedures detailed in the RI Work Plan.

Glacial Till Deposit

The Glacial Till deposit underlies the historic fill deposits, and was encountered at monitoring well locations MWR-101, MWR-102, and MW-105. The soils in the Glacial till deposit are natural soils that were deposited during the last advance of the glaciers approximately 10,000 years ago. Soil descriptions from this deposit range from dense light brown to gray GRAVEL, some silt, little coarse to fine sand, trace clay to medium dense light brown SILT, some gravel, little coarse to fine sand. The thickness of the Glacial Till deposit is approximately 10.5 feet at the MWR-101 bedrock monitoring well and 17 feet at the MWR-102 bedrock monitoring well. The thickness of the Glacial till deposit at monitoring Well MW-105 is inferred to be approximately 12.3 feet thick as the soil boring at this overburden well location was terminated at refusal (12.3 ft.) potentially indicating the top of bedrock. The Glacial till was not encountered at other subsurface explorations and other natural soils were not encountered during the RI/SI field work at other sample locations.

Soil Boring / Test Pit ID	Depth Interval feet
with thickness of Glacial till in ft.	below Ground Surface
MWR-101(10.5 ft.)	34-44.5 ft.
MWR-102 (17 ft.)	27-44 ft.
MW-105 (12.3 ft.)	14-26.3 ft.

2.3 Hydrogeologic Conditions

2.3.1 Regional Hydrogeologic Conditions

The "hydrologic cycle" describes the movement of water through the environment, including the air, ground and surface water bodies. Within the ground, water ("groundwater") is contained within the unconsolidated geologic materials and the fractured bedrock. The upper surface of the groundwater table surface fluctuates seasonally, in response to precipitation events. The overburden deposits (Historic Fill and Glacial Till) deposits at the Site have moderate hydraulic conductivities. The top of bedrock is moderately permeable where concentrations of fractures or joints are present. Preferential flow occurs through the more permeable zones of the subsurface such as areas that contain buried coal. The glacial till has a lower permeability than the overlying historical fill soils.

The top of bedrock water bearing zone is the deepest hydrogeologic unit evaluated. This water bearing zone encompasses the upper 10 feet of bedrock. A relatively low horizontal hydraulic conductivity and a low vertical hydraulic conductivity characterize the upper bedrock unit. Since the top of bedrock water bearing zone is situated below the dense glacial till soil deposit, the water quality has been less impacted in the top of bedrock groundwater zone, at locations where the Glacial Till is present as, compared to the overburden groundwater quality at the Site. The general groundwater flow direction in the vicinity of the Site is in the easterly direction towards the Genesee River.

2.3.2 Site Hydrogeologic Conditions

Overburden groundwater underlying the Site was encountered on average elevation of 457.52 with depth to groundwater measurements ranges from 18.29 ft. to 43.20 ft., based on the observations of



seven on overburden monitoring wells gauged during the implementation of this RI. Seasonal variations for groundwater elevations during the two measurement events are likely due to precipitation or snow melt events. The depth to groundwater measurements and groundwater elevations are presented in Table 1 - Groundwater Elevations. The Site groundwater flow direction, evaluated from overburden groundwater elevations, is towards the former ravine from the west and east sides of the Site, and there appears to be a northern trend of groundwater flow direction along center of the Site that coincides with the approximate location of the centerline of the former ravine. The groundwater, contour map for October 2009 is presented on Figure 6 - Groundwater contour map.

Field permeability tests were performed on the nine groundwater monitoring wells. The hydraulic conductivities varied for each monitoring well and ranged from 3.15×10^{-4} to 5.69×10^{-4} with an average of 6.97 $\times 10^{-4}$. In general the overburden groundwater wells that were screened in the historic fill soils had higher conductivities when compare to the results from overburden monitoring wells that were screened within the Glacial till deposit. The hydraulic conductivity results are presented in Appendix A - Hydraulic Conductivity Test.

3.0 SITE BACKGROUND

3.1 Site History and Description

Residential structures occupied portions of the Site at the turn of the century according to historic maps. Prior to 1918, both the northeast portion of Parcel A and Parcel B were filled.

From approximately 1918 until 1981, RG&E owned Parcel B (Site) and the northeast portion of Parcel A as part of its larger Ambrose Street Coal Yard. RG&E used this Site for coal storage through at least the mid-1960's. This Site (size is approximately 3 acres) was the southernmost portion of RG&E's approximately 20 plus acres property known as the Ambrose Street or Lake Avenue Coal Yard. This was the area on the Ambrose Street Coal Yard used for storage of very large coal piles to feed its nearby active power plants. Railroad tracks, which were essentially located in the center of the Site over the ravine, were situated in between the coal piles, and railroad cars, which were loaded to allow for the transport of coal. Aerial photographs taken during 1958, 1966, and 1971 depict the coal piles that were still on the Site. See Attachment 1.

The Site (later known as Parcel B during VOA's remediation of the front portion of the full Site known as Parcel A) was used for automobile storage from the time it was leased to Heinrich Motors in 1971 until 1997. Parcel B was sold to Heinrich Motors in 1981. Kaplan Container (a barrel manufacturing and refurbishing company) also used the western area of Parcel B. The northeast portion of Parcel A was used by automobile dealerships from at least 1940 through 1997. Historical information indicates that a gasoline station was present off-site on the west portion of Parcel A on Lake Avenue from 1928 until approximately 1966.

In November 1997, VOA purchased Parcel A and Parcel B, which includes the entire 214 Lake Avenue VOA property (see Figure 2). In August 1998, Parcel A was sold to the County of Monroe Industrial Development Agency (COMIDA) for purposes of financing the Parcel A Human Services Complex improvements. VOA retains ownership of Parcel B. Before acquiring the property, VOA applied for participation in the Voluntary Cleanup Program for Parcel A. At the request of the NYSDEC, VOA performed additional investigative work and remediation to complete the investigation

of Parcel A. The remediation of Parcel A was completed in 1999. This RIR specifically relates to the eastern portion of Parcel A and Parcel B and whether uses and former impacts on Parcel A caused environmental impacts on Parcel B.

3.2 Adjoining Property Description

The following uses were identified on the surrounding properties:

- North The former Ambrose Street Coal Yard extended north beyond the Site. The adjoining
 property to the north is currently used as a contractors' yard by BVR Contracting. A Monroe
 County Pure Waters drop shaft is also located north of the Site. An RG&E electric substation is
 located further to the north. RG&E's Property #29 is located at 298 Lake Avenue and is a site
 that was reviewed by EPA under Superfund but was not a National Priority List (NPL) site.
- East The former Raeco Products NYS Superfund site (Raeco Oil Site) is located east of the Site at 10 Ambrose Street. This property appears to be used by a contractor to store heavy equipment. Further to the east is the Genesee River gorge and the river water is approximately 100 feet below the edge of the gorge. Other former commercial buildings are located east of the Site and appear to be vacant.
- South Various former industrial and commercial facilities are located south of the Site along Ambrose Street. The VJ Stanley plumbing supply warehouse adjoins the Site to the south.
- West The VOA Human Service Complex on Parcel A includes a daycare center, retail store, and outreach center. A second VOA building is used for VOA administrative offices. These current uses occupy the former car dealership and auto body shop buildings. Further to the west is Lake Avenue with a mix use of commercial and residential properties.

3.3 **Previous Investigation**

In June 1996, a Phase II Environmental Site Assessment of the 214 Lake Avenue property (Parcels A and B) was performed by GZA on behalf of a prospective purchaser, AAC Contracting, Inc. This initial Phase II investigation generally indicated concentrations of petroleum related compounds in the front portion of the Site (which later became Parcel A) and heavy metals on the back lot (which later became Parcel B) in concentrations that exceeded applicable NYSDEC guidance standards at this time.

The 1996 Phase II ESA included a review of environmental regulatory information from a professional data search service, a review of historic Sanborn maps, the completion of a soil vapor survey, a site reconnaissance, and the installation of nine test borings with four test borings completed as groundwater monitoring wells. The scope of work also included an optical survey of the groundwater monitoring well casings for elevation.

Selected soil and groundwater samples were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and the 8 RCRA Metals. Selected soil samples were also analyzed for total petroleum hydrocarbon (TPH).

In January 1997, Supplemental Phase II ESA was conducted on behalf of VOA, a new prospective purchaser, primarily to further evaluate the conditions encountered in the June 1996 Phase II ESA. The property had not been sub-divided into Parcels A and B when these investigations were performed. A summary of the relevant findings from these previous investigation reports that pertains exclusively to this Site (Eastern portion of Parcel A and Parcel B) is presented below. The findings



from these two prior investigations were used to select the proposed locations for subsurface explorations for the RI project work as stated in the RIWP.

3.3.1 Phase II Environmental Site Assessment (GZA 1996 Report)

The GZA 1996 Report presented the following conclusions relevant to the Site: Groundwater flow direction at the Site is generally to the northeast and in the direction of the Genesee River.

- Soil and groundwater sample analytical results from boring B-6, located east of the former automobile body shop building that housed the paint shop, and which is the current location of the VOA Administration Building, did not indicate concentrations of VOC compounds above the laboratory detection limits.
- VOC and SVOC compounds were detected in soil samples from boring MW-1 at levels that exceed NYSDEC TAGM 4046 guidelines. Acetone, Pyrene, and Benzo (a) pyrene were detected in the soil samples from MW-1.
- SVOC compounds were detected in the soil sample from soil boring B-3 located directly behind (east) of the former automobile dealership building (currently VOA's Child Care Center). Based on the 1935 Sanborn map, it appears that the Kaplan "Metal and Wood Barrel Storage" building was positioned parallel to the former automobile dealership building and Lake Avenue. The location of soil boring B-3 may be in the former footprint of the Kaplan building. Two additional test borings (B-8 and B-9) were drilled down gradient of B-3. Analytical results of soil samples from B-8 and B-9 indicated that two SVOC compounds were present in the soil sample from B-8, and SVOC compounds were not detected in the sample from the B-9 location. It appears that the SVOC compound contamination may be limited in the vicinity of B-3, B-8, and B-9. The impacted soil samples were collected from sample intervals that were less than 6 feet below ground surface, since the top of rock was encountered at approximately 6 feet below ground surface in this area of the Site.
- SVOCs were not detected in the groundwater samples analyzed.
- Metals were detected in soil samples at concentrations that exceed NYSDEC TAGM 4046 guidelines. Metals were detected in soil samples collected from test borings installed at MW-1, MW-2, and B-3 at depths ranging from approximately 0 to 14 feet. The metals that were detected above the NYSDEC TAGM #4046 Soil Cleanup Objectives (the applicable cleanup standards at this time) included arsenic, chromium, mercury, and selenium.
- Metals were detected in groundwater samples collected from monitoring wells MW-1 and MW-2 at concentrations that exceed Class GA Groundwater Standards. The metals that were detected above the groundwater standards include arsenic, barium, cadmium, chromium, lead, and mercury.
- A heavy weight petroleum hydrocarbon identified by the laboratory as "lube oil" was detected in soil samples from MW-1, MW-2, and B-3. These test borings/monitoring wells are located in the open area behind (east of) the former automobile dealership building. The highest TPH concentration was detected in the soil sample from MW-1 (sample depth 12 to 14 feet), at a concentration of approximately 7 million parts per billion (ppb).





3.3.2 Supplemental Phase II ESA (GZA 1997 Report)

The GZA 1997 Report included the installation of geoprobe borings P-1 through P-8, and P-10 through P-14. The conclusions relevant to the Site are summarized below:

- Six (6) SVOC compounds were detected in soil samples at concentrations that exceed NYSDEC guidance values. These were identified in shallow subsurface soils (0 to 6 feet) collected from the area immediately northeast and adjacent to the former automobile service area in the main building, and from areas near the eastern property line. It appears that detection of these compounds is limited to the area where geoprobe boreholes P-10, P-11, P-12, and P-14 were installed.
- Metals were identified in subsurface soil samples obtained from geoprobe boreholes P-7, P-10, P-11, P-12, and P-14. The analytical results indicated that the following metals exceed NYSDEC guidelines: arsenic, cadmium, chromium, lead, mercury, selenium, and silver. The spatial distribution of these metals indicates that they are generally present in the east portion of the Site and immediately northeast and adjacent to the former automobile service area in the main building.
- The subsurface soil samples collected and submitted for laboratory analyses generally consisted of fill materials. This fill was comprised of various amounts of fine to coarse sand and gravel, silt and clay, as well as coal, cinders and slag. The components of the fill, specifically the coal, cinder, and slag, may have contributed to the elevated metals concentrations.

3.4 RI Scope of Work Based on Previous Investigation Findings

Based on the results from the previous GZA investigations, further site observations, and review of the Site history, the RI Scope of Work focused on the following potential environmental conditions, which were identified in the RI work plan and are shown on Figure 7.

1: Historic Fill (Site Wide)

The entire Site consists of historic fill. Previous Phase II ESAs (GZA 1996 and 1997) identified soil and groundwater contamination on the Site with cinders, ash, and coal fragments described as fill deposit. Soil and groundwater sample analyses from these previous Phase II ESAs revealed detection of concentrations of SVOCs and metals that exceeded NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives and groundwater standards. Sanborn Fire Insurance Maps also indicate that the Site was landfilled. Potential contaminants of concern include SVOCs and metals. While VOCs were not found on Parcel B in the overburden deposits at levels that would require a cleanup, based on the past presence of VOCs on the western portion of Parcel A, a bedrock groundwater investigation was included as part of the RI Scope of Work to confirm that VOCs had not impacted Parcel B.

2: Former Coal Pile Storage (Site Wide)

The entire Site was used for coal pile storage based on a review of the aerial photographs from 1920's through approximately 1971, site observations and sample results. Coal fragments are visible on the ground surface and were also encountered in soil borings during the previous Phase II ESA investigations. Groundwater sample results from previous GZA reports indicate elevated concentrations with metals and SVOCs that exceed NYSDEC subpart 703.3 class GA groundwater standards. Run-off from the former coal piles that infiltrated the ground surface from

former coal pile storage and remaining buried coal may have impacted the surface soil, subsurface soil and groundwater quality. Potential contaminants of concern include SVOCs and metals.

3: Coal Tar

In litigation VOA filed against past owners and operators of Parcels A and B, VOA's case was settled with all defendants associated with Parcel A and is currently stayed against RG&E. As part of the discovery in the litigation, RG&E produced a June 12, 1981 internal memo. This memo was prepared as part of the investigation RG&E was conducting to properly report to the EPA for the then new Superfund program. The memo indicates that "in 1946, or there about, 10,000 gallons [of coal tar] was hauled to the Lake Avenue Yard," which was taken from RG&E's East Station. The coal tar was reportedly "landfilled with construction debris". As a result of RG&E information and based on the investigation performed on the Site to date, it was considered unlikely that the coal tar was landfilled on VOA's property because the Site was principally used for coal storage not disposal. Additional remedial investigation was required to rule out whether coal tar was present on this portion of the former Coal Yard Site.

4: Former Automobile Parking Area (site wide)

Since the Site was used for vehicle parking, there was also a need to further investigate the Site to rule out whether the former car dealership uses, including parking of vehicles, contributed additional petroleum and solvent related contamination on Parcel B.

5: Soils in Former Bio-cells

Contaminated Petroleum soils were placed in three lined biocells on the eastern border of Parcel B from the off-site gasoline spill remediation of Parcel A. The RI needed to confirm that these soils were now fully remediated and could be subsequently used during Parcel B Site remediation if fill is required.

6: Soil Piles

The redevelopment of the Parcel A Site required significant regarding of existing Site soils. Excess soil resulting from regarding was placed on the eastern boundary of the Parcel B Site to block the views of the Raeco Oil Superfund Site. Further remedial investigation of the soil piles were required to determine if these soils required remediation or could be reused as Site fill if required during Parcel B remediation.

7: Kaplan Container Former Barrel Cleaning and Barrel Reconditioning Operations (offsite)

While the previous investigations did not reveal any significant contribution to on-site soil contamination or a contaminated soil source areas in the vicinity of the former Kaplan Container barrel cleaning operations (likely due to the fact that cleaning discharge water was discharged into an on-Site sewer at the time), potential impact to the Site groundwater from the former barrel cleaning and barrel reconditioning operations was not fully known and required further investigation.



8: Former Gasoline Spill & Petroleum Related Uses (off-site)

While the previous investigations did not reveal significant contribution to off-Site soil contamination or contaminated soil source areas on Parcel B from the former petroleum-related uses on Parcel A, potential impact to on Site groundwater from the former off-site gasoline spill area west of the VOA Human Services Complex was not fully known and required further investigation.

After the completion of the GZA Phase II investigations in 1997, NYSDEC had requested the installation of two bedrock monitoring wells. An automobile paint booth in the former auto body shop was located at the east end of VOA's Administration Office Building that adjoins the Site on Parcel A. NYSDEC expressed concern potential contamination associated with painting operations and former gasoline station (gasoline spill), which usually involve solvents and petroleum, may have been released with subsequent migration into groundwater in the bedrock formation near the east end of the VOA Administrative Office. In addition, DEC requested a second bedrock well installed in the vicinity of the former Kaplan Container operations.

NYSDEC requested installation of the wells near the former Ambrose Street Coal Yard Parcel B Site, which could have also contributed contamination to bedrock groundwater. Due to the significant expense of such wells, and concerns regarding the results onto and from off-site properties independent spills or releases, and the lack of liability protection in the VCP liability release that was afforded to VOA as a volunteer at this time (a volunteer had to prove off-site contamination did not originate from their site), VOA opted to withdraw from the VCP. VOA preceded to cleanup the western portion of Parcel A under the Petroleum Spills Program. VOA entered the BCP in 2005 for the eastern portion of Parcel A and Parcel B and was in a position at this time to install the requested bedrock wells under the improved BCP Law that did not require off-site remediation by a volunteer. Therefore, the two bedrock monitoring wells NYSDEC had requested (MWR-101 and MWR-102) would be installed as part of the RI in order to evaluate the bedrock ground water quality.

4.0 FIELD INVESTIGATION

In June 2005, VOA entered into a Brownfield Cleanup Agreement for the investigation and remediation of the western portion of Parcel A and Parcel B Site. In August 2006, a Remedial Investigation Work Plan (RIWP) was prepared by GeoQuest Environmental Inc. (GeoQuest). Final modifications to the August 2006 RIWP were provided by NYSDEC in a letter dated December 22, 2006. These modifications were accepted on behalf of VOA in a letter dated January 8, 2007 and became a part of the approved RIWP.[GeoQuest implemented the approved RIWP between October 2007 and April 2010.] NYSDEC requested additional supplemental investigation work to be performed. A Supplemental RIWP to perform a Supplemental Investigation (SI) was prepared on September 22, 2009 and approved by NYSDEC on April 16, 2010. Bergmann Associates (Bergmann) implemented some remaining approved RIWP tasks and completed the SI field work in September 2011.

The objective of the RI and SI was to investigate and characterize the nature and extent of the contamination within the boundary of the Site and to qualitatively evaluate if there is potential off-site migration of contamination pursuant to the requirements in the BCP Law, Environmental Conservation Law Article 27, Title 14, and Section 27-1415.

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The RI and SI included additional surface soil, subsurface soil, and groundwater sampling with analysis from surface soil locations, soil borings, monitoring wells and test pit explorations. These RI /SI sample locations are presented on Figure 8 - Subsurface Explorations Plan. GeoQuest conducted the RI investigations and Bergmann conducted the SI investigations, respectively, in general accordance with the methods and procedures of the approved RI work plan and SI scope of work. In general, the procedures in NYSDEC Investigation Guidance Document DER-10 were followed throughout the investigations. The RI /SI field program included the following activities:

- Preliminary test boring and well location inspection, including site plan review, and utility mark out.
- Soil samples from 11 soil test borings located in the vicinity of potentially impacted areas or near areas were impacts were previously detected. Test borings were advanced to approximately 10 feet below the groundwater table and monitoring wells were installed with 10 foot well screen intervals that extended approximately 2 feet above the groundwater table. Test borings and overburden monitoring wells were completed to depths ranging from 24 to 44.5 feet below ground surface (bgs). One soil sample was generally collected from at depths above the water table from each test boring location.
- Surface soil sampling from 6 locations using hand tools to collect a sample from the ground surface to two inches below any vegetative cover in accordance with NYSDEC approved modifications to the RI Work Plan. The surface soil samples were collected from unconsolidated historical fill soils.
- Installation of 7 overburden monitoring wells and 2 bedrock monitoring wells. Overburden
 monitoring wells were installed to a depth ranging from 24 to 45 feet at the locations where
 previous contamination was found, and at up- gradient and down-gradient Site boundary
 locations to more fully delineate potential off-site contamination. Two rounds of groundwater
 sampling were conducted during the course of the investigation for the evaluation of potential
 seasonal groundwater fluctuations with the exception of Monitoring well MW-107 that was
 sampled once since this well was installed during the October 2010 SI.
- Excavation of 26 test pits during the RI field work and 10 test pits during the SI field work was
 implemented to evaluate the nature and extent of historical fill and to determine the nature and
 extent of potential source areas requiring remediation. Sub-surface soil samples were also
 collected from selected test pit locations to characterize the nature of the material
 encountered.

Details of the field investigation are described in the following report sections below.

4.1 Utility Clearance

Prior to initiating the subsurface investigation a GeoQuest representative during the RI or a Bergmann representative during the SI staked out the locations of the proposed soil borings, test borings, and monitoring wells. The actual field locations for some of the explorations were modified based on Site conditions and field instructions received from the on-Site NYSDEC field representative. Significant sample location changes were not required during the RI/SI investigations.



Additionally, prior to beginning the field investigation work, the remedial contractor, SJB Services, Inc. (SJB) of Buffalo, New York contacted underground dig safely (U.F.P.O.) for stake out clearance atthe proposed soil borings and test pits locations. Subsurface explorations were not installed until the following minimum requirements were met:

- The project manager field marked drilling and test pit locations and surrounding area.
- Underground utilities provided clearance for proposed sub-surface explorations.
- NYSDEC was notified approximately 10 days prior to the implementation of field work activities.
- A health and safety meeting was conducted at the Site.
- Site air monitoring equipment was activated at upwind and downwind locations.
- A temporary decontamination pad was constructed.

4.2 Historic Fill Soil Investigation

Subsurface test borings, monitoring well installations and test pit excavations were installed from October 2007 through October 2011 by SJB Services, Inc. These subsurface explorations were completed, in accordance with the approved RIWP and SIWP to investigate the areas of contamination identified in previous investigations and to further delineate the nature and extent of contamination at the Site. Samples were collected from each soil boring that was completed, from each groundwater monitoring well, and from selected test pit locations, as described in Section 4.2.2. The RI/SI subsurface explorations were completed under the supervision of a GeoQuest/Bergmann Geologist and a NYSDEC representative.

A total of 11 soil borings and 36 test pits were advanced at the approximate locations shown on Figure 8. Seven of the soil borings were completed as overburden monitoring wells and two of the soil borings were completed as top of bedrock monitoring wells. Surface soil samples were also collected from 6 sample locations in accordance with the approved work plan at the approximate location shown on Figure 8. A summary of the surface soil and subsurface soil samples collected with laboratory analysis is presented on Table 2 - Summary of Sample Requirements and Laboratory Analyses. This table presents a summary of sample location, sample matrix, number of samples collected, and laboratory analysis. The RI and SI locations are shown on Figure 8.

4.2.1 Investigation and Sampling Methods

Soil investigation methods included hollow stem auger drilling advance with a rotary drill rig following ASTM D-1586 procedures, test pit excavation and hand grab sample collection. Continuous soil samples were collected from ground surface to the final depth in each soil boring and test pit excavation. The soil samples were screened for visual, olfactory, and direct field measurements for environmental impacts. Soil samples retrieved from each test boring / test pit were visually classified for soil type, grain size, texture, and moisture content. Each sample was screened for the presence of VOCs with a photoionization detector (PID) equipped with a 10.6 electron volt (eV) lamp. Select soil samples were collected for laboratory analysis as outlined in Section 4.2.3.

Following test (soil) boring completion, the contractor installed a monitoring well in the soil boring borehole or grouted the soil borings to the surface if the soil boring location was not scheduled to be completed as a monitoring well. Soil borings that were not completed as monitoring wells were



backfilled with cement/bentonite grout to the ground surface. The following text describes specific methodology for HSA borings, test pit excavation, and hand grab samples.

Subsurface Soil Sampling and Overburden Monitoring Wells

Eleven soil borings were completed at various locations throughout the Site as shown on Figures 8. The RI/SI test borings / monitoring wells were advanced through the water table to the depth of native soil at five locations and at two locations were advanced to the top of bedrock for the installation of top of bedrock monitoring wells. At 6 locations the soil boring were terminated within the Historic fill soil. Soil borings were completed to depths ranging from 26 to 45 feet below ground surface (bgs) using a CME 75 truck mounted drill rig using rotary methodology. Soil samples were collected from split spoon soil samples of two-inch diameter and 2-foot in length. Following completion of 7 soil borings, 2-inch diameter PVC overburden monitoring wells were installed and at two locations the soil borings (test borings) were advanced approximately 10-feet into the bedrock formation with an HQ diamond core barrel to facilitate the completion of the top of bedrock monitoring wells, as discussed in Section 4.3. Test Boring logs are provided in Appendix B - Test Boring & Test Pit Logs. Monitoring well construction details are presented in Appendix C - Well Completion Reports.

Test Pit Excavations

Thirty-six (36) test pits explorations were excavated using a CAT 350 tracked excavator equipped with a 36-inch bucket attachment. Historic fill soil was excavated with the bucket to depths of approximately 20 feet bgs or until the test pit excavation collapsed. Soil samples were collected from the test pits via the excavator bucket. Samples of coal fragment and coke were not collected for TCLP analysis. Instead, one sample of the black sandy soils was collected for TCLP analysis. In addition several samples were taken at different times for 8015 analysis in order to evaluate potential pyrogentic or petrogentic origin of the historic fill material.

Surface Soil Samples

Six surface soil samples were collected at a depth of approximately ground surface to two inches below any vegetative cover if present. The surface soil grab samples were collected with a new, clean and a stainless steel trowel.

Soil Pile Sampling

Six composite soil samples were collected, based on field screen PID results, from six test pits (TP-121 through TP-126) excavated in the two large piles of soil on the Site. These soil piles were generated during the 1998 construction activities associated with the VOA Human Services Complex that is adjacent to the Site. These soils were placed along the eastern property line to eliminate the visual impact from the Raeco Oil Superfund site. The composite soil samples were submitted to Columbia Analytical Services for laboratory analysis in accordance with DER-10 required VOC, SVOC, TAL Metals, cyanide and Pesticide/PCB testing methodologies.

Bedrock Monitoring Wells

Two bedrock monitoring wells (MWR-101 and MWR-102) were installed in order to collect initial groundwater samples for laboratory analysis to evaluate the top of bedrock ground water quality. Bedrock monitoring wells were installed in the upper-most water-bearing zone within the bedrock formation. The locations for the bedrock monitoring wells are shown on Figure 8 at locations that

are down-gradient (MWR-101) from the former barrel cleaning and barrel reconditioning facility and down-gradient (MWR-102) of the former automobile dealership and gasoline spill area.

Bedrock wells were installed by advancing 6.25-inch inside diameter (ID) hollow-stem augers to the top of bedrock. Collection of soil samples from depths greater than the adjacent overburden monitoring well was also completed using the same protocol used for soil borings. The bedrock drilling was advanced with a HQ core barrel to a depth of approximately 10 feet to complete the bedrock section of the well intake. The well intake, for each bedrock well, was completed with a 10 foot section of 2-inch PVC well screen that extends to the bottom of the borehole. The well screen was attached to well casing that extends to the ground surface. Bedrock wells were developed as described in the Overburden Monitoring Well Installation section of this report.

4.2.2 Sampling Protocols

Soil samples were collected in accordance with the sampling protocol presented in the RIWP. The rational for sample collection and analytical methods is based on the previous laboratory sample results and the former uses of the Site (petroleum related and coal yard storage) and activities (historic filling) that occurred on the Site. Sampling parameters were performed in general accordance with DER-10 and include: Volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Metals, cyanide, PCB and pesticides. The focus of the RI and SI was on the heavy metals and semi-volatile organic compounds (SVOCs), which included polycyclic aromatic hydrocarbons (PAHs), that had previously been detected in soil samples from the Site, and to evaluate potential impact of VOCs from former automobile uses and releases on Parcel A that may have impacted overburden and bedrock groundwater quality on Parcel B.

To satisfy the objectives of the RI and SI work plans, in total, 33 VOCs, 46 SVOCs, 46 Metals, 15 total Cyanide, 20 PCBs, 20 Pesticides, 4 USEPA 8015 Diesel Range Organics (DRO) and 2 USEPA 8015 Gasoline Range Organics (GRO) soil samples were collected, see Table 2, and submitted for laboratory analysis from:

- 7 soil borings,
- 6 surface soil samples,
- 9 soil sample from the former bio-cells,
- 6 soil samples from the soil piles at the site, and
- 23 soil sample from test pit explorations.

In general, one soil sample was collected from the sample interval with the highest PID reading or visual impacts or from a sample interval above the water table. Since the majority of the RI soil samples were collected from deeper depth intervals, during the SI subsurface soil samples were generally collected from the 8 to 10 foot depth interval in the historic fill soil if visual impacts or elevated PID readings were not observed. Additional soil samples were collected from subsurface exploration locations when elevated PID measurements were detected or as direct for the NYSDEC representative.

Eleven soil borings were installed to obtain soil samples or observe and field screen soil conditions and seven of these soil borings were completed as overburden monitoring wells and two soil borings were completed as top of bedrock monitoring wells.

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Samples for VOCs were collected directly from the split spoon sampler or the excavator bucket, placed into appropriate pre-cleaned laboratory-supplied glassware, and compacted to minimize head space. The remaining sample volume was homogenized and placed in appropriate containers for SVOCs, metals, PCBs, pesticides, and herbicides. The sample containers were labeled, placed in a laboratory-supplied cooler and packed on ice (to maintain a temperature of 4°C). The coolers were picked up at the end of each day, or every other day, by the laboratory under standard chain-of-custody protocol, in accordance with the RIWP. Sampling equipment decontamination procedures are summarized in Section 4.8.

Laboratory analytical services associated with this program were provided by Columbia Analytical Services of Rochester, New York, a NYS ELAP-certified laboratory. Soil samples were analyzed for VOC's, SVOC's, TAL Metals and Total Cyanide according to protocols described in the June 2000, New York State Analytical Services Program (ASP00) as required by DER-10. In addition, 25% of the subsurface soil samples were also analyzed for TCL pesticides and PCBs. Surface soil samples were analyzed for TCL/TAL analyses.

The laboratory analytical protocols used for the RI investigation were Target Compound List (TCL) Volatile Organic Compounds (VOCs) plus tentatively identified compounds (TICs) by NYSDEC ASP Method OLMO4.2.

- TCL Base/Neutral/Acid Organic Compounds (BNAs) plus TICs by NYSDEC ASP Method OLMO4.2.
- TAL Metals by NYSDEC ASP Method ILMO4.1.
- PCB's and TCL pesticides by NYSDEC ASP Method OLMO4.2
- Total Cyanide by NYSDEC ASP Method ILMO4.1
- 8015B (DRO and GRO)

A summary of the soil samples collected from each sample location with the analysis performed by the laboratory is presented in Table 2 – Summary of Samples Collected for Laboratory Analysis. The laboratory analytical data package included Category B deliverables with Data Usability Summary Reports.

Soil samples from the SI were analyzed for Target Compound List (TCL) VOCs via EPA Method 8260, TCL SVOCs via EPA Method 8270, Target Analyte List (TAL) metals via EPA methods 6010 and 6020. Deviations from the RI and SI work plans regarding soil sample collection protocol and soil sample analysis did not occur during the RI/SI project work. In addition, TCLP soil test were performed on soil samples from test pit TP-132R. This test pit was excavated on September 26, 2011 to collect a TCLP soil sample from the historic fill and also from the black stained soils that were previously observed in the pit TP-132. A TCLP soil sample was also collected from the contents of the soil cuttings generated from the installations of monitoring wells.

4.3 Geophysical Survey

A geophysical survey was included as a required component of the RI. The geophysical investigation was designed for geophysical characterization of the subsurface, potentially assist with the selection of subsurface exploration locations for the RI, and confirm there were no buried tanks or other structures on the Site. In addition, the information in the geophysical survey was used to assist GeoQuest with the assessment of contaminated areas identified at the Site. Geomatrix Consultants, Inc. (Geomatrix) performed data acquisition for the geophysical survey on July 24, 2007. Geomatrix



used both time and frequency domain geophysical tools (EM61 and EM31) to characterize the geophysical conditions at the Site.

EM31 Results

Seven anomalous areas are identified from the EM31 data and are labeled A through G on the figures in the Geomatrix report. See Appendix D - Geophysical Survey Results. Anomalies A, B and E indicate large conductivity and in phase highs are shown in shades of dark red on in the Geomatrix report. These anomalies are likely related to conductive fill material. Anomaly A is partially located beneath the paved parking area. Anomalies F and G are likely related to buried railroad lines (F) and utilities (G). Anomaly C is located largely within the fenced in former boat storage area adjacent to Ambrose Street and may be related to surface debris and/or subsurface material. Anomaly D is a zone of buried metals on the east slope of the mounded areas. The character of the response at Anomaly D is suggestive of buried metals. The EM 31 results are presented in Appendix D.

EMG61 Results

The EM61 data for the Site are shown in Geomatrix report figures. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 40 m Volts) likely contain buried metals. These areas are depicted in shades of dark blue through yellow on the Geomatrix report figure. Most of the anomalies identified with the EM61 correspond with known surface and subsurface features. There were no anomalies identified on the EM61 data set that are interpreted to be significant relative to the objectives of this investigation. The EM 61 result is presented in Appendix D.

Despite the identification of some subsurface structures, the results for the geophysical survey did not indicate the need to modify the locations and or the number of subsurface investigations presented in the RIWP and subsurface investigations were completed in the areas of the geophysical anomalies.

4.4 Groundwater Investigation

4.4.1 Monitoring Well Installation

Overburden Monitoring Wells

Seven overburden monitoring wells were installed during the RI/SI to investigate the identified on-site potential environmental areas of concern and to evaluate overburden groundwater quality at up-gradient and down-gradient of the Site. RI overburden monitoring wells MW-101 through MW-106 was installed in October 2008. Overburden well MW-107 was installed in October 2010 as part of the supplemental investigation (SI). Two previous monitoring wells existed on-site as a result of GZA's 1996 Phase II Environmental Site Assessment but were not sampled as part of the RI/SI project work because of the poor conditions of these wells. Monitoring well locations are presented on Figure 8.

Overburden monitoring wells were installed in accordance with the methods and procedures detailed in the RIWP and SIWP. Each RI overburden monitoring well (MW-101 through MW-106) and SI overburden monitoring well MW-107 was installed using 4 1/4 inch ID hollow stem augers utilizing rotary drilling methods. The overburden monitoring wells were constructed using two-inch, threaded, flush-joint, schedule 40 PVC riser and approximately 10 feet of 0.01-inch slot well screen. The well screens (well intake) were placed across the



water table interface (approximately 7 feet below, 3 feet above the water table) to allow for the monitoring seasonal groundwater fluctuations and light non-aqueous phase liquid (LNAPL), if present.

Clean sand (Morie #1) was used to backfill the annulus around the well screen and the borehole to a height of approximately two feet above the top of the well screen interval. A two to three foot layer of hydrated bentonite clay was placed above the sand pack to seal the well. The remainder of the annular space was backfilled with a cement-bentonite grout to approximately 1-foot below the ground surface.

Well construction was completed with a flush mount or stickup steel well cover set into a concrete surface seal and over the well for protection. The top of PVC well casing was surveyed for elevation and marked as the reference elevation for the well. Total well depths ranged from approximately 22 to 45 feet bgs. Monitoring well construction details are recorded on the Well Completion Logs in Appendix C - Well Completion Logs.

Bedrock Monitoring Wells

Two top of bedrock monitoring wells were installed during July 2008 RI implementation to investigate bedrock groundwater quality in the top of bedrock zone. Bedrock monitoring well MWR-1 is installed at an up-gradient location and MWR-102 is installed at a down-gradient location at the Site. Top of bedrock monitoring well MWR-101 and MWR-102 were installed adjacent to GZA Phase II previous overburden monitoring wells MW-101 and MW-102, respectively. These monitoring wells were installed in boreholes that extended below the historic fill soils and through the underlying Glacial Till deposit. The augers were advanced until refusal on the top of bedrock surface using the same drilling methods for the overburden monitoring well installations. The well borehole was advanced into the bedrock formation by advancing a HQ diamond core barrel approximately 10 feet into the top of bedrock.

The top of bedrock monitoring wells were constructed using two-inch, threaded, flush-joint, schedule 40 PVC riser and approximately 10 feet of 0.01-inch slot well screen. The well screens (well intake) were placed into the bedrock core hole (borehole) and clean sand (Morie #1) was used to backfill the annulus around the well screen and the bedrock borehole to a height of approximately one foot above the top of the well screen interval. A two to three foot layer of hydrated bentonite clay was placed above the sand pack to seal the well. The remainder of the annular space was backfilled with a cement-bentonite grout to approximately 1-foot below the ground surface. Bedrock well construction was completed with a flush mount steel well cover set into a concrete surface seal and over the well for protection. The top of PVC well casing was surveyed for elevation and marked as the reference elevation for the well. Total well depths for the top of bedrock monitoring wells MWR-101 and MWR-102 (were approximately 54.5 and 54.0 feet bgs, respectively.

4.4.2 Monitoring Well Development

Groundwater monitoring wells were developed after installation following the methods and procedures in the RIWP. Each well was developed by, surging the well intake interval with a bailer and pumping groundwater with a peristaltic pump and dedicated polyethylene tubing to enhance the hydraulic permeability of the monitoring well with surrounding overburden soils or bedrock. During development, each well was pumped until the water appeared clear

with a turbidity of less than 50 NTU was measured in accordance with the RIWP. Approximately five well volumes of water were removed during the development process. The groundwater removed was contained in 55 gallon drums and properly disposed of by Waste Management of New York. TCLP testing was performed on the well water and soil cuttings the laboratory results indicate non-hazardous waste, See Attachment 3 – TCLP Laboratory Results.

4.4.3 Groundwater Sampling

During the RI, two rounds of groundwater samples were collected in October 2008 and July 2009, from six groundwater monitoring wells (MW-101 through MW-106, and two bedrock monitoring wells (MWR-101 and MWR-102) to evaluate seasonal high and low groundwater table fluctuations with respect to groundwater quality. One additional overburden monitoring well MW-107 was completed during the SI and was sampled for metals on November 4, 2010. Therefore, there is one sample result for metals from this well. Each monitoring well was purged and sampled at least one week after development, in general accordance with methods and procedures detailed in the RIWP and the U.S. EPA's low-flow groundwater sampling procedure to allow for collection of a representative sample ("Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures", EPA/540/S-95/504, April 1996). Groundwater sample parameters are presented in Table 3 — Groundwater Field Sample Parameters.

Prior to sampling, the static water level was measured to the nearest 0.01 foot with a decontaminated oil/water interface probe. Light non-aqueous phase liquid (LNAPL) and dense non-aqueous phase liquid (DNAPL) was not observed on or in the groundwater from the monitoring wells during the sampling events.

Monitoring wells were purged using a peristaltic pump fitted with dedicated, disposable polyethylene tubing prior to sample collection. Purging rates were maintained at less than 0.5 liters per minute in order to minimize drawdown and sample turbidity. During purging and sampling, monitoring well effluent was pumped into a flow-through cell with a Horiba U-22 Water Quality Monitoring System probe until the parameters were within 10% for three successive well volumes. The Horiba U-22 was used to monitor the purge water for hydrogen ion concentration (pH), conductivity, temperature, dissolved oxygen, and turbidity. Prior to collecting the sample at each monitoring well location, a minimum of five well volumes was purged the parameters stabilized to approximately 10 percent of their respective values, and the NTU turbidity was below 50. In instances where groundwater samples were collected and turbidity did not fall below 50 NTU, the measured groundwater turbidity was allowed to stabilize. Groundwater samples collected with turbidity greater than 50 NTUs included MW-3 during both sampling events.

Groundwater samples were collected with a new disposable bailer, and analyzed for TCL VOCs, SVOCs, TAL metals, total cyanide, pesticides and PCBs. A summary of the locations of groundwater samples collected and laboratory analysis is presented in Table 2. The samples were collected in pre-cleaned, laboratory-provided containers. The sample containers were labeled, placed in a laboratory-supplied cooler, and packed on ice (to maintain a temperature of 4°C). Sample coolers were picked up on-site by a courier from the laboratory and delivered under proper chain of custody protocol for analysis. The depths to groundwater in monitoring wells were gauged before purging during each sample collection and also before the hydraulic conductivity testing. The measurements are provided in Table 1.

4.5 Quality Control Sampling

During the RI/SI, field blanks, trip blanks, field duplicate samples, and matrix spike/matrix spike duplicate (MS/MSD) samples were collected and submitted for laboratory analysis in accordance with the Quality Assurance Project Plan (QAPP), contained within the RIWP. During the course of the investigation, the following quality control samples were collected:

Soil samples

- Three MS/MSD duplicate QA/QC samples
- Three field duplicate samples
- One trip blank samples

Groundwater samples

- Two field duplicate samples
- Two MS/MSD groundwater sample
- One field blank sample
- Two trip blanks samples

Field blanks were not collected since new dedicated sample collection equipment was used to collect the soil and groundwater samples.

Field duplicates were collected to determine the accuracy of the analytical methods. The duplicates were collected from the same material as the primary sample by splitting the volume of sample collected in the field into two sample containers. The field duplicates were analyzed for the same parameters as the samples being duplicated, which for the majority of the samples included TCL VOCs, TCL SVOCs, TAL metals, PCBs, and total cyanide.

Matrix Spike/Matrix Spike Duplicate samples were collected to assess the effect of the sample matrix on the recovery of target compounds or target analyses for soil and groundwater samples. The MS/MSD samples were analyzed for several compounds including TCL VOCs, TCL SVOCs, TAL metals, PCBs and total cyanide.

The trip blank samples were collected to assess the potential for contamination of the sample containers and samples during the trip from the laboratory, to the field, and back to the laboratory for analysis. The groundwater trip blank contains approximately 40 milliliters of acidic water (doped with hydrochloric acid) that is sealed by the laboratory when the empty sample containers are shipped to the field, and unsealed and analyzed by the laboratory when the sample shipment is received from the field. The groundwater trip blank samples were analyzed for TCL VOCs.

4.6 Sample Analysis

The laboratory analyses of soil and groundwater were conducted by Columbia Analytical Services, Inc. (Columbia) of Rochester, New York, a New York State Department of Health Environmental Laboratory Analysis Program (ELAP)-approved laboratory certified for analyses using NYSDEC Analytical Services Protocol (ASP00). Soil sample analyses included TCL VOCs by EPA Method OLM 04.3, TCL Base /Neutral/Acid Organic Compounds Method OLM 04.3, TAL Metals by Method ILM 05.3, PCB/Pesticides by Method OLM 04.3, and Cyanide by Method ILM 05.3. Laboratory analyses



were conducted in accordance with the EPA SW-846 methods and NYSDEC ASP Level B deliverable format for soil and groundwater samples from the SI.

A two soil samples from TP-132R, located adjacent to TP-132 representative of the Historic Fill and the black sandy soils were collected and submitted to the laboratory for TCLP analysis at the request of the NYSDEC. The TCLP results indicate that the soil samples from the Historic Fill and the Black sandy soils are non-hazardous.

4.7 Data Validation

The final ASP Category B laboratory sample reports from Columbia Analytical Services were transported to Paradigm Environmental Services, Inc., in Rochester, New York for data validation. Data validation was performed in general accordance with NYSDEC data usability summary requirements (DUSR) for organic and inorganic data review.

The DUSR presented the results of data validation, including a summary assessment of laboratory data packages, sample preservation and COC procedures, and a summary assessment of precision, accuracy, representativeness, comparability, and completeness for each analytical method. For each of the organic analytical methods, the following was assessed:

- Holding times
- Instrument tuning
- Instrument calibrations
- Blank results
- System monitoring compounds or surrogate recovery compounds (as applicable)
- Internal standard recovery results
- MS and MSD results
- Target compound identification
- Chromatogram quality
- Pesticide cleanup (if applicable)
- Compound quantization and reported detection limits
- System performance
- Results verification

For each of the inorganic compounds, the following was assessed:

- Holding times
- Calibrations
- Blank results
- Interference check sample
- Laboratory check samples
- Duplicates
- Matrix Spike
- Furnace atomic absorption analysis QC
- ICP serial dilutions
- Results verification and reported detection limits

Based on the results of data validation, the validated analytical results reported by the laboratory were assigned one of the following usability flags as indicated in each validation report:





- "U" Not detected at given value;
- "UJ" Estimated not detected at given value;
- "J" Estimated value;
- "N" Presumptive evidence at the value given; and
- No Flag Result accepted without qualification.

Data reduction, validation, and reporting procedures were completed in general accordance with the DUSR requirements provided in the RIWP. A DUSR was completed for each laboratory report. The report tables and figures present a summary of validated data. The DUSRs are presented in Appendix E - DUSR Reports.

4.8 Field Equipment Decontamination

Steel split spoon samplers were used to collect soil samples. The split spoon soil samplers were cleaned with alconox and rinsed with water for each soil sample interval. Direct contact of sampling equipment with the ground was avoided between decontamination rinses and sampling equipment was placed on polyethylene sheets or aluminum foil if necessary to avoid contact with the ground. The back of the drill rig and down-holes tools, augers, and rods were decontaminated between soil boring locations and at the completion of the prior to leaving the Site by steam cleaning.

Decontamination liquids and soil cuttings that were generated at the sampling location were temporarily contained in 55 gallon D.O.T. Drums. Decontamination wastewater was drummed for disposal as described in Section 4.9.

4.9 Investigation-Derived Waste Management

Investigation-derived wastes (IDW) generated during the RI Site Investigation were containerized by SJB Services, Inc. and transported off-site for disposal by Waste Management of New York. Solid waste included contaminated personal protection equipment, contaminated soils from drilling activities, and purge water and decontamination water collected from the temporary decontamination pad (steam pad) were placed in DOT approved 55-gallon steel drums with closed tops. Aqueous waste from monitoring well development and purging and decontamination water were placed also placed into DOT approved 55-gallon steel drums with closed tops. The contents of from the drums were analyzed and provided to the chemist from Waste Management of New York for review. A manifest was prepared and the drums were transported off-site for disposal by Waste Management of New York. One drum currently remains on-site from the SI and is awaiting removal by a licensed waste hauler.

5.0 SUMMARY OF SAMPLE RESULTS BY MEDIA

This section discusses the findings of the RI/SI. Soil sample results were compared to the NYSDEC Brownfield Cleanup Program's most stringent Unrestricted Use Soil Cleanup Objectives (SCOs) in 6 NYCRR 375-6.8(a) ("Track 1" or "Unrestricted SCOs") and also the Commercial Use Soil Cleanup Objectives in 375-6.8(b) ("Track 2 Commercial" or "Commercial SCOs"). In addition, If a soil sample analyte was also detected in the groundwater media than a comparison of the sample result with the Protection of Groundwater SCO criteria was presented on the soil sample summary tables. A comparison with the most stringent Unrestricted SCOs is required to facilitate the future completion of a Remedial Alternatives Analysis as required by the BCP for a potential Track 1 remedy. However, it

is important to note the remedial goal for this Site is not expected to meet a BCP Track 1 scenario cleanup due to the area-wide and deep historic fill. The planned development (as noted in Section 7.1), which will primarily consist of asphalt pavement and building materials, will serve as a cap to prevent exposure to the contaminated fill materials. Groundwater sample results were compared to the NYSDEC subpart 703.5 Groundwater (Class GA standards) Quality Standards and the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards and Guidance Values.

1: Historic Fill (site wide)

Eleven soil borings, nine monitoring wells, six surface sample samples, and 36 test pits were completed in the historic fill. Samples were analyzed for TCL VOCs and SVOCs, TAL metals, PCBs, pesticides, and total cyanide and USEPA 8015B Diesel range organics and gasoline range organics. A sample of investigation derived soil cuttings from test borings and purge water from wells was collected and analyzed for TCLP. In addition, one soil sample from the Historic Fill and one sample from the black stained sandy soils from test pit TP-132R were also submitted to the laboratory for TCLP analysis. Sample results were compared to the Unrestricted SCOs and Commercial SCOs. The following summarizes the sampling rationale and findings associated with the surface soil and subsurface soil in the historic fill media and the overburden groundwater media:

Surface Soil: 21 surface soil analyses were performed on samples from six surface soil sample locations SS-1 through SS-6 to evaluate the surface soil media at the Site, see Table 2. Visual and olfactory evidence of petroleum contamination was not noted and there was nondetection of total organic vapors based on field screening with a PID. Some fragments of coal and cinders were observed in the surface soil samples. SVOCs were detected at SS-1, SS-2, SS-3, and SS-5 at concentrations that exceed the Commercial SCOs. The concentration of metals (Lead and Mercury) in surface soil sample SS-1 exceeds the Commercial SCOs. The surface soils are historic fill materials (upper fill) based on the visual observations and historic information at this Site. VOCs, PCBs, and pesticides were not detected at concentrations above the Residential and Commercial SCOs. These findings indicate that the historic fill material, which comprises the surface soil, contains SVOCs with concentrations that exceed the Commercial SCOs at half of the locations sampled and at one location exceed Commercial SCOs for metals. Surface soil quality is summarized in Table 4- Soil sample Analytical Summary SCOC, page 9 and 10, Table 5 Soil Analysis Summary Metals and Cyanide, page 5, and Table 6 – Soil Analytical Summary Volatile Organic Compounds, page 5 and 6 and is further discussed in Section 6.

<u>Subsurface Soil</u>: 135 subsurface soil analyses were performed on samples from 27 subsurface soil sample locations (7 test boring/monitoring wells and 21 test pit locations) to evaluate the subsurface historic fill material present at the Site, see Table 2. Metals and SVOCs were detected at concentrations that exceed the Residential and Commercial SCOs. VOC, PCBs, pesticides, and total cyanide were not detected at concentrations that exceed the Residential scos. In general, VOCs were not detected that are typically associated with petroleum contamination from petroleum bulk storage or automotive dealerships. These laboratory analytical results indicate that the subsurface soil is historic fill material that contains metals and SVOCs, which exceed both the Residential and Commercial SCOs. Impacts are further discussed in Section 6.

<u>Groundwater</u>: 103 groundwater analyses were performed on samples from 7 overburden monitoring wells and 2 bedrock monitoring wells, during two RI groundwater sampling events



and monitoring well MW-107 was sampled as part of the SI to evaluate the overburden and bedrock groundwater quality, see Table 2. The types of metals that were detected in the overburden groundwater that exceed the Class GA 703.5 groundwater standards and T.O.G.S. 1.1.1. Guidance values are the same metals that were detected in the historic fill samples. This indicates that the historic fill has had an effect on the overburden groundwater quality with respect to metals. Bedrock groundwater was less impacted with lower concentrations of metals that exceed the Class GA 703.5 groundwater standards and T.O.G.S. 1.1.1. Guidance values when compare to overburden groundwater quality. Therefore, it appears that bedrock groundwater is less impacted by the historic fill than overburden groundwater, and contains lower concentrations for metals. It should also be noted that SVOCs were detected at the low ppb range in the overburden groundwater samples and less detection of SVOC with lower concentrations in the bedrock groundwater samples during the initial groundwater sampling event. SVOCs were not detected above the method detection limits during the second groundwater sampling event in overburden and bedrock groundwater samples. The lower concentrations of metals in the bedrock groundwater samples is likely due to the dense glacial till soils that provides lower permeable soils and some separation of historic fill soils and overburden groundwater from the underlying bedrock groundwater.

VOCs were detected in the low ppb range in groundwater samples from monitoring wells MWR-102 and MW-106 locations that exceed the Class GA703.5 groundwater standards and T.O.G.S. 1.1.1. Guidance values. Chlorobenzene was detected in the groundwater sample from MW-106 with a concentration of 22 ppb that exceeds the groundwater standard of 5 ppb. Methyl Tert-Butyl Ether (MTBE) was detected in the groundwater sample from monitoring well MWR-102 with a concentration of 31.0 ppb that exceeds the groundwater standard of 10 ppb. VOCs were not detected above the groundwater standards in the other groundwater samples and VOCs are not a containment of concern in the groundwater media. PCBs, pesticides and cyanide were not detected in the groundwater samples above the method detection limits. Historic fill and groundwater quality is further discussed in Section 6.

Black Stained Sandy Soils: An area of black stained sandy soils was encountered in TP-131 and TP-132. While these soils are also historic fill, this material is not comprised of cinder, ash and coal fragments that are common to the majority of the historic fill at the Site. This distinct area of black stained sand and silt soils, which exhibited creosote-like odors as observed by Bergmann and NYSDEC representatives who were present at the time, was revealed in test pits TP-131 and TP-132 near the north central portion of the Site. Total organic vapors measured from soils excavated from these test pit locations ranged from 19.8 parts per million (ppm) to 84 ppm in TP-131 and 19.8 ppm to 440 ppm in TP-132. The depth of the black stained sand and silt fill soils (black stained sandy soils) was encountered from approximately 6 to 8 ft below the ground surface and was greater than 20 feet deep at these test pit locations. Test pits TP-133 through TP-136 were excavated to delineate the horizontal extent of the impacted black sandy soils at the direction of the NYSDEC field representative. It appears that these impacted black sandy soils are located in an area approximately 35 ft. by 35 ft, and is centered on TP-132. Analytical soil sample results of these soils indicate detections of 2-Methylnaphthalene in TP-131 (8-10 ft.), TP-132 (8-10 ft.) and TP-133 (8-10 ft.) and the concentration of 1.6J ppm detected in TP-132 exceeds the Commercial SCO level of 0.41 ppm. 2-Methylnaphthalene is a polycyclic aromatic hydrocarbon (PAH) which is a natural compound of coal and is found in combustion products. This chemical compound was also detected in soil samples from TP-128 (8-10 ft.) and TP-130 (8-10 ft.) which are also located in the north central portion of the site. 2-Methylnaphthalene was not detected in other soil samples during the RI/SI project work. The results from the laboratory analytical results of soil



sample TP-132 for EPA 8015B diesel range organic reported 2,200 ppm. Arsenic was also detected in the black stained sand and silt fill soil samples from TP-131 (53.5 ppm), which exceeded the Commercial SCO level of 16 ppm.

As a result of the presence of historic fill soil, groundwater quality has been impacted and the levels of metals and PAHs detected in soil and groundwater samples exceed the restricted commercial cleanup objectives and 703.5 groundwater standards / T.O.G.S. 1.1.1. Guidance values. Historic fill from what appears to be a variety of sources, including but not limited to, areas of buried coal and coke, an area of limited black stained sandy soil with in the historic fill and approximately 55 years of coal pile surface storage have collectively contributed to impacts to Site soil and groundwater quality with respect to SVOCs and metals contamination. The distribution of these contaminants of concern (COC) is further described in detail in Section 6.

2: Former Coal Pile Storage (Site wide)

Eleven soil borings were installed and nine soil borings were completed as groundwater monitoring wells. In addition, 36 test pits were installed and 6 surface soil samples were collected to investigate soil conditions throughout the area of the Site that was formerly used as a coal pile storage area. Soil samples were analyzed for TCL VOCs and SVOCs, TAL metals, total cyanide, pesticides and PCBs.

Coal and coke were observed buried in layers within the historic fill (Upper Fill) at several locations across the Site with the exception of test pits TP-109, TP-110, TP-116, TP-117, TP-118 and TP-120. The coal and coke ranged in thickness from 0.5 ft. to greater than 20 ft. at the following soil borings and test pit locations with corresponding depth intervals as presented below:

Soil Boring / Test Pit ID with thickness in feet	Depth Interval feet below Ground Surface	
MW-104 (3.5 ft.)	0.5-4 ft	
MW-107 (7 ft.)	1-8 ft.	
TP-104 (3 ft)	1-4 ft.	
TP-107 (3.5 ft.)	0.5-4 ft.	
TP-114 (3.5 ft)	0.5-4 ft.	
TP-115 (7 ft.)	1-8 ft.	
TP-127 (6 ft.)	2-8 ft.	
TP-128 (4 ft.)	2-8 ft.	
TP-129 (>20 ft.)	2->22 ft.	
TP-130 (3 ft.)	14 ft.	
TP-132 (3 ft.)	1-4 ft.	
TP-133 (3 ft.)	1-4 ft.	
TP-135 (3 ft.)	1-4 ft.	

Layers of coke that are approximately 2 ft. thick were also observed in test pits TP-115 from approximately 8 ft. to 10 ft. below ground surface and in TP-127 from approximately 10 ft. to 12 ft. A layer of coal and gravel was observed to be approximately 2.0 ft. thick was also observed at monitoring well MW-103 location. The layer of coal and coke was deepest in TP-129.

Field observations of coal on the ground surface layers of buried coal and coke remain on the Site as part of the historic fill. Elevated concentrations of PAHs and metals concentrations in soil / groundwater samples indicate that the use of the Site for former coal pile storage has likely contributed impacts to the Historic fill and overburden groundwater quality at the site. Coal fragments were also observed in the ash and cinders of the historic fill. The approximate distribution and thickness of buried coal is shown on Figure 9- Coal Distribution Plan.

3: Coal Tar

Buried coal tar was not encountered during the RI/SI subsurface investigations.

4: Impacts from Parked Automobiles (Site Wide)

Petroleum related compounds that are typically used at automobile dealerships or found in gasoline were generally not detected in the six surface soil samples SS-1 through SS-6. Visual and olfactory evidence of petroleum contamination was not noted during the collection of these samples, and there was non-detection of total organic vapors based on field screening with a PID. Soil and groundwater quality is further discussed in section 6.

5: Soils Contained in Former Bio-cells

Nine soil samples were collected from soil contained in three bio-cell locations located at the northeast end of the site. These soils were place in the bio-cells from the former gasoline spill area located on the western portion of Parcel A. In addition, some of the soils were petroleum impacted soils removed from catch basins from the former automobile dealership building and also from the former automobile body shop building. The soil samples were analyzed for SVOCs, TAL metals, PCBs and pesticides. It appears that the soil contained in the former bio-cells is generally not impacted with SVOCS, metals, PCBs and pesticides. However, two SVOCs [benzo (a) pyrene and dibenz (a,h) anthracene] were detected in VOA Biocell 101 sample that slightly exceeds the Commercial SCOs. Soil quality is further discussed in Section 6.

6: Soil Piles from the Construction of the VOA Facility

Soil piles were placed on the Site during the construction of the VOA Human Services Complex. The soil sample results indicate elevated SVOCs with concentrations that exceed the Commercial SCOs in soil samples TP-121, TP-122, TP-123, TP-124, and TP-126. Concentrations of metals (Lead and Mercury) exceed the Commercial SCOs in soil samples from TP-121 and TP-123, respectively. Soil quality is further discussed in Section 6.

7: Barrel Cleaning and Barrel Reconditioning Operations (off-site)

Correlation of potential impact to the groundwater quality from the former off-site barrel cleaning and barrel reconditioning operations was not evident from the groundwater samples evaluated.

8: Former Gasoline Spill (off-site)

VOC and SVOC concentrations in overburden and bedrock groundwater samples indicate that the groundwater is not impacted with gasoline or diesel derived chemical compounds typically associated with petroleum bulk storage or automobile dealerships. It appears that the former automobile dealership uses and former gasoline spill on the western portion of Parcel A has not impacted overburden and bedrock groundwater quality at levels that require remediation of



gasoline chemical compounds on this Site. Therefore, correlation of potential impact to the groundwater quality from the former off-site automobile dealership and former gasoline spill was not evident from the groundwater samples evaluated.

6.0 NATURE AND EXTENT OF THE CONTAMINATION

This Section discusses the nature and extent of the identified contaminants of concern (COCs).

6.1 Soil Findings

A total of 11 soil borings, 36 test pits, 6 surface soil samples, and 9 biocell soil samples were completed from which a total of 182 analyses were preformed from these explorations, see Table 2. The approximate locations of the soil samples are shown on Figure 8. Summary data tables are presented in Tables 4-9 in this report for: SVOCs, Metals, and VOCs. The COCs detected in soil media that exceed the Commercial SCOs and Protection of Groundwater SCOs is SVOCs and Metals. VOCs were not detected at concentrations that exceed the Commercial and Residential SCO. At two sample locations VOCs exceed the Protection of Groundwater SCOs. The data summary tables compare the analytical sample results to the Commercial SCOs, Residential SCOs, and Protection of Groundwater SCOs.

COC: SVOCs - Subsurface Soils/ Historic Fill

Subsurface soil samples of the historic fill material, which was encountered at each subsurface exploration at the Site, were collected from 20 test pits and 6 soil boring locations during the RI /SI at sample depth intervals ranging from 8 to 8.5 ft. to 30 to 32 ft. below the ground surface. The SVOC characterization data for subsurface soil samples are presented in Table, 4, pages 1 through 8. The locations of the subsurface soil samples are shown on Figure 10 - Contaminant Distribution Plan SVOC. The soil sample locations and corresponding depths with the highest levels of SVOCs were collected from soil boring/monitoring well MW-103 (20.0 - 22.0 ft.), test pit TP-103 (16.0 - 16.5 ft.), and test pit TP-127 (8.0-10.0 ft.). These subsurface explorations are located in the northern section of the Site where the deepest areas of coal and coke were observed to depths below 20 ft. (test pit TP - 129). These explorations are also near the location of the black stained sandy soil area (TP-131 and TP-132). These SVOCs are Poly Aromatic Hydrocarbons (PAHs), which are a sub set of SVOCs.

PAHs are generally less water-soluble and less volatile than VOCs. As a result of these properties, PAHs (SVOCs) tend to be found primarily in soil and sediments as opposed to water or air when released into the environment. Natural crude oil and coal deposits contain significant amounts of PAHs. PAHs are one of the most widespread organic pollutants from natural and anthropogenic sources. PAHs are found in fossil fuels and are formed by incomplete combustion of carbon-containing fuels such as diesel, wood, and coal. The source of the PAHs present at the Site is likely associated with the composition of the historic fill containing coal, coke, ash, cinders, coal fragments, leather, wood, and slag. The group of PAHs detected at concentrations that exceed the Commercial SCOs at the Site is identified as carcinogenic by the U.S. Environmental Protection Agency (EPA).

<u>SVOCs – Subsurface Soils/Historic Fill Exceed Commercial Soil Cleanup Objectives</u>

The SVOC soil sample results indicate that 9 out of the 21 subsurface soil/historic fill samples exceed the SCO for one to five SVOCs that are PAH compounds. The SVOC chemical compounds detected that exceed the Commercial SCOc are listed below with concentration ranges in parts per million (ppm):

SVOC Chemical Compound	Range of Concentrations That Exceed SCOs (ppm)	SCOs (ppm)	Samples That Exceed/Number of Samples
 Benzo (a) Anthracene 	6.4 to 56	5.6	5/21
Benzo (a) Pyrene	1.9J to 54	1.0	9/21
Benzo (b) Fluoranthene	5.8 to 35	5.6	3/21
 Indeno (1,2,3-cd) Pyrene 	9.8 to 32	5.6	4/21
• Dibenz (a,h) Anthracene J – Estimated concentration	0.67J to 12J	0.56	8/21

<u>SVOCs – Subsurface Soils/Historic Fill Exceed Protection of Groundwater Soil Cleanup</u> <u>Objectives</u>

The SVOC soil sample results also indicate that 10 out of the 21 subsurface soil/historic fill samples exceed the Protection of Groundwater SCO for one to seven SVOCs that are PAH compounds. The SVOC chemical compounds detected that exceed the Protection of Groundwater SCOs are listed below with concentration ranges in parts per million (ppm):

SVOC Chemical Compound	Range of Concentrations That Exceed SCOs (ppm)	<u>SCOs (ppm)</u>	<u>Samples That</u> Exceed/Number of <u>Samples</u>
 Benzo (a) Anthracene 	1.1 to 56	1	10/21
 Benzo (a) Pyrene 	24 to 54	22	2/21
 Benzo (b) Fluoranthene 	2.4 to 35	1.7	8/21
Benzo (k) Fluoranthene	2.5 to 32	1.7	7/21
Naphthalene	99	12	1/21
Chrysene	1.5 to 51	1	10/21
 Indeno (1,2,3-cd) Pyrene 	8.3 to 32	8.2	3/21

COC: SVOCs - Surface Soils/Historic Fill

Surface soil samples, which consist of historic fill, were collected from 6 locations from ground surface to two inches below the ground surface or the root zone if present. The surface soil sample locations are presented on Figure 8. A summary of the SVOC surface soil sample results is presented in Table 4 - Soil Sample Analytical Summary SVOC, pages 9 and 10. The surface soil sample location with the highest levels of SVOC was collected from surface soil sample SS-3. This surface soil location is located at the southern end of the Site. Coal, cinders and slag were observed on the ground surface during the RI/SI project. The source of the PAHs in the Site surface soils is likely associated with the composition of the historic fill, which contains coal, coke, ash, cinders, coal fragments, and slag.

SVOCs – Surface Soils Exceed Commercial Soil Cleanup Objectives

The SVOC surface soil sample results indicate that concentrations detected in 4 out of the 6 samples exceed the Commercial SCOs. The SVOC chemical compounds detected that exceed the Commercial SCO are PAHs as listed below with concentration ranges in ppm:

SVOC Chemical Compound	Range of Concentrations That Exceed SCOs (ppm)	<u>SCOs (ppm)</u>	Samples That Exceed/Number of Samples
 Benzo (a) Anthracene 	27	5.6	1/6
Benzo (a) Pyrene	1.3 to 24	1	4/6
Benzo (b) Fluoranthene	25	5.6	1/6
 Indeno (1,2,3-cd) Pyrene 	16	5.6	1/6
• Dibenz (a,h) Anthracene J – Estimated concentration	0.58J to 5.1J	0.56	2/6

COC: SVOCs — Soil Piles

Soil pile samples were collected from 6 test pit excavations in the two soil piles along the eastern side of the Site. The soil pile samples were collected from test pit locations TP-121 through TP-126. The locations of the soil pile sample locations are presented on Figure 8. A summary of the soil pile sample results is presented in Table 4 - Soil Sample Analytical Summary SVOC, page 11 and 12. The soil pile sample location with the highest levels of SVOC was collected from soil sample TP-122. This test pit is located at the south end of the southernmost soil pile. The PAH concentrations in the soil piles, and the number of detections, is generally lower than the PAHs detected in subsurface soil samples from the Historic Fill. The source or sources of the PAHs in the soil piles originated from the eastern side of Parcel A from areas of the VOA building & parking lot that was historically part of the Ambrose Street Coal Yard but was located at the western side of PAHs based on results from previous investigations, and indicates that historic fill on the western side of PAHs based on results from previous investigations, and indicates that historic fill on the western side of Parcel A is from a different historic source.

SVOCs - Soil Piles Exceed Commercial Soil Cleanup Objectives

The SVOC soil pile sample results indicate that concentrations detected in 5 out of the 6 samples exceed the Commercial SCOs. The SVOC chemical compounds detected that exceed the Commercial SCOs are PAHs as listed below with concentration ranges in ppm:

SVOC Chemical Compound	Range of Concentrations That Exceed SCOs (ppm)	<u>SCOs (ppm)</u>	Samples That Exceed/Number of Samples
 Benzo (a) Anthracene 	9.2	5	1/6
Benzo (a) Pyrene	1.1J to 7.7	6	5/6
 Benzo (b) Fluoranthene 	6.7	1	1/6
• Dibenz (a,h) Anthracene J – Estimated concentration	1.9	5.6	1/6

COC: SVOCs — Former Biocell Soils

Soil samples were collected from 9 locations in the three former biocells located along the northeast area of the Site. The biocell samples were collected from locations VOA Biocell 101



through VOA Biocell 109. The biocell soil samples were collected from depths approximately 1foot below the top of the soil surface in the former bio-cells. The locations of the biocell soil samples are shown on Figure - 8. A summary of the biocell sample results is presented in Table 4 - Soil Sample Analytical Summary SVOC, pages 13 through 16. The soil sample VOA Biocell 101 was collected from the west end of the northern most biocell. Three biocells were constructed on Site during the cleanup for a former gasoline spill that was located off-site on the west side of Parcel A at the VOA Human Services Complex. Soils from the gasoline spill area and catch basins located in the former automobile dealership building and the auto-body shop were placed in the lined biocells with NYSDEC oversight. Confirmatory soil samples for VOCs from the biocells were previously submitted to NYSDEC and indicated that gasoline chemical compounds concentrations were acceptable for spill inactivation. The SVOC (PAH) concentrations and the number of detections are lower than the PAHs detected in subsurface soil samples and soil piles samples from this Site. The source or sources of the SVOC (PAHs) in the biocell piles is more likely from urban soil on Parcel A since the lower concentrations suggest this soil was different from the historic fill soils on Parcel B.

<u>SVOCs – One Former Biocell Soil Sample Exceeds Commercial Soil Cleanup Objectives</u>

SVOC biocell soil sample results indicated SVOC concentrations in 1 out of the 9 samples that exceed the Commercial SCOs. The SVOC chemical compounds detected that exceeded the Commercial SCOs are listed below with concentrations in ppm for soil sample VOA Biocell 101:

SVOC Chemical Compound	Range of Concentrations That Exceed SCOs (ppm)	SCOs (ppm)	<u>Samples That</u> Exceed/Number of <u>Samples</u>
 Benzo (a) Pyrene 	4.0	1	1/9
 Dibenz (a,h) Anthracene 	0.8J	0.56	1/9
J – Estimated concentration			

COC: Metals - Subsurface Soils

Subsurface soil samples were collected from 14 test pits and 7 soil boring locations at sample depth intervals ranging from 8 to 8.5 ft. to 30 to 32 ft. below the ground surface. The subsurface soil samples that were analyzed by the laboratory are from the historic fill (subsurface soils). The Metals concentrations data for subsurface soil samples are presented in Table 5 - Soil Sample Analytical Summary Metals, pages 1 through 4. The locations of the metal samples are shown in Figure 11 - Contaminant Distribution Plan Metals. The distribution of arsenic and mercury are shown on Figures 12 – Distribution of Arsenic in Soil and Groundwater Samples and Figure 13 – Distribution of Mercury in Soil and Groundwater Sample, respectively. Sample locations that indicate concentrations that exceed SCO are also presented on Figure 14 – SVOC & Metals Soil Sample Locations that Exceed SCO.

The subsurface soil samples with the highest concentrations of arsenic were collected from test pit TP-133 (8.0-10 ft.), TP-134 (8.0-10.0 ft.), and TP-130 (8.0-10.0 ft.) with concentrations of 140 ppm, 132 ppm, and 119 ppm, respectively. These test pits are located in the northern section of the Site where the deepest areas of coal and coke were observed to depths below 20 ft. (test pit TP-129). Arsenic also exceeded the Commercial SCOs at test pit locations TP-106 (14.0-14.5 ft.) and TP-107 (8.0 -10.0 ft.) with concentrations of 18.3 ppm and 72.6 ppm, respectively. The concentration of Lead at 1,110 ppm exceeds the Commercial SCO in the soil sample from TP-103 (16 -16.5 ft.) The concentration of Copper at 467 ppm exceeds the Commercial SCO of 270 ppm



in the sample from MW-106 (26.0 – 28.0 ft.) The concentration of Mercury at 16.0 in the soil sample from MW-101 (22.0-23.0 ft.) and 149 ppm in the soil sample from MW-102 (22.0 -22.5 ft.) exceed the Commercial SCO of 2.8 ppm. These test pits are located in the center and southern portions of the Site. It appears that the distribution of metals with concentrations that exceed the SCO in the subsurface soils is generally random with respect to depth and location. This is also the case with 21 metals that were detected at concentrations for one to five metals that exceed the Residential SCO in each sample. The source of metals detected in subsurface soils is likely associated with the heterogeneous composition of the historic fill that contains coal, coke, ash, cinders, coal fragments and slag.

Metals – Subsurface Soils/Historic Fill Exceed Commercial Soil Cleanup Objectives

Subsurface soil sample results for metals indicate that 12 out of the 21 soil samples exceed the Commercial SCO. The metals detected that exceed the Commercial SCOs are listed below with concentration ranges in ppm:

Metal	Range of Concentrations That Exceed SCOs (ppm)	<u>Commercial</u> SCOs (ppm)	<u>Samples That</u> <u>Exceed/Number of</u> <u>Samples</u>
 Arsenic 	18.3 to 140	16	8/21
 Lead 	1,110	1,000	1/21
 Copper 	467	270	1/21
Mercury	16 to 149	2.8	2/21

Metals – Subsurface Soils/Historic Fill Exceed Protection of Groundwater Soil Cleanup Objectives

The metals soil sample results also indicate that 14 out of the 21 subsurface soil/historic fill samples exceed the Protection of Groundwater SCO for one to two metals. The metals detected that exceed the Protection of Groundwater SCOs are listed below with concentration ranges in parts per million (ppm):

Metal	Range of Concentrations That Exceed SCOs (ppm)	SCOs (ppm)	<u>Samples That</u> Exceed/Number of <u>Samples</u>
Arsenic	18.3 to 140	16	8/21
 Lead 	1,110	450	1/21
 Mercury 	0.752 to 149	0.73	7/21
 Selenium 	4.3 to 8.3	4	5/21

COC: Metals - Surface Soils

Surface soil samples were collected from 6 locations, VOA SS-1 through VOA SS-6, at depths of approximately six inches below the ground surface. The locations of the surface soil samples are shown on Figure - 8. The surface soil samples that were analyzed by the laboratory are historic fill soils. A summary of the Metals surface soil sample results is presented in Table 5 Soil Sample Analytical Summary Metals, page 5. The surface soil sample SS-1 exceeded the Commercial SCOs for lead and mercury with concentrations of 1,050 ppm and 10 ppm, respectively. This surface soil sample is located in the northern section of the Site where the deepest areas of buried coal and coke were observed to depths below 20 ft. (test pit TP-129). Coal, cinders and slag were observed on the ground surface during the RI/SI project. It appears that the distribution of concentrations that exceed the Commercial SCO for surface soils is generally limited with respect to depth and location. This is also the case with the 10 metals that were detected in which two to



five metals were detected at concentrations that exceed the Residential SCO at each surface soil sample location. In general, concentrations of metals detected in surface soil samples are lower when compared to subsurface soils.

Metals – Surface Soils Exceed Commercial Soil Cleanup Objectives

Surface soil sample results indicate that concentrations detected in 1 out of the 6 samples exceed the Commercial SCOs for metals. The Metals detected that exceed the SCO are listed below with concentrations for surface soil sample VOA SS-1in ppm:

Metal	Range of Concentrations That Exceed SCOs (ppm)	<u>Commercial</u> SCOs (ppm)	<u>Samples That</u> <u>Exceed/Number of</u> <u>Samples</u>
LeadMercury	1,050	1,000	1/6
	10.1	2.8	1/6

Metals – Surface Soils/Historic Fill Exceed Protection of Groundwater Soil Cleanup Objectives

The metals soil sample results also indicate that 3 out of the 6 surface soil/historic fill samples exceed the Protection of Groundwater SCO for one to two metals. The metals detected that exceed the Protection of Groundwater SCOs are listed below with concentration ranges in parts per million (ppm):

<u>Metal</u>	Range of Concentrations That Exceed SCOs (ppm)	SCOs (ppm)	<u>Samples That</u> Exceed/Number of <u>Samples</u>
• Lead	457 to 1,050	450	2/6
 Mercury 	10.1	0.73	1/6
Nickel	144	130	1/6

COC: Metals – Soil Piles

Soil pile samples were collected from 6 test pit excavations in the two soil piles along the eastern side of the Site. The soil pile samples were collected from test pit locations TP-121 through TP-126. The locations of the soil pile sample locations are shown on Figure - 8. A summary of the soil pile sample results is presented in Table 5- Soil Sample Analytical Summary Metals, page 6. The soil pile soil sample TP-121 exceeded the SCO for lead with a concentration of 2,540 ppm and TP-123 exceeded the SCO for Mercury with a concentration of 2.9 ppm. Test pit TP-121 is located at the north end of the southernmost soil pile and TP-123 is located at the south end of the northern most soil pile. The soil piles were placed on the Site during the construction of the VOA Human Services Complex. In general, metals concentrations (with the exception of lead) are lower than the metals detected in subsurface soil (historic fill soil) samples. The source or sources of the metals in the soils piles is from historical soils that contain ash, cinders and slag and from urban soils located from the adjoining VOA Human Services Complex on the western portion of Parcel A.

It appears that the distribution of concentrations that exceed the Commercial SCOs for the soil piles is generally limited with respect to locations sampled. This is also the case with 18 metals that were detected with concentrations of two to four metals in each sample that exceed the Residential SCOs. In general, fewer metals exceeded the Commercial SCO as compared to the



Site historic fill samples. This may be because these soils originated from Parcel A from areas near the western side of the historic fill area that were formerly part of the Ambrose Street Coal Yard. The soils that originated from along Lake Avenue on Parcel A (see description of Biocell Soils below), were less impacted with metals.

Metals – Soil Piles Exceed Commercial Soil Cleanup Objectives

Soil pile sample results indicate that concentrations detected in 2 out of the 6 samples exceed the Commercial SCOs for metals. The metals detected that exceed the Commercial SCOs are listed below with concentrations in ppm:

Metal	Range of Concentrations That Exceed SCOs (ppm)	<u>Commercial</u> <u>SCOs (ppm)</u>	<u>Samples That Exceed</u> <u>/Number of</u> <u>Samples</u>
LeadMercury	2,540	1,000	1/6
	2.9	2.8	1/6

Metals – Soils Piles Exceed Protection of Groundwater Soil Cleanup Objectives

The metals soil sample results also indicate that 3 out of the 6 soil pile soil samples exceed the Protection of Groundwater SCO for one to two metals. The metals detected that exceed the Protection of Groundwater SCOs are listed below with concentration ranges in parts per million (ppm):

Metal	Range of Concentrations That Exceed SCOs (ppm)	SCOs (ppm)	<u>Samples That</u> Exceed/Number of Samples
• Lead	641 to 2,540	450	2/6
 Mercury 	1.3 to 2.9	0.73	2/6

COC: Metals — Former Biocell Soils

Soil samples were collected from 9 locations in the three former biocells located along the northeast area of the Site. The biocell samples were collected from locations VOA Biocell 101 through VOA Biocell 109. The biocell soil samples were collected from depths approximately 1-foot below the top of the soil surface in the former bio-cells. The locations of the biocell soil samples are shown on Figure - 8. A summary of the biocell sample results is presented in Table 5 - Soil Sample Analytical Summary Metals, page 7 and 8.

Metals – Former Biocell Soils Do Not Exceed Commercial Soil Cleanup Objectives

The biocell soil sample results indicate that concentrations were not detected in the biocell soil samples that exceed the Commercial SCOs for metals. Sixteen metals were detected and one to five metals was detected in each soil sample that exceeds the Residential SCOs. However, the concentrations are lower than the subsurface historic fill samples.



<u>Metals – Former Biocell Soils Exceed Protection of Groundwater Soil Cleanup Objectives at One</u> <u>Sample Location</u>

Metal	Range of Concentrations That Exceed SCOs (ppm)	Protection of Groundwater SCOs (ppm)	<u>Samples That Exceed</u> <u>/Number of</u> Samples
 Mercury 	0.81	0.73	1/9

SOIL — VOCs Subsurface Soils/ Historic Fill

Subsurface soil samples of the historic fill material, which was encountered at each subsurface exploration at the Site, were collected from 20 test pits and 6 soil boring locations during the RI /SI at sample depth intervals ranging from 8 to 8.5 ft. to 30 to 32 ft. below the ground surface. The VOC characterization data for subsurface soil samples are presented in Table, 6, pages 1 through 8. The locations of the VOC subsurface soil samples are shown on Figure - 8. VOCs are not a COC in the Subsurface Soil, Surface Soil, Soil Piles, and Biocell Soils based on the concentrations detected and limited frequency for detection in soil samples. The concentrations of VOCs detected in soil samples from subsurface soil/historic fill, surface soil, biocell soil, and soil piles are below the Commercial, Residential, and Protection of Groundwater SCOs in. VOCs exceed the Protection of Groundwater SCOs at two subsurface soil/historic fill sample locations.

<u>VOCs – Subsurface Soil Exceed Protection of Groundwater Soil Cleanup Objectives at Two</u> <u>Sample Locations</u>

The VOC subsurface soil/historic fill sample results indicate that 2 out of 9 soil samples exceed the Protection of Groundwater SCO. Acetone was detected in soil samples from TP-132 (8.0 - 10.0 ft.) and TP-131 (8.0 - 10.0 ft.) at concentrations that exceed the Protection of Groundwater SCOs. Ethylbenzene was also detected in the TP-132 (8.0 - 10.0 ft.) sample with a concentration that exceeds the Protection of Groundwater SCO as presented below. The VOC chemical compounds that exceed the Protection of Groundwater SCOs are listed below with concentration ranges in parts per million (ppm):

VOC	Range of Concentrations That Exceed Protection of Groundwater SCOs (ppm)	Protection of Groundwater SCO	<u>Samples That</u> Exceed/Number of <u>Samples</u>
 Acetone 	0.190J to 0.100	0.05	2/9
 Ethylbenzene 	27	1	1/9
I - Estimated conc	contration		

J – Estimated concentration

Refer to Table 6 and Figures 15 and Figure 16 – Volatile Organic Soil sample locations That Exceed Protection of Groundwater Soil Cleanup Objectives.

SOIL — PCBs. Pesticides, and Total Cyanide

PCBs, pesticides, and total cyanide were not detected at levels above the Residential SCO, Commercial SCOs and Protection of Groundwater SCOs. Detection of Pesticides was limited to soil samples from the soil pile test pit samples from TP-121, TP-123, TP-124, and TP-126. Based on the soil sample results, PCBs were not part of the composition of the historic fill, and it appears that PCBs were not used, or disposed of at the Site based on the laboratory analytical results and known uses of the site. A list of laboratory results for PCB, Pesticides, Total Cyanide and EPA 8015 B is presented in Attachment 4 - List of Non-COC laboratory results.

6.2 Groundwater Findings

A total of nine (9) groundwater monitoring wells were installed to collect overburden and bedrock groundwater samples for the evaluation of groundwater quality. The monitoring well intervals (well screens) of the overburden wells were installed entirely within the historic fill or partially in the historic fill and the underlying glacial till deposit (MW-105 and MW-106). A total of 103 overburden and bedrock groundwater analyses were performed on the groundwater samples collected for SVOC, VOC, Metals, total cyanide, and PCB/Pesticides. The groundwater sample results are summarized in data Tables 7-9 in this report for SVOCs, Metals and VOCs. Cyanide and PCBs/Pesticides were not detected above the method detection limits. Low ppb concentrations of VOCs were detected below the groundwater standards with the exception of one compound that slightly exceed the groundwater standards during the initial groundwater sampling event and were not detected during the second sampling event. Several metals were detected with elevated levels that exceed the Class GA groundwater standards.

COC: Overburden Groundwater — Metals

Groundwater samples were collected from 6 overburden monitoring wells during the October 2008 and July 2009 groundwater sampling events to evaluate groundwater quality during seasonal low and high conditions. A seventh well (MW107) was added during the SI and was sampled in November 2010. Overburden monitoring well depths ranged from 15.5 ft. at MW-105 to 41 ft. at MW's 103 and MW-107 below the ground surface. The overburden groundwater samples results for metals are presented in Table 7- Groundwater Sample Analysis Summary Metals. The locations of the groundwater samples are shown on Figure 12 - Groundwater Contaminant Distribution Plan Metals. The metals analysis results for groundwater samples indicate that 22 metals were detected and 13 out of the 13 groundwater samples have two to fourteen metals that exceed the Class GA groundwater standards. The concentrations of metals that exceed the Class GA groundwater standards are: Antimony, Arsenic, Barium, Cadmium, Chromium, Copper, Iron, Lead, Manganese, Mercury, Nickel, Selenium and Sodium. The measured concentration ranges that exceeded the GA standards are summarized below. Total Cyanide was not detected in the groundwater samples that were collected and analyzed.

<u>Metal</u>	Range of Concentrations That Exceed Standards (ppb)	Class GA Groundwater Standard (ppb)	Samples That Exceed/Number of Samples
 Antimony 	10B to 165	3	4/13
Arsenic	29 to 160	25	8/13
 Barium 	1,370 to 2,310	1,000	13/13
 Cadmium 	5.6 to 7.7	5	3/13
 Chromium 	86.2 to 319	50	7/13
 Copper 	204 to 8,840	200	7/13
• Iron	10,200 to 210,000	300	13/13
 Lead 	64 to 6,600	25	13/13
 Manganese 	376 to 4,380	300	13/13
 Mercury 	0.75 to 193	0.7	8/13
Nickel	132 to 209	100	5/13
 Selenium 	21.8	10	1/13
 Sodium 	58,700 to 628,000	20,000	13/13
B – Metal de	tected in Blank		



The groundwater sample locations with the highest levels of metals were collected from monitoring wells MW-103 and MW-107. Both of these wells are screened from 31 to 41 ft. below ground surface and are in the deepest areas of the lower fill. Coal and coke were observed to depths extending from 0-20 feet above this lower fill area. The source of the elevated levels of metals in the overburden groundwater is associated with the composition of the historic fill soils that contain coal, coke, ash, cinders, coal fragments, and slag.

COC: Bedrock Groundwater — Metals

Bedrock groundwater samples were collected from 2 top of bedrock monitoring wells during the October 2008 and July 2009 groundwater sampling events to evaluate groundwater quality during seasonal low and high conditions. Bedrock monitoring well depths was 54.5 ft. and 54.0 ft. for MWR-101 and MWR-102, respectfully. These monitoring well intervals (well screen) are in the upper 10 feet of bedrock. A summary of the bedrock groundwater sample results for metals is presented in Table 7 - Groundwater Sample Analysis Summary Metals. The metals sample results indicate that 4 out of the 4 groundwater samples exceed the Class GA groundwater standards for 2 metals. A total of 8 metals were detected. The highest concentrations of metals were detected that exceed the Class GA groundwater standards are: Iron and Sodium. There was non-detection for Cyanide.

<u>Metal</u>	Range of Concentrations That Exceed Standards (ppb)	<u>Class GA Groundwater</u> <u>Standard (ppb)</u> <u>SCOs (ppm)</u>	Samples That Exceed/Number of Samples
 Antimony 	5.0B	3	1/4
• Iron	460 to 1,300	300	3/4
 Sodium 	86,200 to 350,000	20,000	4/4
B – Metal detec	ted in Blank		

The bedrock groundwater sample locations are from MWR-101 at the northwest corner of the Site and MWR-102 located near the west central side of the Site. These bedrock wells are paired with overburden monitoring wells MW-101 and MW-102. The lack of metals detected in the bedrock monitoring wells indicated that the glacial till deposit, that overlies the bedrock formation, is less permeable than the historical fill soils that overly the glacial till. The bedrock groundwater media is generally not impacted at the two locations sampled.

COC: Overburden Groundwater — SVOCs

Groundwater samples were collected from 6 overburden monitoring wells during the October 2008 and July 2009 groundwater sampling events to evaluate groundwater quality during seasonal low and high conditions. Overburden monitoring well depths ranged from 28 to 44 feet below the ground surface. The overburden groundwater samples analysis results for SVOCs are presented in Table 8 - Groundwater Sample Analysis Summary SVOCs. The locations of the groundwater samples are shown on Figure 13 - Groundwater Contaminant Distribution Plan SVOCs. The SVOC sample estimated results indicate that 4 out of the 6 overburden groundwater samples exceed the Class GA groundwater standards for several SVOCs during the October 2008 groundwater sampling event (seasonal wet period). SVOCs were not detected above the Class GA groundwater standard during the July 2009 (dry seasonal period) event.



SVOC Chemical Compound	Range of Concentrations That Exceed Standards (ppb)	Class GA <u>Standard (ppb)</u>	<u>Samples That</u> Exceed/Number of <u>Samples</u>
 Benzo (a) Anthracene 	1.0J to 10.0J	0.002	4/6
 Benzo (a) Pyrene 	1.0J to 10.0J	0.002	4/6
 Benzo (b) Fluoranthene 	1.0J to 7.0J	0.002	4/6
 Indeno (1,2,3-cd) Pyrene 	1.0J	0.002	1/6
Chrysene	1.0J to 9.0J	0.002	4/6
 4-Methylphenol 	3.0J to 36.0	1.0	2/6
Phenanthrene	11.0J	5.0	1/6
Phenol	2.0J to 6.0J	1.0	2/6
Pyrene	18.0J	5.0	1/6
J – Estimated concentration	n		

The source of the estimated detections of SVOCs that are PAHs and the detection of 4 – Methylphenol at 36.0 ppb in the overburden groundwater is likely from the historic fill that contains coal, coke, ash, cinders, coal fragments, and slag fill materials.

Bedrock Groundwater - SVOCs

Groundwater samples were collected from 2 bedrock monitoring wells during the October 2008 and July 2009 groundwater sampling events to evaluate groundwater quality during seasonal low and high conditions. Bedrock monitoring well MWR- 101 is 54.0 ft. and MWR-102 is 54.5 ft. deep. The SVOC analytical results for the bedrock groundwater samples are presented in Table 8 -Groundwater Sample Analysis Summary SVOCs. The locations of the groundwater samples are shown on Figure 13 - Groundwater Contaminant Distribution Plan SVOC. The SVOC sample results indicate that one groundwater sample from monitoring well MWR-102 exceeds the Class GA groundwater standards of 5.0 part per billion (ppb) for Bis (2-Ethylhexyl) Phthalate with a concentration of 9.0J. Other SVOCs were not detected above the Class GA groundwater standard during the July 2009 (dry seasonal period) event. The low ppb range of detection, and the limited SVOCs detected, indicates that SVOCs in the bedrock groundwater media are not a COC.

Overburden and Bedrock Groundwater - VOCs

Methyl Tert—Butyl Ether (MTBE) with a concentration of 31.0 ppb was detected in the groundwater sample from bedrock monitoring well MWR-102 during the October 2008 groundwater sampling event (wet season) and Chlorobenzene 22.0 ppb was detected in the groundwater sample from MW-106 during the July 2009 (dry season). MTBE is a chemical compound used as an additive in gasoline and exceeded the Class GA groundwater standard of 10 ppb. The Class GA groundwater standard for Chlorobenzene is 5 ppb. Chlorobenzene was also detected at an estimated concentration of 2.0J during the October 2008 groundwater sampling event and there was non-detection of MTBE in the groundwater sample from MWR-102 during the July 2009 groundwater sampling event.

VOCs in the overburden and bedrock groundwater were not detected above the GA groundwater standards, except for the two isolated and temporary detections of MTBE and Chlorobenzene that slightly exceeded the GA groundwater standards. The overburden groundwater and bedrock groundwater media is generally not impacted with VOCs at the locations sampled and therefore, VOCs are not a COC in the groundwater at the Site. A summary of the groundwater sample results for VOCs is presented in Table 9 - Groundwater Sample Analysis Summary VOC. The



locations where groundwater samples exceed the GA groundwater standards are presented on Figure 13b. Based on these results it appears that historic petroleum related uses and the former gasoline spill on Parcel A Site have not impacted the groundwater at the Site.

Groundwater — PCBs, Pesticides and Total Cyanide in Groundwater

Total PCBs, pesticides and cyanide were not detected in groundwater samples from the site monitoring wells.

Quality Control Results

Duplicate samples, trip blanks, cooler blanks, and MS/MSD samples were collected during the RI and are listed in Table 2 as quality control quality assurance samples. Quality control sample results were verified during data validation. Field QA/QC and trip blank quality control sample results are summarized in Table 2. In total, 2 trip blanks, 2 duplicates and 2 MS/MSD samples were collected and analyzed during implementation of the RI. The analytical results quality control samples were inconsequential to the conclusions of this RI.

Evaluation of Potential Pyrogentic and Petrogentic Forensic Origin of Historic Fill

The chromatograph results from the USEPA 8015 GC/FID Gasoline Range Organics (GRO) and Diesel range Organics (DRO) soil samples was reviewed by a Chemist at Columbia Analytical Services as an attempt to evaluate the potential origin of the historic fill soils with respect to pyrogentic origin or petrogentic origin. Based on the Chemist's review this determination was not able to be made, see Attachment 5 – Columbia Analytical Services Forensic Summary. The results of the 8015 GRO and DRO are presented in Attachment 5.

7.0 QUALITATIVE HUMAN AND FISH/WILDLIFE EXPOSURE ASSESSMENT

Site Setting

Summary of Environmental Conditions

The analytical data obtained during the RI at the Site for soil, and groundwater (the exposure media) were evaluated in Section 6.0. Historic fill soil COCs included five SVOCs (PAHs) and four metals that exceed the Commercial SCOs for arsenic, mercury, copper and lead. Groundwater COCs included metals in the overburden groundwater.

Conceptual Site Model

A conceptual site model has been developed based on the findings of the Site subsurface investigations. The purpose of the conceptual site model is to develop a simplified framework for understanding the distribution of impacted materials, potential migration pathways, and potentially complete exposure pathways, as discussed below.

Potential Sources of Contamination

Potential sources of contamination at the Site have been identified in the RIWP and in this RIR. The potential sources of contamination appears to originate from the heterogeneous, site-wide historic fill, comprised of various amounts of gravel, coal, coke, ash, cinders, slag, wood, black stained sandy soils, silt, metals, glass, etc. as described in Section 2.2.2. The SVOCs (PAHs) and Metals that exceed the Commercial SCOs are associated with the composition of the historic fill. Historic use of the Site for long term coal storage also may have had a contributing effect on the soils and the groundwater quality.



Exposure Media

Soil media (surface and subsurface soil) on Parcel B is made up of historic fill whose composition contains metals and SVOCs and Glacial till that is relatively non-impacted., Soils contained in the three biocell soils, which were imported onto Parcel B from the front of Parcel A, and are generally non-impacted urban soils remediated from prior petroleum contamination. The soil piles generally contain historic fill material whose composition contains lower concentrations of SVOCs and less detection that exceed the commercial SCOs for metals than the subsurface soils on this Site with the exception of one lead result, since these fill soils came from the back of Parcel A.

The overburden groundwater is impacted with elevated concentrations of several metals and some SVOCs, and a detection of a single VOC in one groundwater sample that exceeded the class GA groundwater standards. The groundwater in the top of the bedrock zone appears to be less impacted with generally lower concentrations and less detection of Metals and SVOC. Overburden groundwater quality has been impacted by the presence of historic fill above and in contact with the groundwater table. Analytical data collected indicates that the groundwater underlying the northern section of the Site has the highest concentration of Metals that exceeded the class GA groundwater standards. A review of soil and groundwater data is provided in Section 6.0 (Nature and Extent of Contamination).

7.1 Human Health Exposure Assessment

Human health exposure risk was evaluated for both current and future Site and off-Site conditions, in accordance with the NYSDEC Draft DER-10 Technical Guidance for Site Investigation and Remediation. The assessment includes an evaluation of potential sources and migration pathways of site contamination, potential receptors, exposure media, and receptor intake routes and exposure pathways.

Receptor Populations

Human receptors under current conditions are limited to Site security workers or guests visiting the Site. During construction and remediation activities, receptors will include construction and remediation workers and the local population. Under future conditions, receptors will include the new building tenants, workers, and visitors including children.

Potential Exposure Pathways — On-Site Current Conditions

The composition of the historic fill at the Site contains various SVOCs (PAHs) and metals. The Site is primarily exposed soil and vegetation with the exception of paved area located on the western portion of the Site. In localized areas where human exposure to the historic fill is possible (i.e., ground surface is not paved or capped), the potential migration pathway is likely complete for dermal absorption and ingestion. However, site activity is limited under current conditions to site security and guests with access limited to portions of the Site with surface cover.

Overburden groundwater beneath the Site contains various metals, and some SVOCs, since it is in direct contact with the historic fill materials. Based on groundwater elevations obtained during the remedial investigation, groundwater appears to flow into the Site from the west and from the east and there is also a northerly component to the groundwater flow. This flow is formed within a former ravine that contains historic fill, and trends to the north, and flows in a northerly direction.

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Construction/Remediation Activities

The proposed construction of a commercial first floor senior day care services center with upper residential floors and remediation activities at the Site will result in potential exposures to Site contaminants during site construction. The proposed activities include excavation and removal of the most impacted soil and site wide capping. The proposed building will primarily serve as the cap for the Site and the remainder of the Site will be paved. Therefore, the potential exists for exposure of soil COCs to construction workers via dermal absorption, ingestion, and inhalation.

Although groundwater is not likely to be encountered during construction or remediation activities due to its depth starting at 22 feet bgs, if groundwater is encountered during excavation activities, exposure of groundwater COCs to construction workers is also possible via dermal absorption, ingestion, and inhalation. The proposed construction activities may also result in exposure to the public and construction workers through volatilization of vapors into the air and through generation and off-site migration of dust containing Site COCs. However, due to the nature of SVOCs and Metals, and lack of VOCs, there are limited vapors that can result. Such exposures would be of short duration limited only to intrusive activities. Work will be performed in accordance with a Health and Safety Plan, a Soil Management Plan, and a Community Air Monitoring Plan, including such measures as conducting an air monitoring program, donning personal protective equipment, and applying vapor and dust suppression measures to prevent off-site migration of contaminants during construction would make this potential migration pathway incomplete.

Proposed Future Conditions

The Site is targeted for development for a ground floor commercial senior citizen day care use with upper floor residential apartments. While complete details regarding the proposed development have not yet been generated, the planned use is a commercial first floor senior day care services center with upper residential floors and other proposed improvements which include a pavement cap to be used throughout parking lot areas. Landscaped areas are not anticipated. Areas not paved or covered by future buildings will require a minimum of 1-foot of clean soil. Upon completion of the proposed new development, the Site will be overlain with a new building, including a proposed senior center to provide services from 8 AM-5 PM, and residential dwellings on the upper levels and a six-inch to one foot thick pavement parking lot cap. These barriers will prevent direct human exposure to impacted soil and groundwater that will be left in place.

Following completion of the remediation activities, the groundwater and soil vapor should be sampled to evaluate potential effects from soil excavation and dewatering activities may have had on the groundwater and soil vapor quality. These results will be used to determine if soil vapor sampling will be necessary to evaluate if remedial measures such as vapor barriers or Sub-Slab Depressurization Systems (SSDSs) or other engineering controls will be required to minimize potential risks of vapor intrusion into the retail stores and residential dwellings. Vapor barriers, SSDSs, or other appropriate remedial measures will be designed for the existing future buildings based on existing Site data.

Potential Exposure Pathways - Off-Site

Because of the overall northerly groundwater flow direction shown on Figure 6 through the filled ravine it is possible that groundwater contaminants are migrating off-site. The off-site migration of contaminants in the ground water from the southern portion of the Site to the north end of the site is not expected to result in a complete exposure pathway for current, construction/remediation, or future conditions for the following reasons:

• The Site and surrounding areas obtain their drinking water supply from municipal supply.

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• Groundwater that is impacted would likely discharge to the Genesee River and not to a human receptor.

Therefore, the COCs are not expected to reach a surface water body that is used as a drinking water source to potentially complete an exposure pathway.

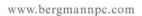
Summary

Complete on-site exposure pathways may exist between the historic fill and human receptors during current conditions, construction and remediation activities, and proposed conditions. The pathways include direct contact (dermal absorption), ingestion, and inhalation of soil and groundwater contaminants. Complete off-site exposure pathways are not thought to exist between the Site media and human receptors during current conditions and proposed conditions. During construction and remediation activities, precautions will be required to protect construction workers and the general public. The table below summarizes the exposure pathways for the Site.

Source	Contaminant/Release Transport Mechanism	Receptor	Potential Exposure Pathway
Contaminated Soil	 Historic fill and soil contamination 	Current: Site Security personnel, Visitors	Current: Dermal absorption and ingestion of soil
	 Releases associated with former operations 	Construction: Construction/ remediation workers, Local population	
		Future: Commercial and residential tenants, Visitors, and Building maintenance workers	Future:Inhalation of indoor air vapors
Contaminated Groundwater	 Releases associated with former operations 	Current: Commercial tenants, Visitors, and Building maintenance workers	Current: no completed pathways
		Construction: Construction/ remediation workers, Local population	Construction: Inhalation of vapors, Dermal absorption and ingestion of groundwater (workers only)
		Future: Commercial and residential tenants, Visitors and Building maintenance workers	Future: Inhalation of indoor air vapors

Evaluation of Human Health Exposure

Based upon the conceptual site model and the review of environmental data, complete on-site exposure pathways appear to be present based on current and future conditions, and during the construction and remediation phase. The complete exposure pathways indicate there is a risk of exposure to humans from Site contaminants.





Complete exposure pathways have the following five elements:

- 1) a contaminant source;
- 2) a contaminant release and transport mechanism;
- 3) a point of exposure;
- 4) a route of exposure; and
- 5) a receptor population.

A discussion of the five elements comprising a complete pathway as they pertain to the Site is provided below.

Current Conditions

Contaminant sources include the historic fill in surface soil media, subsurface soil and overburden groundwater contamination. Contaminant release and transport mechanisms include the chemical composition of the historic fill. The composition of the historic fill has affected the groundwater as a result of direct contact between the historic fill and the overburden groundwater. Points of exposure include those areas on-site where contaminated soil is present with no surface cover. Routes of exposure may include ingestion and dermal absorption of contaminated soil and possible inhalation of vapors entering the future building. However, these routes may not exist if adequate surface cover is present over the historic fill and if vapors do not infiltrate unventilated portion of the buildings. The future receptor population may include security personnel and visitors to the Site. Four of the five elements exist under current conditions for a potential exposure pathway, and the fifth (route of exposure), may also be a pathway. The fifth element can be controlled through management of the limited site operations of the security personnel and potential guests. Further evaluation of indoor air quality conducted after the new buildings are in place would be needed to assess whether the vapor intrusion pathway is complete.

Construction/Remediation Activities

Contaminant sources and contaminant release and transport mechanisms are those identified for the current conditions. Points of exposure include the disturbed and exposed historic fill during excavation, dust and organic vapors arising from the excavation of the historic fill, and contaminated groundwater, if any, encountered during excavation and dewatering operations. Routes of exposure include ingestion and dermal absorption of the historic fill and groundwater, inhalation of organic vapors arising from historic fill and groundwater, and inhalation of dust arising from the disturbance of the historic fill. The receptor population includes the construction and remediation workers and, to a lesser extent, the local population. All five elements exist; therefore, completed exposure pathways are present. However, the risk can be minimized by applying appropriate health and safety measures, such as monitoring the air for organic vapors and dust, using vapor and dust suppression measures, maintaining site security, and wearing the appropriate personal protective equipment.

Proposed Future Conditions

Contaminant sources and contaminant release and transport mechanisms are those identified for the current conditions. Points of exposure include buildings where cracks in the foundation or sub-grade walls occur. Routes of exposure may include inhalation of vapors entering the buildings; these routes may not exist depending on the effectiveness of the remediation. The receptor population includes the building tenants and maintenance workers, and visitors. The possible routes of exposure need to be verified by soil vapor sampling upon completion of the remediation to determine if all five elements of



an exposure pathway are present. If necessary, the buildings will include vapor barriers or SSDS to prevent any vapor intrusion.

Ecological Risks

The Site is located in an urban commercially developed area. The current surface cover on the Site provides minimal habitat for wildlife. The Genesee River and associated deep gorge is located to the east of the Site but not immediately adjacent to the Site. Due to the lack of suitable habitat and limited ecological receptors, the ecological risks appear to be negligible.

Human Health Exposure Assessment Conclusions

The following conclusions were developed from this human health exposure assessment:

- 1) The potential for complete exposure pathways for Site contaminants to Site human receptors for current conditions exists; however, management of the limited operations of future security personnel and guests will prevent a completed pathway. This would be dependent on limiting access to uncapped portions of the Site or unventilated portions of the building. It is likely that the risk to humans under current conditions is relatively low, provided partial surface cover across the Site.
- 2) There is a moderate risk of exposure during the construction and remediation activities. This risk can be minimized by following the appropriate health and safety, vapor and dust suppression, and Site security measures.
- 3) The existence of a complete exposure pathway for Site contaminants to human receptors during proposed conditions is unlikely, since the exposure from grossly contaminated black stained soils (that have total organic vapors from 300 ppm to 440 ppm) at the northern end of the Site may be reduced once these soils have been removed. Some contaminated groundwater is expected to be removed during remediation activities since the excavation to remove the black stained soils may be greater than 20 feet. Future development over this area of the Site should be limited to parking lot areas to further minimize exposure. Soil vapor samples can be collected upon completion of the remediation to further evaluate potential exposure pathways or the parties may elect to install vapor mitigation measures into the future buildings. If a risk is present based on the results of the soil vapor sampling, vapor barriers, SSDSs, or another appropriate remedial approach, will be used to eliminate the potential impact from vapor intrusion.
- 4) It is unlikely that complete exposure pathways exist from the migration of site contaminants to off-site human receptors for current, construction, or future conditions.
- 5) There are negligible risks to the ecological environment based on current conditions. The future conditions at the Site will not impact the ecological conditions at the Site

7.2 Fish and Wildlife Exposure Assessment

Introduction

In accordance with DER-10, an ecological resource characterization was conducted to establish ecological conditions and identify the potential for adverse ecological effects resulting from Site-related contaminants. The resource characterization included a Site

reconnaissance and identification of environmentally sensitive natural resources within the Site boundaries and at the surrounding areas.

An evaluation of the Site topography, surface drainage features, contaminant chemical characteristics, and fate and transport mechanisms was completed to identify actual or potential contaminant migration and exposure pathways to environmentally sensitive natural resources. Direct observations of contaminant migration pathways includes presence of stressed/dead vegetation, wetlands, discolored soil, sediment, surface water, presence of seeps, outfalls, and other discharges. Potential migration pathways were considered based upon migratory capabilities during storm events, discharge of contaminated groundwater to surface water, and food chain effects.

Based on available topographic maps, field surveys, and the online NYS Resource Mapper, there were no habitats of special concern or natural surface waters located directly at the Site study area. In addition, there were no records of actual natural resource damage reports were found or evidence of stressed wildlife / vegetation observed during site visits. The Fish and Wild life report is presented in Appendix F - Fish and Wildlife Report.

Exposure Pathways

Based on our assessment of the Site, contaminant migration pathways are limited and fish and wildlife exposure pathways were not identified. In accordance with the DER-10 Section 3.10.1, further fish or wildlife assessment is not warranted.

8.0 CONCLUSIONS AND RECOMMENDATIONS

8.1 Summary of Findings

- All activities in the Approved RIWP and the Supplemental RIWP are complete. The RIR adequately describes the nature, extent and distribution characteristics of COC in the upper and lower fill materials and in groundwater throughout the Site. The Site contains historic fill material, the composition of which is generally consistent with those materials noted in DER-10 for historic fill. The historic fill is site wide and ranges in depths to approximately 45 and deeper. As noted in Section 2.2.2., two layers comprise the historic fill, which has various amounts of gravel, coal, coke, ash, cinders, slag, sand, metals, wood, shoes, etc. The composition of the historic fill contains COCs including metals and SVOCs (PAHs). The Site was used for coal storage, automobile parking from a former automobile dealership. The RIR concluded the latter two uses did not appear to impact the soils or groundwater on the Site. The distribution of the heterogeneous historic fill that exceed SCOs appears to be random with respect to horizontal distribution and depth.
- A limited area (approximately 35' x 35') at the northern end of the Site has black stained sandy soils with elevated organic vapors from approximately 8 feet to depths greater than 20 feet. These soils had elevated total organic vapor readings that ranged from 300 ppm to approximately 440 ppm. The soils were determined to be characteristically non-hazardous based on the TCLP laboratory results.
- Groundwater is present at depths ranging from 18.29 ft to 44.30 feet below grade, and flows in a northern direction within a former ravine towards the Genesee River.

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- Overburden groundwater contained metals COCs and COCs were not identified in the bedrock groundwater.
- Commercial SCO exceedances for metals were detected in samples of the historic fill material.
- Commercial SCO exceedances for SVOCs were detected in samples collected from the historic fill material.
- Exposure to Site COC in the soil media through dermal contact, ingestion and inhalation is possible due to the presence of exposed surface soil, if not remediated.

8.2 Reuse of On-Site Soils

The soil piles and biocells may be used as potential backfill in the future excavation to remove the black stained soils at the north end of the Site.

Remedial measures should be presented in a remedial action plan to address the impacted soil and groundwater.

8.3 Conclusions

Sufficient analytical data was gathered during the RI/SI to analyze the nature and extent of contamination on the Site and describe the distribution of chemicals of concern. The assessment of the data provides a general understanding that the historic fill at the site is associated with the chemical concentrations measured in soils and groundwater during the remedial investigations at levels that exceed the Commercial Use SCOs and or Protection of Groundwater and require remediation. Therefore, remedy considerations for the Site will need to address the historic fill containing SVOCs (PAHs) and metals and the area of black stained sandy soils.

8.4 Recommendations

Remedial alternatives shall be presented in a Alternatives Analysis Report followed by a preparation of a Remedial Action Work Plan (RAWP) that describes the methods and procedures for remediation. These documents shall be submitted to NYSDEC in the near future for review and approval.

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Tables

TABLE 1 Groundwater Elevations Volunteers of America of Western New York Remedial Investigation Report 214 Lake Avenue Rochester, NY

Well Name	Total Depth (ff)	Depth to Water 10/30-31/08	Depth to Water 3/22/2011	Depth to Water 07/27/2009	Saturated Thickness	GW Elev. 10/2008	GW Elev. 07/2009	GW Elev. 03/2011	Ref. Elev.
MW-101	30.0	24.38	24.37	24.48	5.63	457.51	457.41	457.52	481.89
MWR-101	54.5	24.69	24.68	24.80	29.82	457.15	457.04	457.16	481.84
MW-102	31.0	23.40	23.39	23.50	7.61	466.69	466.59	466.70	490.09
MWR-102	54.0	31.58	31.57	31.69	22.43	458.58	458.47	458.59	490.16
MW-103	44.0	43.03	43.02	43.14	0.98	443.45	443.34	443.46	486.48
MW-104	34.0	30.70	30.69	30.80	3.31	453.98	453.88	453.99	484.68
MW-105	28.0	18.30	18.29	18.41	9.71	465.83	465.72	465.84	484.13
MW-106	32.0	25.47	25.46	25.58	6.54	457.70	457.59	457.71	483.17
MW-107	44.0	43.20	43.19		0.81			443.30	486.49

TABLE 2 Summary of Samples Collected for Laboratory Analysis Remedial Investigation

Sample ID	Date Collected	Matrix	TCL VOCs ¹	TCL SVOCs ²	TAL Metals ³	Total Cyanide ⁴	PCBs⁵	Pesticides ⁶	8015 DRO ⁷ /GRO ⁸
TP-102(10.0-10.5 ft)	10/31/07	Subsurface Soil	Х	Х	Х		Х	Х	
TP-103 (16.0-16.5 ft)	10/31/07	Subsurface Soil	Х	Х	Х		Х	Х	
TP-104 (17.0-17.5 ft)	10/31/07	Subsurface Soil	Х	Х	Х		Х	Х	
TP-105 (15.0-15.5 ft)	10/31/07	Subsurface Soil	Х	Х	Х	Х			X (DRO)
TP-106 (14.0-14.5 ft)	11/1/07	Subsurface Soil	Х	Х	Х				
TP-107 (8.0-8.5 ft)	11/1/07	Subsurface Soil	Х	Х	Х	Х			
Cooler Blank		Subsurface Soil	Х						
TP-118 (8.0-8.5 ft)	11/2/07	Subsurface Soil	Х	Х	Х				
TP-122 (Soil Pile)	11/2/07	Subsurface Soil	Х	Х	Х	Х	Х	Х	
TP-121 (Soil Pile)	11/2/07	Subsurface Soil	Х	Х	Х	Х	Х	Х	
TP-122 (Soil Pile MS/MSD)*	11/2/07	Subsurface Soil	Х	Х	Х	Х	Х	Х	
TP-123 (Soil Pile)	11/2/07	Subsurface Soil	Х	Х	Х	Х	Х	Х	
TP-124 (Soil Pile)	11/2/07	Subsurface Soil	Х	Х	Х	Х	Х	Х	
TP-125 (Soil Pile)	11/2/07	Subsurface Soil	X	X	X	X	X	X	
TP-126 (Soil Pile)	11/2/07	Subsurface Soil	X	X	X	X	X	X	
TP-127	10/25/10	Subsurface Soil		Х	Х				
TP-128	10/25/10	Subsurface Soil		X	X				
TP-130	10/25/10	Subsurface Soil		X	X				
TP-131	10/25/10	Subsurface Soil	Х	X	X				
TP-132	10/26/10	Subsurface Soil	X	X	X				X (DRO)
TP-133	10/26/10	Subsurface Soil	X	X	X				X(BRO)
TP-134	10/26/10	Subsurface Soil	~	X	X				
TP-134 MS*	10/26/10	Subsurface Soil		X	X				
TP-134 MSD*	10/26/10	Subsurface Soil		X	X				
	10/20/10			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~				
MW-106 (26-28 ft)	6/26/08	Subsurface Soil	Х	Х	Х				
MW-104 (30-32 ft)	6/27/08	Subsurface Soil	X	X	X				
MW-105 (26.0-26.3 ft)	6/30/08	Subsurface Soil	X	X	X	Х	Х	Х	
MW-103 (3.5-4.0 ft)	7/1/08	Subsurface Soil	X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
MW-103 (20-22.0 ft)	7/1/08	Subsurface Soil	~	Х	Х	Х	Х	Х	X (DRO/GRO)
MW 100 (22-23 ft)	7/2/08	Subsurface Soil	Х	X	X	X	X	X	X (DRO/GRO)
MW102 (22.0-22.5 ft)	7/7/08	Subsurface Soil	X	X	X	X	X	X	л (Вно, вно)
MW102MS (22.0-22.5 ft)*	7/7/08	Subsurface Soil	X	X	X	X	X	X	
MW102MSD (22.0-22.5 ft)	7/7/08	Subsurface Soil	X	X	X	X	X	X	
Cooler Blank*	111100		X	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~	Λ	Λ	
			Λ						
VOAMW-101	10/30/08	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMWR-101	10/30/08	Groundwater	X	X	X	X		~	
VOAMW-104	10/30/08	Groundwater	X	X	X	X	Х	Х	
VOAMW-104	10/30/08	Groundwater	X	X	X	X	X	X	
VOAMW-102 (MS/MSD)*	10/31/08	Groundwater	X	X	X	X	X	X	
VOAMW-102 (MO/MOD)	10/31/08	Groundwater	X	X	X	X	~	~	
VOAMW-102IX	10/31/08	Groundwater	X	X	X	X	Х	х	
V OAIVIVY-105	10/31/08	Groundwater	~	Λ	Λ	۸	~	Λ	

TABLE 2 Summary of Samples Collected for Laboratory Analysis Remedial Investigation

									8015
Sample ID	Date Collected	Matrix	TCL VOCs ¹	TCL SVOCs ²	TAL Metals ³	Total Cyanide ⁴	PCBs⁵	Pesticides ⁶	DRO ⁷ /GRO ⁸
VOAMW-105	10/31/08	Groundwater	Х	Х	Х	X	Х	Х	
VOAMW-105 DUP*	10/31/08	Groundwater	Х	Х	Х	Х	Х	Х	
Trip Blank*	10/30/08	Groundwater	Х						
	- / /								
VOAMW-101	7/27/09	Groundwater	X	X	X	X	Х	Х	
VOAMWR-101	7/27/09	Groundwater	Х	X	X	X			
VOAMWR-102	7/27/09	Groundwater	Х	Х	Х	Х			
VOAMW-102	7/27/09	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMW-101 Dup	7/27/09	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMW-101 MS/MSD	7/27/09	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMW-103	7/27/09	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMW-104	7/27/09	Groundwater	Х	Х	Х				
VOAMW-105	7/27/09	Groundwater	Х	Х	Х		Х	Х	
VOAMW-106	7/27/09	Groundwater	Х	Х	Х	Х	Х	Х	
VOAMW 7	11/4/10	Groundwater			Х				
Trip Blank	7/27/09	Water	Х						
VOA Biocell 101	8/6/09	Subsurface Soil		Х	Х		Х	Х	
VOA Biocell 102	8/6/09	Subsurface Soil		Х	Х				
VOA Biocell 103	8/6/09	Subsurface Soil		Х	Х				
VOA Biocell 104	8/6/09	Subsurface Soil		Х	Х		Х	Х	
VOA Biocell 105	8/6/09	Subsurface Soil		Х	Х				
VOA Biocell 106	8/6/09	Subsurface Soil		Х	Х				
VOA Biocell 107	8/6/09	Subsurface Soil	1	Х	Х		Х	Х	
VOA Biocell 108	8/6/09	Subsurface Soil		Х	Х				
VOA Biocell 109	8/6/09	Subsurface Soil		Х	Х				
VOA SS-3	2/17/09	Surface Soil	Х	х	v				
VOA SS-3 VOA SS-2	2/17/09	Surface Soil	X	X	X X				
							V	V	
VOA SS-1	2/17/09	Surface Soil	X	X	X		Х	Х	
VOA SS-5	2/17/09	Surface Soil	Х	X	X				ļ
VOA SS-6	2/17/09	Surface Soil	X	X	Х				
VOA SS-4	2/17/09	Surface Soil	X	Х	Х				ļ
Trip Blank*	2/11/09	Water	Х						
TOTALS			55	65	62	32	34	34	6

NOTES

1. TCL VOCs - Target compound list Volatile Organic Compounds by method OLM 04.3 (NYSDEC 2000 ASP)

2. TCL SVOCs - Target compound list Base/Neutral/Acid (BNAs) (semi-volatile Organic Compounds) by Method OLM 04.3 (NYSDEC 2000 ASP)

3. TAL Metals = Target compound list Metals by Method ILM 05.3 (NYSDEC 2000 ASP)

4. Total Cyanide = Cyanide by Method ILM 05.3

5. PCBs = PCB/Pesticides of Method OLM 04.3

6. Pesticides = PCB/Pesticides by Method OLM 04.3

7. 8015 DRO = Method 8015 Diesel Range Organics by GC/FID

8. 8015 GRO = Method 8015 Gasoline Range Organics by GC/FID

9. * = QA/QC Sample

TABLE 3 Groundwater Field Sample Parameters

Volunteers of America of Western New York – RI Report 214 Lake Avenue Rochester, NY

Sample Location Name	Date	Depth of Water (feet)	Organic Vapor (PID)	LNAPL	DNAPL	рН	Conductivity (mS/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temperature (C)
MW-101	10/30/08	24.38	ND	ND	ND	8.95	2.01	19.	11.62	11.8
MWR-101	10/30/08	24.69	ND	ND	ND	7.92	0.67	11	9.87	16.2
MW-102	10/31/08	23.40	ND	ND	ND	8.15	2.68	12	9.83	13.9
MWR-102	10/31/08	31.58	ND	ND	ND	7.88	0.62	37	9.19	15.5
MW-103	10/31/08	43.03	ND	ND	ND	9.31	3.62	80	9.17	14.8
MW-104	10/30/08	30.70	ND	ND	ND	9.09	2.63	10	9.23	15.4
MW-105	10/31/08	18.30	ND	ND	ND	8.37	0.72	14	9.23	15.1
MW-106	10/30/08	25.47	ND	ND	ND	9.21	0.90	10	8.85	16.2

Notes:

1. ND = Not observed during groundwater sampling.

2. Samples collected by GeoQuest Environmental, Inc. on October 30 and 31, 2008

3. A Horiba U-10 meter was used for each sample.



TABLE 3 Groundwater Field Sample Parameters

Volunteers of America of Western New York – RI Report 214 Lake Avenue Rochester, NY

Sample Location Name	Date	Depth of Water (feet)	Organic Vapor (PID)	LNAPL	DNAPL	рН	Conductivity (mS/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Temperature (C)	Salinity (%)
MW-101	7/27/09	24.48	ND	ND	ND	8.90	2.01	19	14.27	10.0	0.03
MWR-101	7/27/09	24.80	ND	ND	ND	7.83	0.67	11	13.50	11.3	0.06
MW-102	7/27/09	23.50	ND	ND	ND	8.05	2.68	12	13.66	11.5	0.05
MWR-102	7/27/09	31.69	ND	ND	ND	7.69	0.62	37	13.37	11.9	0.14
MW-103	7/27/09	43.14	ND	ND	ND	9.47	3.62	80	15.48	9.8	0.06
MW-104	7/27/09	30.80	ND	ND	ND	8.98	2.63	10	13.78	12.9	0.14
MW-105	7/27/09	18.41	ND	ND	ND	8.12	0.72	14	14.64	12.1	0.03
MW-106	7/27/09	25.58	ND	ND	ND	9.10	0.90	10	14.64	12.1	0.03
MW-107*	11/4/10	43.20	ND	ND	ND	9.11	2.89	28	13.67	13.1	0.03

Notes:

1. ND = Not observed during groundwater sampling.

2. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009

3. A Horiba U-10 meter was used for each sample.

4.* Sample collected by Bergmann Associates, Inc. on November 4, 2010 as part of the Supplemental Investigation (SI).



SUBSURFACE SOILS

TABLE 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi-volatile Organic TP - 102 TP - 103 TP - 104 TP - 105 TP - 106 TP - 107 TP - 118 Unrestricted Use Soil Cleanup Compounds (10.0-10.5 ft.) (16.0-16.5 ft.) (17.0-17.5 ft.) (15.0-15.5 ft.) (14.0-14.5 ft.) (8.0-8.5 ft.) Objectives	Restricted Use Soil Cleanup	
Page 1 of 16 10/31/07 10/31/07 10/31/07 10/31/07 10/31/07 11/1/07 11/1/07 11/1/07 Residential	Objectives Commercial	Protection of Groundwater
Acenaphthene 0.048J 0.440 J 0.160J 0.350 J 1.000 J 0.0 52 J 0.720 J 20	500	98
Acenaphthene 2.1ND 0.630 J 3.000 J 1.8ND 4.1ND 2.0ND 2.0ND 100	500	107
Acetophenone 2.1ND 0.000 3 0.000 3 1.0ND 4.1ND 2.0ND 2.0ND 1.0ND Acetophenone 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Accorption 2.110 4.010 0.010 1.010 4.110 2.010 2.010 1.00 Anthracene 0.100 J 2.400 J 0.960 J 0.370 J 2.500 J 0.083 J 1.100 J 100	500	1,000
Antificience 0.1003 2.4003 0.9003 0.9003 0.9003 0.0003 0.0003 1.1003 1.0003 1		1,000
Attazine 2.1ND 4.0ND 0.0ND 1.0ND 4.1ND 2.0ND 2.0ND Benzaldehyde 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Benzo (a) Anthracene 0.410 J 12.000 * 1.800 J * 0.600 J 3.800 J * 0.360 J 2.000 * 1	5.6	
	3.0	22
	5.6	1.7
Benzo (g,h,i) Perylene 0.340 J 9.300 6.700 J 0.430 J 2.500 J 0.290 J 1.500 J 100	500	1,000
Benzo (k) Fluoranthene 0.350 J 9.600* 1.500 J 0.410 J 2.500 J* 0.350 J 1.600 J 0.8	56	1.7
Biphenyl 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 0.270 J		
Butyl Benzyl Phthalate 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Di-N-Butylphthalate 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Caprolactam 5.2ND 12ND 17ND 4.6ND 10ND 5.0ND 5.0ND		
Carbazole 2.1ND 0.550 J 0.400 J 0.190 J 0.700 J 2.0ND 0.180 J		
Indeno (1,2,3-cd) Pyrene 0.310 J 8.300 * 5.900 J 0.380 J 2.200 J 0.270 J 1.300 J 0.5	5.6	8.2
4-Chloroaniline 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Bis (-2-Chloroethoxy) Methane 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Bis (-2-Chloroethyl) Ether 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2-Chloronaphthalene 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2-Chlorophenol 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2,2'- Oxybis (1-Chloropropane) 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Chrysene 0.440 J 11.000 * 3.500 J * 0.670 J 3.500 J * 0.460 J 2.700 * 1	56	1
Dibenz (a,h) Anthracene 0.110 J 2.500 J 1.600 J 0.100 J 0.670 J 2.0ND 0.480 J 0.33	0.56	1,000
Dibenzofuran 2.1ND 0.300 J 6.8ND 0.130 J 0.620 J 2.0ND 0.600 J		
3,3'- Dichlorobenzidine 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2,4- Dichlorophenol 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Diethylphthalate 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Dimethyl Phthalate 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2,4- Dimethylphenol 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2,4- Dinitrophenol 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
2,4- Dinitrotoluene 5.2ND 12ND 17ND 4.6ND 10ND 5.0ND 5.0ND		
2,6- Dinitrotoluene 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		
Bis (2-Ethylhexyl) Phthalate 2.1ND 4.6ND 6.8ND 1.8ND 4.1ND 2.0ND 2.0ND		

TABLE 4 Soil Sample Analytical Summary SVOC (subsurface)

Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York

214 Lake Avenue Rochester, New Yo	ork
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Semi – volatile Organic Compounds Page 2 of 16	TP - 102 (10.0-10.5 ft.) 10/31/07	TP - 103 (16.0-16.5 ft.) 10/31/07	TP - 104 (17.0-17.5 ft.) 10/31/07	TP - 105 (15.0-15.5ft.) 10/31/07	TP - 106 (14.0-14.5 ft.) 11/1/07	TP - 107 (8.0-8.5 ft.) 11/1/07	TP - 118 (8.0-8.5 ft.) 11/2/07	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	0.860 J	19.000	2.000 J	1.600 J	9.100	0.750 J	5.200	100	500	1,000
Fluorene	2.1ND	0.630 J	6.8ND	0.290 J	1.100 J	2.0ND	0.920 J	30	500	386
Hexachlorobenzene	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Hexachlorobutadiene	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Hexachlorocyclopentadiene	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Hexachloroethane	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Isophorone	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
2- Methylnaphthalene	2.1ND	4.6ND	6.8ND	1.8ND	0.180 J	2.0ND	1.500 J			
4,6- Dinitro-2- Methylphenol	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND			
4- Chloro-3- Methylphenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
2- Methylphenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND	0.33		
4- Methylphenol	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND	0.33		
Naphthalene	2.1ND	0.450 J	6.8ND	1.300 J	0.280 J	0.170 J	0.890 J	12	500	12
2- Nitroaniline	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND			
3- Nitroaniline	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND			
4- Nitroaniline	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND			
Nitrobenzene	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
2- Nitrophenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
4- Nitrophenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
N- Nitrosodiphenylamine	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Di-n-octyl Phthalate	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Pentachlorophenol	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND	0.8		0.8
Phenanthrene	0.390 J	6.600	1.200 J	1.500 J	7.000	0.460 J	5.000	100	500	1,000
Phenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND	0.33	500	0.33
4- Bromophenyl- Phenylether	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
4- Chlorophenyl- Phenylether	5.2ND	12ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
N- nitroso-di-n- Propylamine	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
Pyrene	0.640 J	17.000	3.600 J	1.200 J	6.300	0.620 J	4.300	100	500	1,000
2,4,6- Trichlorophenol	2.1ND	4.6ND	6.8ND	1.8ND	4.1ND	2.0ND	2.0ND			
2,4,5- Trichlorophenol	5.2ND	12ND	17ND	4.6ND	10ND	5.0ND	5.0ND			
Total Semi-Volatile Organic Compounds / Total TICS	4.408 / 10,000 (1 TIC) (J)	121 / 79,900 (30TICs) (JN,J)		39,650 (16TICs) (J,JN)			34.26/50,400 (29TICs) (J,JN)			

Notes: Test pit soil pile samples collected from October 31, 2007 through November 2, 2007 by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services. All concentrations expressed in parts per million (ppm). Bold type indicates concentration above the laboratory detection limit and gray shaded concentrations exceed Part 375 – 6.8 (b) Restricted Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Residential Use.

TICS = Tentatively Identified Compounds. The number of TICS and designations with J and JN indicate estimated values.

* Concentration exceeds Protection of Groundwater Part 375 6.5 values.

Table 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi-volatile Organic Compounds Page 3 of 16	MW - 101 (22.0-23.0 ft.) 7/2/08	MW - 102 (22.0-22.5 ft.) 7/7/08	MW - 103 (20.0-22.0 ft.) 7/1/08	Wenue Rochester, New MW - 104 (30.0-32.0 ft.) 6/27/08	MW - 105 (26.0-26.3 ft.) 6/30/08	MW - 106 (26.0-28.0 ft.) 6/27/08	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acenaphthene	0.053ND	0.46ND	7.100 J	0.49ND	0.35ND	0.090J	20	500	98
Acenaphthylene	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND	100	500	107
Acetophenone	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Anthracene	0.053ND	0.110	35.000	0.49ND	0.086J	0.290J	100	500	1,000
Atrazine	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Benzaldehyde	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Benzo (a) Anthracene	0.150 J	0.450J	56.000 *	0.140J	0.140J	0.640	1	5.6	1
Benzo (a) Pyrene	0.150 J	0.470	54.000 *	0.083J	0.120J	0.620	1	1	22
Benzo (b) Fluoranthene	0.053ND	0.390J	35.000 *	0.49ND	0.098J	0.420J	1	5.6	1.7
Benzo (g,h,i) Perylene	0.160 J	0.460J	34.000	0.068J	0.120J	0.600	100	500	1,000
Benzo (k) Fluoranthene	0.110 J	0.340J	32.000 *	0.074J	0.080J	0.450	0.8	56	1.7
Biphenyl	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Butyl Benzyl Phthalate	0.053ND	0.160J	20.0ND	0.49ND	0.35ND	0.44ND			
Di-N-Butylphthalate	0.053ND	0.054J	20.0ND	0.49ND	0.35ND	0.44ND			
Caprolactam	1.300ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
Carbazole	0.053ND	0.047J	14.000J	0.49ND	0.35ND	0.055J			
Indeno (1,2,3-cd) Pyrene	0.120 J	0.390J	32.000 *	0.058J	0.091J	0.490	0.5	5.6	8.2
4-Chloroaniline	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Bis (-2-Chloroethoxy) Methane	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Bis (-2-Chloroethyl) Ether	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2-Chloronaphthalene	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2-Chlorophenol	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,2'- Oxybis (1-Chloropropane)	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Chrysene	0.140 J	0.480	51.000 *	0.160J	0.150J	0.560	1	56	1
Dibenz (a,h) Anthracene	0.053ND	0.130J	12.000J	0.49ND	0.35ND	0.150J	0.33	0.56	1,000
Dibenzofurán	0.053ND	0.46ND	6.200J	0.49ND	0.35ND	0.44ND			
3,3'- Dichlorobenzidine	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,4- Dichlorophenol	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Diethylphthalate	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Dimethyl Phthalate	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,4- Dimethylphenol	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,4- Dinitrophenol	1.300ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,4- Dinitrotoluene	0.053ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
2,6- Dinitrotoluene	0.053ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Bis (2-Ethylhexyl) Phthalate	0.150 J	0.860	20.0ND	0.074J	0.044J	0.44ND			

Table 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi – Volatile Organic Compounds Page 4 of 16	MW - 101 (22.0-23 ft.) 7/2/08	MW - 102 (22.0-22.5 ft.) 7/7/08	MW - 103 (20.0-22.0 ft.) 7/1/08	MW - 104 (30.0-32.0 ft.) 6/27/08	MW - 105 (26.0-26.3ft.) 6/30/08	MW - 106 (26.0-28.0 ft.) 6/27/08	Unrestricted Use Soil Cleanup Objectives	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	0.220 J	0.860	130.000	0.280J	0.300J	1.300	Residential 100	500	1,000
Fluorene	2.1ND	0.46ND	13.000J	0.49ND	0.35ND	0.44ND	30	500	386
Hexachlorobenzene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Hexachlorobutadiene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Hexachlorocyclopentadiene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Hexachloroethane	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Isophorone	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2- Methylnaphthalene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
4,6- Dinitro-2- Methylphenol	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
4- Chloro-3- Methylphenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2- Methylphenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND	0.33		
4- Methylphenol	0.290J	0.46ND	50.0ND	0.061J	0.87ND	0.088J	0.33		
Naphthalene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND	12	500	12
2- Nitroaniline	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
3- Nitroaniline	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
4- Nitroaniline	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
Nitrobenzene	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2- Nitrophenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
4- Nitrophenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
N- Nitrosodiphenylamine	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Di-n-octyl Phthalate	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Pentachlorophenol	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND	0.8		
Phenanthrene	0.130 J	0.500	91.000	0.081J	0.300J	0.910	100	500	1,000
Phenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND	0.33	500	0.33
4- Bromophenyl- Phenylether	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
4- Chlorophenyl- Phenylether	5.2ND	0.46ND	50.0ND	0.49ND	0.35ND	0.44ND			
N- nitroso-di-n- Propylamine	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
Pyrene	0.240 J	0.840	95.000	0.270J	0.290J	1.300	100	500	1,000
2,4,6- Trichlorophenol	2.1ND	0.46ND	20.0ND	0.49ND	0.35ND	0.44ND			
2,4,5- Trichlorophenol	5.2ND	1.200ND	50.0ND	1.200ND	0.87ND	1.100ND			
Total Semi-Volatile Organic Compounds / Total TICS	1.861 / 9.730 (26 TIC) (J,JB,JN)	6.541 / 7.303 (28TIC) (J,JN,JB,)	683.31/582.600 (30TICs) (J,JN)	1.349 / 56.520 (26TIC) (J,JN,)	1.819 / 14.480 (29TICs) (J,JN)	7.963 / 47.560 (28TICs) (J,JN)			

Notes: Monitoring well / test boring soil samples collected from June 27, 2008. July 2, 2008 and July 3, 2008 by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services. All concentrations expressed in parts per million (ppm). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed Part 375 – 6.8 (b) Restricted Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Residential Use. TICS = Tentatively Identified Compounds.

* Concentration exceeds Protection of Groundwater Part 375-6.5 values.

The number of TICS and designations with J, JN, JB indicate estimated values.

Table 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compound

Volunteers of America of Western New York - RI Final Report (Supplemental Investigation)

Rochester. New York Semi-Volatile Organic TP-128 Unrestricted Use **TP-127** TP-130 TP-131 Restricted Use Soil Protection of Soil Cleanup Compounds (8.0-10.0 ft.) (8.0-10.0 ft.) (8.0-10.0 ft.) (8.0 -10.5 ft.) **Cleanup Objectives** Groundwater **Objectives Residential** Commercial Page 5 of 16 ppm ppm ppm ppm 100 500 98 Acenaphthene 1.600J 0.120J 0.690J ND<0.420 500 Acenaphthylene ND<5.000 0.099J 0.610J ND<0.420 100 107 ND<5.000 ND<0.440 ND<1.300 ND<0.420 Acetophenone 1,000 2.300 100 Anthracene 9.800 0.160J 0.062J 500 ND<0.420 ND<0.440 Atrazine ND<5.000 ND<1.300 -Benzaldehyde ND<5.000 ND<0.440 ND<1.300 ND<0.420 --Benzo (a) Anthracene 26.000 * 0.440J 6.400 * 0.190J 1 5.6 1 0.430J 0.120J 22 Benzo (a) Pyrene 19.000 6.100 1 1 5.6 1.7 Benzo (b) Fluoranthene 15.000 * 0.380J 4.400 * 0.130J 1 100 500 1,000 Benzo (g,h,i) Perylene 11.000 0.400J 4.600 0.130J 56 Benzo (k) Fluoranthene 14.000 * 0.280J 4.100 * 0.120J 1 1.7 Biphenyl ND<5.000 0.065J ND<1.300 ND<0.420 ---Butyl Benzyl Phthalate ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---Di-N-Butylphthalate ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---ND<0.440 ND<1.300 ND<0.420 Caprolactam ND<5.000 ---Carbazole 1.700J 0.180J 1.200J ND<0.420 ---0.5 Indeno (1,2,3-cd) Pyrene 9.800 * 0.310J 3.900 0.110J 5.6 8.2 4-Chloroaniline ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---Bis (-2-Chloroethoxy) Methane ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---Bis (-2-Chloroethyl) Ether ND<5.000 ND<0.440 ND<1.300 ND<0.420 --2-Chloronaphthalene ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---2-Chlorophenol ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---2.2'- Oxybis (1-Chloropropane) ND<1.300 ND<5.000 ND<0.440 ND<0.420 ---0.220J 24.000 * 0.540 6.900 * 56 Chrysene 1 1 Dibenz (a.h) Anthracene 3.600J 0.078J 1.200J ND<0.420 0.33 0.56 1.000 Dibenzofuran 1.400J 0.170J 0.510J 0.046J ---3.3'- Dichlorobenzidine ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---2,4- Dichlorophenol ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---Diethylphthalate ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---Dimethyl Phthalate ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---2.4- Dimethylphenol ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---ND<2.300 ND<6.800 ND<2.100 2,4- Dinitrophenol ND<26.000 ---2.4- Dinitrotoluene ND<5.000 ND<0.440 ND<1.300 ND<0.420 ---ND<5.000 ND<0.440 ND<1.300 ND<0.420 2.6- Dinitrotoluene ---ND<0.420 Bis (2-Ethylhexyl) Phthalate ND<5.000 ND<0.440 ND<1.300 -100 500 1,000 Fluoranthene 55.000 0.930 12.000 0.370J

Table 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compound

Volunteers of America of Western New York - RI Final Report (Supplemental Investigation)

Rochester, New York

Semi-Volatile Organic	TP-127	TP-128	TP-130	TP-131	Unrestricted Use	Restricted Use Soil	
Compounds	(8.0 -10.0 ft.)	(8.0 -10.0 ft.)	(8.0 -10.0 ft.)	(8.0 - 10.0 ft.)	Soil Cleanup	Cleanup Objectives	Protection of Groundwater
Page 6 of 16	ppm	ppm	ppm	ppm	Objectives Residential	Commercial	Groundwater
Fluorene	2.000J	0.200J	0.960J	ND<0.420	100	500	386
Hexachlorobenzene	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Hexachlorobutadiene	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Hexachlorocyclopentadiene	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Hexachloroethane	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Isophorone	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
2- Methylnaphthalene	ND<5.000	0.130J	0.230J	0.049J	0.41	-	-
4,6- Dinitro-2- Methylphenol	ND<26.000	ND<2.300	ND<6.800	ND<2.100	-	-	-
4- Chloro-3- Methylphenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
2- Methylphenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	100	500	-
3and4 Methylphenol Coelution	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Naphthalene	ND<5.000	0.250J	0.360J	0.450	100	500	12
2- Nitroaniline	ND<26.000	ND<2.300	ND<6.800	ND<2.100	-	-	-
3- Nitroaniline	ND<26.000	ND<2.300	ND<6.800	ND<2.100	-	-	-
4- Nitroaniline	ND<26.000	ND<2.300	ND<6.800	ND<2.100	-	-	-
Nitrobenzene	ND<5.000	ND<0.440	ND<1.300	ND<0.420	3.7	69	-
2- Nitrophenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
4- Nitrophenol	ND<26.000	ND<2.300	ND<6.800	ND<2.100	-	-	-
N- Nitrosodiphenylamine	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Di-n-octyl Phthalate	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Pentachlorophenol	ND<26.000	ND<2.300	ND<6.800	ND<2.100	2.4	6.7	0.8
Phenanthrene	34.000	0.860	11.000	0.300J	100	500	1,000
Phenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	100	500	0.33
4- Bromophenyl- Phenylether	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
4- Chlorophenyl- Phenylether	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
N- nitroso-di-n- Propylamine	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
Pyrene	40.000	0.800	11.000	0.440	100	500	1,000
2,4,6- Trichlorophenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	-	-	-
2,4,5- Trichlorophenol	ND<5.000	ND<0.440	ND<1.300	ND<0.420	100	-	-
Total Semi-Volatile Organic	267.9 /	6.822 /	78.46 /	2.737 /	NA	NA	NIA
Compounds / Total TICS	75.1 (TICS)	26.12 (TICS)	30.27 (TICS)	0.910 (TICS)	NA		NA

Notes:

NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, concentrations shown in bolt type indicate detection above laboratory limits, and shaded concentrations exceed New York State Department of Environmental Conservation (NYSDEC) Part 375-6.8 (b) Restricted Use Commercial Soil Cleanup Objectives. Blue shaded concentrations exceed NYSDEC Part 375-6 Unrestricted Use residential Soil Cleanup Objectives. * Concentration exceeds Protection of Groundwater Part 375 - 6.5 values. - = No standard available. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.

Samples collected by Bergmann Associates, Inc. on October 25 and 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145). TICS = Tentatively Identified Compounds.

Table 4 Soil Sample Analytical Summary SVOC (subsurface)
Semi-Volatile Organic CompoundVolunteers of America of Western New York – RI Final Report (Supplemental Investigation)
Rochester, New York

Semi-Volatile Organic	TP-132	TP-133	TP-134	MW-107	Unrestricted Use	Restricted Use Soil	
Compounds	(8.0 -10.0 ft.)	(8.0 -10.0 ft.)	(8.0 - 10.0 ft.)	(12.0-14.0 ft.)	Soil Cleanup	Cleanup Objectives	Protection of Groundwater
Page 7 of 16	ppm	ppm	ppm	ppm	Objectives Residential	Commercial	
Acenaphthene	ND<7.900	1.200J	ND<0.420	0.820J	100	500	98
Acenaphthylene	ND<7.900	0.490J	ND<0.420	ND<1.200	100	500	107
Acetophenone	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Anthracene	ND<7.900	3.500	0.130J	1.500	100	500	1,000
Atrazine	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Benzaldehyde	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Benzo (a) Anthracene	1.500J *	9.700 *	0.490	5.3 *	1	5.6	1
Benzo (a) Pyrene	0.950J	8.300	0.330J	4.700	1	1	22
Benzo (b) Fluoranthene	0.930J	5.800 *	0.310J	3.000 *	1	5.6	1.7
Benzo (g,h,i) Perylene	ND<7.900	4.900	0.220J	3.200	100	500	1,000
Benzo (k) Fluoranthene	0.920J	5.300 *	0.250J	3.100 *	1	56	1.7
Biphenyl	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Butyl Benzyl Phthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Di-N-Butylphthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Caprolactam	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Carbazole	ND<7.900	0.830J	ND<0.420	0.620J	-	-	-
Indeno (1,2,3-cd) Pyrene	ND<7.900	4.100	0.210J	2.700	0.5	5.6	8.2
4-Chloroaniline	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Bis(-2-Chloroethoxy)Methane	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Bis (-2-Chloroethyl) Ether	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2-Chloronaphthalene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2-Chlorophenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,2'-Oxybis(1-Chloropropane)	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Chrysene	1.500J *	9.600 *	0.540	5.300 *	1	56	1
Dibenz (a,h) Anthracene	ND<7.900	1.300J	0.084J	0.920J	0.33	0.56	1,000
Dibenzofurán	ND<7.900	1.100J	ND<0.420	0.400J	-	-	-
3,3'- Dichlorobenzidine	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,4- Dichlorophenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Diethylphthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Dimethyl Phthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,4- Dimethylphenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,4- Dinitrophenol	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
2,4- Dinitrotoluene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,6- Dinitrotoluene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Bis (2-Ethylhexyl) Phthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Fluoranthene	3.900J	24.000	0.850	9.500	100	500	1,000

Table 4 Soil Sample Analytical Summary SVOC (subsurface) Semi-Volatile Organic Compound

Volunteers of America of Western New York - RI Final Report (Supplemental Investigation)

Rochester, New York

Semi-Volatile Organic	TP-132	TP-133	TP-134	MW-107	Unrestricted Use	Restricted Use Soil	
Compounds	(8.0 -10.0 ft.)	(8.0-10.0 ft.)	(8.5 -10.0 ft.)	(12.0-14.0 ft.)	Soil Cleanup	Cleanup Objectives	Protection of Groundwater
Page 8 of 16	ppm	ppm	ppm	ppm	Objectives	Commercial	Groundwater
Fluorene	ND<7.900	1.700J	ND<0.420	0.800J	100	500	386
Hexachlorobenzene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Hexachlorobutadiene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Hexachlorocyclopentadiene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Hexachloroethane	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Isophorone	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2- Methylnaphthalene	1.600J	0.270J	ND<0.420	ND<1.200	0.41	-	-
4,6- Dinitro-2- Methylphenol	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
4- Chloro-3- Methylphenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2- Methylphenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	100	-	-
3and4 Methylphenol Coelution	ND<7.900	ND<2.400	ND<0.420	0.320J	-		-
Naphthalene	99.000 *	0.760J	ND<0.420	0.230J	100	500	12
2- Nitroaniline	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
3- Nitroaniline	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
4- Nitroaniline	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
Nitrobenzene	ND<7.900	ND<2.400	ND<0.420	ND<1.200	3.7	-	-
2- Nitrophenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
4- Nitrophenol	ND<41.000	ND<12.00	ND<2.200	ND<6.200	-	-	-
N- Nitrosodiphenylamine	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Di-n-octyl Phthalate	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
Pentachlorophenol	ND<41.00	ND<12.00	ND<2.200	ND<6.200	2.4	6.7	0.8
Phenanthrene	3.000J	13.000	0.480	4.400	100	500	1,000
Phenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	100	500	0.33
4- Bromophenyl Phenyl ether	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
4- Chlorophenyl Phenyl ether	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
N- nitroso-di-n- Propylamine	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-		-
Pyrene	3.200J	20.000	0.690	7.800	100	500	1,000
2,4,6- Trichlorophenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	-	-	-
2,4,5- Trichlorophenol	ND<7.900	ND<2.400	ND<0.420	ND<1.200	100	-	-
Total Semi-Volatile Organic	116.5 /	115.85 /	4.584 /	54.61 /		NA	
Compounds / TICS	81.50 (TICS)	43.18 (TICS)	0.520 (TICS)	0.00 (TICS)	NA	IV/A	NA

Notes:

NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, concentrations shown in bolt type indicate detection above laboratory limits, and shaded concentrations exceed New York State Department of Environmental Conservation (NYSDEC) Part 375-6.8 (b) Restricted Use Commercial Soil Cleanup Objectives. Blue shaded concentrations exceed NYSDEC Part 375-6 Unrestricted Use residential Soil Cleanup Objectives. * Concentration exceeds Protection of Groundwater Part 375 - 6.5 values. - = No standard available. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.

Samples collected by Bergmann Associates, Inc. on October 25 and 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145). TICS = Tentatively Identified Compounds. I:IVOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\testpitsemi-vol_soil (TP)10272010.doc

TABLE 4 Soil Sample Analytical Summary SVOC (surface) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

			211 Luke A	Wende Rochester, Ne	SWITCH				
Semi-volatile Organic Compounds Page 9 of 16	VOA SS-1	VOA SS-2	VOA SS-3	VOA SS-4	VOA SS-5	VOA SS-6	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acenaphthene	0.230J	12.0ND	3.700	0.320J	0.160J	0.360ND	20	500	98
Acenaphthylene	0.800ND	12.0ND	11.0ND	0.400ND	0.095J	0.360ND	100	500	107
Acetophenone	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Anthracene	0.940	0.330J	4.900J	0.590	0.310J	0.360ND	100	500	1,000
Atrazine	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Benzaldehyde	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Benzo (a) Anthracene	2.800 *	1.300 *	27.000 *	0.940	1.100 *	0.079J	1	5.6	1
Benzo (a) Pyrene	3.200	1.300	24.000 *	0.890	1.300	0.087J	1	1	22
Benzo (b) Fluoranthene	2.300 *	1.100J	25.000 *	0.680	0.990	0.091J	1	5.6	1.7
Benzo (g,h,i) Perylene	2.500	0.870J	17.000	0.540	0.990	0.075J	100	500	1,000
Benzo (k) Fluoranthene	2.300 *	1.100J	23.000 *	0.590	1.100	0.069J	0.8	56	1.7
Biphenyl	0.800ND	12.0ND	11.0ND	0.49ND	0.840ND	0.360ND			
Butyl Benzyl Phthalate	0.800ND	12.0ND	11.0ND	0.048J	0.180J	0.079J			
Di-N-Butylphthalate	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.170J			
Caprolactam	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
Carbazole	0.150J	0.190J	5.600J	0.240J	0.220J	0.360ND			
Indeno (1,2,3-cd) Pyrene	2.300	0.820J	16.000 *	0.500	0.880	0.070J	0.5	5.6	8.2
4-Chloroaniline	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Bis (-2-Chloroethoxy) Methane	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Bis (-2-Chloroethyl) Ether	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2-Chloronaphthalene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2-Chlorophenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2,2'- Oxybis (1-Chloropropane)	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Chrysene	2.900 *	1.400 *	30.000 *	0.900	1.400 *	0.110J	1	56	1
Dibenz (a,h) Anthracene	0.580J	0.270J	5.1J	0.150J	0.250J	0.360ND	0.33	0.56	1,000
Dibenzofuran	0.087J	12.0ND	1.500	0.180J	0.190J	0.360ND			
3,3'- Dichlorobenzidine	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2,4- Dichlorophenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Diethylphthalate	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Dimethyl Phthalate	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2,4- Dimethylphenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2,4- Dinitrophenol	2.000ND	28.0ND	28.0ND	0.400ND	2.100ND	0.360ND			
2,4- Dinitrotoluene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.910ND			
2,6- Dinitrotoluene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Bis (2-Ethylhexyl) Phthalate	0.089J	12.0ND	11.0ND	0.055J	0.140J	0.086J			

TABLE 4 Soil Sample Analytical Summary SVOC (surface)

Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds Page 10 of 16	VOA SS-1	VOA SS-2	VOA SS-3	VOA SS-4	VOA SS-5	VOA SS-6	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	6.000	2.700	60.000	2.400	2.800	0.360ND	100	500	1,000
Fluorene	0.260J	12.0ND	2.600	0.290J	0.250J	0.360ND	30	500	386
Hexachlorobenzene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Hexachlorobutadiene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Hexachlorocyclopentadiene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Hexachloroethane	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Isophorone	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2- Methylnaphthalene	0.800ND	0.140J	11.0ND	0.069J	0.089J	0.360ND			
4,6- Dinitro-2- Methylphenol	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
4- Chloro-3- Methylphenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2- Methylphenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND	0.33		
4- Methylphenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND	0.33		
Naphthalene	0.800ND	12.0ND	11.0ND	0.093J	0.210J	0.360ND	12	500	12
2- Nitroaniline	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
3- Nitroaniline	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
4- Nitroaniline	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
Nitrobenzene	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2- Nitrophenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
4- Nitrophenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
N- Nitrosodiphenylamine	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Di-n-octyl Phthalate	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Pentachlorophenol	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND	0.8		0.8
Phenanthrene	2.600	1.400	34.000	2.100	1.900	0.073J	100	500	1,000
Phenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND	0.33	500	0.33
4- Bromophenyl- Phenylether	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
4- Chlorophenyl- Phenylether	2.000ND	12.0ND	28.0ND	0.400ND	0.840ND	0.360ND			
N- nitroso-di-n- Propylamine	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
Pyrene	4.400	1.700	46.000	1.500	1.900	0.110J	100	500	1,000
2,4,6- Trichlorophenol	0.800ND	12.0ND	11.0ND	0.400ND	0.840ND	0.360ND			
2,4,5- Trichlorophenol	2.000ND	28.0ND	28.0ND	0.990ND	2.100ND	0.910ND			
Total Semi-Volatile Organic Compounds / Total TICS	33.636 / 13.380 (29 TIC) (J,JN,JNB)	14.62 / 9.290 (15TIC) (J,JN,)	325.4 / 163.800 (30TICs) (J,JN)	13.075 / 10.190 (29TIC) (J,JN,JNB)	16.454 / 14.090 (28TICs) (J,JN)	1.099 / 124.089 (29TICs) (J,JN, JNB)			

Notes: Surface soil samples collected on February 17, 2009by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services. All concentrations expressed in parts per million (ppm). Bold font indicates concentration above the laboratory detection limit and shaded concentrations exceed NYSDEC Part 375 – 6.8 (b) Restricted

Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Use Soil Cleanup Objectives for Residential Use.

* Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

TICS = Tentatively Identified Compounds. The number of TICS and designations with **J**, **JN**, **and JNB** indicate estimated values.

TABLE 4 Soil Sample Analytical Summary (soil piles) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds November 2, 2007 Page 11 of 16	TP - 121 Soil Pile	TP - 122 Soil Pile	TP - 123 Soil Pile	TP - 124 Soil Pile	TP - 125 Soil Pile	TP - 126 Soil Pile	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acenaphthene	5.4ND	1.600J	0.200J	5.7ND	1.8ND	0.140J	20	500	98
Acenaphthylene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND	100	500	107
Acetophenone	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Anthracene	0.280J	2.700J	0.670J	0.610J	0.100J	0.420J	100	500	1,000
Atrazine	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Benzaldehyde	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Benzo (a) Anthracene	1.000J	9.200 *	2.000J *	2.100J *	0.530J	1.600J *	1	5.6	1
Benzo (a) Pyrene	1.100J	7.700	1.800J	1.900J	0.560J	1.500J	1	1	22
Benzo (b) Fluoranthene	5.4ND	6.700 *	1.400J	1.600J	0.490J	1.300J	1	5.6	1.7
Benzo (g,h,i) Perylene	1.000J	5.700J	1.300J	1.600J	0.560J	1.400J	100	500	1,000
Benzo (k) Fluoranthene	1.000J	6.900J *	1.500J	1.500J	0.460J	1.300J	0.8	56	1.7
Biphenyl	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Butyl Benzyl Phthalate	1.700J	0.290J	4.300	5.7ND	0.300J	0.620J			
Di-N-Butylphthalate	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Caprolactam	14ND	18ND	9.2ND	14ND	4.4ND	14ND			
Carbazole	5.4ND	2.500J	0.360J	0.260J	1.8ND	0.240J			
Indeno (1,2,3-cd) Pyrene	0.850J	5.400J	1.200J	1.400J	0.480J	1.000J	0.5	5.6	8.2
4-Chloroaniline	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Bis (-2-Chloroethoxy) Methane	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Bis (-2-Chloroethyl) Ether	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2-Chloronaphthalene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2-Chlorophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,2'- Oxybis (1-Chloropropane)	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Chrysene	1.200J *	9.500 *	2.000J *	2.100J *	0.600J	1.700J *	1	56	1
Dibenz (a,h) Anthracene	0.330J	1.900J	0.400J	0.450J	0.130J	5.4ND	0.33	0.56	1,000
Dibenzofuran	5.4ND	130 J	3.7ND	5.7ND	0.700J	5.4ND			
3,3'- Dichlorobenzidine	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,4- Dichlorophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Diethylphthalate	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Dimethyl Phthalate	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,4- Dimethylphenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,4- Dinitrophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,4- Dinitrotoluene	14ND	18ND	9.2ND	14ND	4.4ND	5.4ND			
2,6- Dinitrotoluene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Bis (2-Ethylhexyl Phthalate	5.4ND	7.1ND	3.7ND	5.7ND	0.130J	5.4ND			

TABLE 4 Soil Sample Analytical Summary (soil piles)

Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi – Volatile Organic Compounds Page 12 of 16	TP - 121 Soil Pile	TP - 122 Soil Pile	TP - 123 Soil Pile	TP - 124 Soil Pile	TP - 125 Soil Pile	TP - 126 Soil Pile	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	2.100J	24.000	4.600	4.500J	1.300J	3.800J	100	500	1,000
Fluorene	5.4ND	1.200J	3.7ND	5.7ND	1.8ND	5.4ND	30	500	386
Hexachlorobenzene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Hexachlorobutadiene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Hexachlorocyclopentadiene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Hexachloroethane	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Isophorone	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2- Methylnaphthalene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
4,6- Dinitro-2- Methylphenol	14ND	18ND	9.2ND	14ND	4.4ND	14ND			
4- Chloro-3- Methylphenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2- Methylphenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND	0.33		
4- Methylphenol	14ND	18ND	9.2ND	14ND	4.4ND	510ND	0.33		
Naphthalene	0.130J	0.350J	0.200J	5.7ND	1.8ND	5.4ND	12	500	12
2- Nitroaniline	14ND	18ND	9.2ND	14ND	4.4ND	14ND			
3- Nitroaniline	14ND	18ND	9.2ND	14ND	4.4ND	14ND			
4- Nitroaniline	14ND	18ND	9.2ND	14ND	4.4ND	14ND			
Nitrobenzene	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2- Nitrophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
4- Nitrophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
N- Nitrosodiphenylamine	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Di-n-octyl Phthalate	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Pentachlorophenol	14ND	18ND	9.2ND	14ND	4.4ND	14ND	0.8		0.8
Phenanthrene	1.400J	14.000	2.700J	2.600J	0.530J	2.100J	100	500	1,000
Phenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND	0.33	500	0.33
4- Bromophenyl- Phenylether	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
4- Chlorophenyl- Phenylether	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
N- nitroso-di-n- Propylamine	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
Pyrene	1.600J	13.000	2.400J	2.800J	0.810J	2.000J	100	500	1,000
2,4,6- Trichlorophenol	5.4ND	7.1ND	3.7ND	5.7ND	1.8ND	5.4ND			
2,4,5- Trichlorophenol	14ND	18ND	9.2ND	9.2ND	4.4ND	14ND			
Total Semi-Volatile Organic Compounds / Total TICS	10.66 / 51.000 (1 TIC)(J)	242.64 / 73,300 (25TICs)(J,JN)	27.03 / 4.500 (2 TICs)(J,JN)	23.42 / 6.200 (2 TICs)(J,JN)	4.91 / 8.120 (2TICs)(J,JN)	19.12 / 5.000 (2TICs)(J , JN)			

Test pit soil pile samples collected on November 2, 2007 by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services. All concentrations expressed in parts per million (ppm). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed Part 375 – 6.8 b) Restricted Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Soil Cleanup Objectives for Residential Use.

TICS = Tentatively Identified Compounds. The number of TICS and designations with J and JN indicate estimated values.

* Concentration exceeds Protection of Groundwater Part 375 - 6.5 values.

TABLE 4 Soil Sample Analytical Summary (biocell) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi – volatile Organic			2 14 Lake Ave	enue Rochester, Nev	VIOK		Unrestricted	Restricted Use	
Compounds	VOA Biocell	VOA Biocell	VOA Biocell	VOA Biocell	VOA Biocell	VOA Biocell	Use Soil	Soil Cleanup	Protection of
August 6, 2009	101	102	103	104	105	106	Cleanup	Objectives Commercial	Groundwater
Page 13 of 16	101	102	100	104	100	100	Objectives Residential	Commercial	
Acenaphthene	0.4J	0.34ND	0.110J	0.35ND	0.37ND	0.35ND	20	500	98
Acenaphthylene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND	100	500	107
Acetophenone	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			107
Anthracene	2.7	0.34ND	0.390	0.087J	0.37ND	0.35ND	100	500	1,000
Atrazine	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Benzaldehyde	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Benzo (a) Anthracene	4.3 *	0.34ND	0.970	0.240J	0.37ND	0.35ND	1	5.6	1
Benzo (a) Pyrene	4.0	0.34ND	0.920	0.330J	0.37ND	0.35ND	1	1	22
Benzo (b) Fluoranthene	3.8 *	0.34ND	0.880	0.280J	0.37ND	0.35ND	1	5.6	1.7
Benzo (g,h,i) Perylene	2.2	0.34ND	0.530	0.480	0.37ND	0.35ND	100	500	1,000
Benzo (k) Fluoranthene	4.0 *	0.34ND	0.650	0.360	0.37ND	0.35ND	0.8	56	1.7
Biphenyl	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Butyl Benzyl Phthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Di-N-Butylphthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Caprolactam	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Carbazole	1.7ND	0.34ND	0.230J	0.35ND	0.37ND	0.35ND			
Indeno (1,2,3-cd) Pyrene	2.8	0.071J	0.620	0.580	0.37ND	0.35ND	0.5	5.6	8.2
4-Chloroaniline	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Bis (-2-Chloroethoxy) Methane	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Bis (-2-Chloroethyl) Ether	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2-Chloronaphthalene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2-Chlorophenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,2'- Oxybis (1-Chloropropane)	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Chrysene	4.5 *	0.34ND	1.0	0.340J	0.37ND	0.35ND	1	56	1
Dibenz (a,h) Anthracene	0.8J	0.34ND	0.200J	0.290J	0.37ND	0.35ND	0.33	0.56	1,000
Dibenzofuran	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
3,3'- Dichlorobenzidine	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,4- Dichlorophenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Diethylphthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Dimethyl Phthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,4- Dimethylphenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,4- Dinitrophenol	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
2,4- Dinitrotoluene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,6- Dinitrotoluene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Bis (2-Ethylhexyl Phthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			

TABLE 4 Soil Sample Analytical Summary (biocell)

Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi – Volatile Organic Compounds Page 14 of 16	VOA Biocell 101	VOA Biocell 102	VOA Biocell 103	VOA Biocell 104	VOA Biocell 105	VOA Biocell 106	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	9.0	0.34ND	2.100	0.580	0.37ND	0.35ND	100	500	1,000
Fluorene	0.610J	0.34ND	0.140J	0.35ND	0.37ND	0.35ND	30	500	386
Hexachlorobenzene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Hexachlorobutadiene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Hexachlorocyclopentadiene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Hexachloroethane	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Isophorone	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2- Methylnaphthalene	0.440J	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
4,6- Dinitro-2- Methylphenol	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
4- Chloro-3- Methylphenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2- Methylphenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND	0.33		
4- Methylphenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND	0.33		
Naphthalene	0.390J	0.071J	0.35ND	0.35ND	0.37ND	0.35ND	12	500	12
2- Nitroaniline	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
3- Nitroaniline	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
4- Nitroaniline	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
Nitrobenzene	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2- Nitrophenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
4- Nitrophenol	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND			
N- Nitrosodiphenylamine	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Di-n-octyl Phthalate	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Pentachlorophenol	8.7ND	1.7ND	1.8ND	1.7ND	1.8ND	1.8ND	0.8		0.8
Phenanthrene	6.1	0.086J	1.400J	0.200J	0.37ND	0.35ND	100	500	1,000
Phenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND	0.33	500	0.33
4- Bromophenyl- Phenylether	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
4- Chlorophenyl- Phenylether	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
N- nitroso-di-n- Propylamine	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Pyrene	6.9	0.088J	1.600	0.380	0.37ND	0.35ND	100	500	1,000
2,4,6- Trichlorophenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
2,4,5- Trichlorophenol	1.7ND	0.34ND	0.35ND	0.35ND	0.37ND	0.35ND			
Total Semi-Volatile Organic Compounds / Total TICS	52.94 / ND	0.316 / ND	11.51 / ND	4.147 / ND	ND / ND	ND / ND			

Notes: Test pit soil pile samples collected on August 6, 2009 by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services. All concentrations expressed in parts per million (ppm). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed Part 375 – 6.8(b) Restricted Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Soil Cleanup Objectives for Residential Use.

* Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

TICS = Tentatively Identified Compounds. J = estimated value. ND = non-detection above the laboratory detection limits.

TABLE 4 Soil Sample Analytical Summary SVOC (biocell) Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds Page 15 of 16	VOA Biocell 107	VOA Biocell 108	VOA Biocell 109	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acenaphthene	0.34ND	0.36ND	0.36ND	20	500	98
Acenaphthylene	0.34ND	0.36ND	0.36ND	100	500	107
Acetophenone	0.34ND	0.36ND	0.36ND			
Anthracene	0.34ND	0.36ND	0.36ND	100	500	1,000
Atrazine	0.34ND	0.36ND	0.36ND			
Benzaldehyde	0.34ND	0.36ND	0.36ND			
Benzo (a) Anthracene	0.34ND	0.36ND	0.36ND	1	5.6	1
Benzo (a) Pyrene	0.34ND	0.36ND	0.36ND	1	1	22
Benzo (b) Fluoranthene	0.34ND	0.36ND	0.36ND	1	5.6	1.7
Benzo (g,h,i) Perylene	0.069J	0.36ND	0.36ND	100	500	1,000
Benzo (k) Fluoranthene	0.34ND	0.36ND	0.36ND	0.8	56	1.7
Biphenyl	0.34ND	0.36ND	0.36ND			
Butyl Benzyl Phthalate	0.34ND	0.36ND	0.36ND			
Di-N-Butylphthalate	0.34ND	0.36ND	0.36ND			
Caprolactam	0.34ND	0.36ND	0.36ND			
Carbazole	0.34ND	0.36ND	0.36ND			
Indeno (1,2,3-cd) Pyrene	0.34ND	0.36ND	0.36ND	0.5	5.6	8.2
4-Chloroaniline	0.34ND	0.36ND	0.36ND			
Bis (-2-Chloroethoxy) Methane	0.34ND	0.36ND	0.36ND			
Bis (-2-Chloroethyl) Ether	0.34ND	0.36ND	0.36ND			
2-Chloronaphthalene	0.34ND	0.36ND	0.36ND			
2-Chlorophenol	0.34ND	0.36ND	0.36ND			
2,2'- Oxybis (1-Chloropropane)	0.34ND	0.36ND	0.36ND			
Chrysene	0.34ND	0.36ND	0.36ND	1	56	1
Dibenz (a,h) Anthracene	0.34ND	0.36ND	0.36ND	0.33	0.56	1,000
Dibenzofuran	0.34ND	0.36ND	0.36ND			
3,3'- Dichlorobenzidine	0.34ND	0.36ND	0.36ND			
2,4- Dichlorophenol	0.34ND	0.36ND	0.36ND			
Diethylphthalate	0.34ND	0.36ND	0.36ND			
Dimethyl Phthalate	0.34ND	0.36ND	0.36ND			
2,4- Dimethylphenol	0.34ND	0.36ND	0.36ND			
2,4- Dinitrophenol	1.8ND	1.8ND	1.8ND			
2,4- Dinitrotoluene	0.34ND	0.36ND	0.36ND			
2,6- Dinitrotoluene	0.34ND	0.36ND	0.36ND			
Bis (2-Ethylhexyl Phthalate	0.34ND	0.36ND	0.36ND			

TABLE 4 Soil Sample Analytical Summary SVOC (biocell) Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi – Volatile Organic Compounds Page 16 of 16	VOA Biocell 107	VOA Biocell 108	VOA Biocell 109	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Fluoranthene	0.076J	0.36ND	0.36ND	100	500	1,000
Fluorene	0.34ND	0.36ND	0.36ND	30	500	386
Hexachlorobenzene	0.34ND	0.36ND	0.36ND			
Hexachlorobutadiene	0.34ND	0.36ND	0.36ND			
Hexachlorocyclopentadiene	0.34ND	0.36ND	0.36ND			
Hexachloroethane	0.34ND	0.36ND	0.36ND			
Isophorone	0.34ND	0.36ND	0.36ND			
2- Methylnaphthalene	0.34ND	0.36ND	0.36ND			
4,6- Dinitro-2- Methylphenol	1.7ND	1.8ND	1.8ND			
4- Chloro-3- Methylphenol	0.34ND	0.36ND	0.36ND			
2- Methylphenol	0.34ND	0.36ND	0.36ND	0.33		
4- Methylphenol	0.34ND	0.36ND	0.36ND	0.33		
Naphthalene	0.34ND	0.36ND	0.36ND	12	500	12
2- Nitroaniline	1.7ND	1.8ND	1.8ND			
3- Nitroaniline	1.7ND	1.8ND	1.8ND			
4- Nitroaniline	1.7ND	1.8ND	1.8ND			
Nitrobenzene	0.34ND	0.36ND	0.36ND			
2- Nitrophenol	0.34ND	0.36ND	0.36ND			
4- Nitrophenol	1.7ND	1.8ND	1.8ND			
N- Nitrosodiphenylamine	0.34ND	0.36ND	0.36ND			
Di-n-octyl Phthalate	0.34ND	0.36ND	0.36ND			
Pentachlorophenol	1.7ND	1.8ND	1.8ND	0.8		0.8
Phenanthrene	0.34ND	0.36ND	0.36ND	100	500	1,000
Phenol	0.34ND	0.36ND	0.36ND	0.33	500	0.33
4- Bromophenyl- Phenylether	0.34ND	0.36ND	0.36ND			
4- Chlorophenyl- Phenylether	0.34ND	0.36ND	0.36ND			
N- nitroso-di-n- Propylamine	0.34ND	0.36ND	0.36ND			
Pyrene	0.34ND	0.36ND	0.36ND	100	500	1,000
2,4,6- Trichlorophenol	0.34ND	0.36ND	0.36ND			
2,4,5- Trichlorophenol	0.34ND	0.36ND	0.36ND			
Total Semi-Volatile Organic Compounds / Total TICS	0.145 / ND	ND / ND	ND / ND			

Notes: Test pit soil pile samples collected on August 6, 2009 by GeoQuest Environmental, Inc. and delivered to Columbia Analytical Services.

All concentrations expressed in parts per million (ppm). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed Part 375 – 6.8 (b) Restricted Use Soil Cleanup Objectives for Commercial Use and blue shaded exceed Unrestricted Soil Cleanup Objectives for Residential Use. TICS = Tentatively Identified Compounds. J = estimated value. ND = non-detection above the laboratory detection limits. * Concentration exceeds Protection of Groundwater Part 375-6.5value

TABLE 5 Soil Analysis Summary Metals (from test pits) Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 1 of 8	TP-102 (10.0-10.5 ft.)	TP-103 (16.0-16.5 ft.)	TP-104 (17.0-17.5 ft.)	TP-105 (15.0-15.5 ft.)	TP-106 (14.0-14.5 ft.)	TP-107 (8.0-8.5 ft.)	TP-118 (8.0-8.5 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	5,670	5,370	6,850	1,580	11,200	2,470	3,090	-	-	-
Antimony	0.70B	4.6B	0.51	1.1B	0.26ND	0.69B	0.26ND	-	-	-
Arsenic	37.3 *	14.3	12.7	10	18.3 *	72.6 *	12.8	13	16	16
Barium	104	105	164	42.2	90	106	42.9	350	400	820
Beryllium	0.53B	0.56B	0.87	0.44B	0.73	0.26B	0.41B	7.2	590	47
Cadmium	0.61	0.35B	0.19	0.16B	0.30B	0.33B	0.10B	2.5	9.3	7.5
Calcium	30,900	14,100	9,190	14,200	17,000	947	17,000	-	-	-
Chromium	12.6	10.1	8.6	4.7	10.9	6.6	5.1	1	400	-
Cobalt	14.2	8.3	7.9	2.4B	7.9	0.07ND	5.5B	-	-	-
Copper	79.1	212	49.1	63.8	63.4	48.9	17.3	50	270	1,720
Iron	45,300	22,900	11,700	11,600	15,900	68,100	13,300	-	-	-
Lead	381	1,110 *	439	220	105	178	60.6	63	1,000	450
Magnesium	4,940	2,710	956	3,900	4,170	319	7,930	-	-	-
Manganese	947	345	192	143	211	13.7	183	1,600	10,000	2,000
Mercury	1.0 *	1.3 *	0.11B	0.66	0.48	0.44	0.23	0.18	2.8	0.73
Nickel	27.2	18.5	16.6	7.3	16.6	1.3B	11.2	30	310	130
Potassium	751	818	934	445B	800	2,190	791	-	-	-
Selenium	3.8B	3.3	2.4B	1.9B	1.7	4.3 *	1.3B	3.9	1,500	4
Silver	0.10ND	0.11ND	0.11ND	0.09ND	0.09ND	0.09ND	0.09ND	2	1,500	8.3
Sodium	128B	313B	275B	99.5B	593	5,430	221B	-	-	-
Thallium	0.69B	0.21ND	0.20ND	0.16ND	0.18ND	0.84B	0.18ND	-	-	-
Vanadium	16.1	23	33.2	10.9	17.3	9.4	11.9	-	-	-
Zinc	137	507	386	121	96.8	16.3	71.8	109	10,000	2,480
Total Cyanide	NA	NA	NA	1.10ND	NA	1.19ND	NA	27	27	40

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates detection above New York State Department of Environmental Conservation unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on October 31 through November 2, 2007 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 5 Soil Analysis Summary (subsurface) Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 2 of 8	MW-101 (22.0-23.0 ft.)	MW-102 (22.0-22.5 ft.)	MW-103 (20.0-22.0 ft.)	MW-104 (30.0-32.0 ft.)	MW-105 (26.0-26.3 ft.)	MW-106 (26.0-28.0 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	3,410	8,330	5,780	2,130	4,110	4,630	-	-	-
Antimony	1.2B	0.24B	0.26B	0.72B	0.15ND	2.1B	-	-	-
Arsenic	5.0	7.1	10.2	6.3	5.1	6.1	13	16	16
Barium	76.2	101	111	124	11.3B	150	350	400	820
Beryllium	0.27B	0.53B	0.47B	0.26B	0.40B	0.26B	7.2	590	47
Cadmium	0.14B	0.19B	0.16B	0.03B	0.03B	0.36B	2.5	9.3	7.5
Calcium	50,300	17,800	6,510	4,790	155,000	53,800	-	-	-
Chromium	7.1	11.8	23.5	4.9	6.2	13.1	1	400	-
Cobalt	3.3B	8.5	5.7B	3.0B	4.4B	3.0B	-	-	-
Copper	83.0	74.7	41.5	116	13.5	467	50	270	1,720
Iron	15,700	18,400	10,700	13,600	12,500	9,340	-	-	-
Lead	235	92.5	264	109	24.6	425	63	1,000	450
Magnesium	11,400	5,550	939	793	38,200	12,900	-	-	-
Manganese	305	1,090	110	121	282	341	1,600	10,000	2,000
Mercury	16.0 *	149 *	0.31	1.5 *	0.05B	1.5 *	0.18	2.8	0.73
Nickel	7.3	16.0	12.3	10.0	9.8	7.4	30	310	130
Potassium	758B	1,310	677	281B	2,940	769	-	-	-
Selenium	1.8B	1.6B	1.9B	1.3B	0.53B	1.7B	3.9	1,500	4
Silver	0.40B	0.69B	0.05ND	0.23B	0.04ND	0.51B	2	1,500	8.3
Sodium	428B	277B	238B	263B	183B	391B	-	-	-
Thallium	0.11ND	0.09ND	0.11B	0.10ND	1.9B	0.31B	-	-	-
Vanadium	9.6	17.5	20.3	11.5	7.1	12.1	-	-	-
Zinc	105	120	147	132	13.1	651	109	10,000	2,480
Total Cyanide	1.59ND	1.39ND	1.21ND	1.47ND	1.05ND	1.34ND	27	27	40

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold font indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on June 27, 2008, July 2, 2008 and July 3, 2008, analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 5 Soil Sample Analysis Summary (from test pits) Metals

Volunteers of America of Western New York - Supplemental Investigation (SI) 214 Lake Avenue Rochester, New York

Metals Page 3 of 8	TP-127 (8.0-10.0 ft.)	TP-128 (8.0-10.0 ft.)	TP-130 (8.0-10.0 ft.)	TP-131 (8.0-10.0 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Commercial Use Soil Cleanup Objectives	Protection of Groundwater
Aluminum	7,500	6,730	2,150	3,400	-	-	-
Antimony	ND<7.5	ND<8.0	ND<8.0	ND<7.6	-	-	-
Arsenic	13.4	9.2	119 *	53.5 *	13	16	16
Barium	116	113	84.6	55.1	350	400	820
Beryllium	0.748	ND<0.664	ND<0.664	ND<0.631	7.2	590	47
Cadmium	ND<0.627	ND<0.664	ND<0.664	ND<0.631	2.5	9.3	7.5
Calcium	6,800	13,400	3,470	2,050	-	-	-
Chromium	12.3	11.2	5.7	6.3	1	400	-
Cobalt	12.4	ND<6.6	ND<6.6	ND<6.3	-	-	-
Copper	167	266	33.1	17.3	50	270	1,720
Iron	32,400	17,000	73,000	35,400	-	-	-
Lead	301	319	89.0	50.3	63	1,000	450
Magnesium	3,750	2,840	508	965	-	-	-
Manganese	504	278	51.2	38.8	1,600	10,000	2,000
Mercury	0.752 *	0.380	0.164	0.213	0.18	2.8	0.73
Nickel	23.2	60.9	ND<5.3	ND<5.1	30	310	130
Potassium	782	826	1,340	978	-	-	-
Selenium	1.8	1.8	4.6 *	2.7	3.9	1,500	4
Silver	ND<1.3	ND<1.3	ND<1.3	ND<1.3	2	1,500	8.3
Sodium	ND<125	ND<133	858	348	-	-	-
Thallium	ND<1.3	ND<1.3	ND<1.3	ND<1.3	-	-	-
Vanadium	16.8	23.4	15.6	12.4	-	-	-
Zinc	220	151	28.8	20.5	109	10,000	2,480

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates detection above New York State Department of Environmental Conservation unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by Bergmann Associates, Inc. on October 25 and 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

TABLE 5 Soil Sample Analysis Summary (from test pits) Metals

Volunteers of America of Western New York - Supplemental Investigation (SI) 214 Lake Avenue Rochester, New York

Metals Page 2 of 2	TP-132 (8.0-10.0 ft.)	TP-133 (8.0-10.0 ft.)	TP-134 (8.0-10.0 ft.)	MW-107 (12.0 – 14.0 ft.)	Unrestricted Use Soil Cleanup Objectives	Restricted Commercial Use Soil Cleanup Objectives	Protection of Groundwater
Aluminum	8,470	2,840	2,630	3,670	-	-	-
Antimony	ND<7.1	ND<8.3	ND<7.6	ND<7.3	-	-	-
Arsenic	4.5	140 *	132 *	28.1 *	13	16	16
Barium	53.6	133	71.1	51.6	350	400	820
Beryllium	ND<0.595	ND<0.690	ND<0.630	ND<0.604	7.2	590	47
Cadmium	ND<0.595	0.751	ND<0.630	ND<0.604	2.5	9.3	7.5
Calcium	11,700	5,170	1,320	34,500	-	-	-
Chromium	9.9	7.7	6.2	10.6	1	400	-
Cobalt	6.2	ND<6.9	ND<6.3	ND<6.0	-	-	-
Copper	18.9	72.6	11.5	176	50	270	1,720
Iron	14,700	108,000	53,700	51,300	-	-	-
Lead	64.7	169	128	269	63	1,000	450
Magnesium	3,720	552	702	6,320	-	-	-
Manganese	196	165	50.4	850	1,600	10,000	2,000
Mercury	0.199	0.107	0.111	0.505	0.18	2.8	0.73
Nickel	11.2	9.3	ND<5.0	12.5	30	310	130
Potassium	913	1,200	1,240	602	-	-	-
Selenium	ND<1.2	6.9 *	8.3 *	6.5 *	3.9	1,500	4
Silver	ND<1.2	ND<1.4	ND<1.3	ND<1.2	2	1,500	8.3
Sodium	ND<119	338	1,630	ND<121	-	-	-
Thallium	ND<1.2	ND<1.4	ND<1.3	ND<1.2	-	-	-
Vanadium	17.7	34.1	13.8	14.3	-	-	-
Zinc	49.1	55.6	21.5	110	109	10,000	2,480

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates detection above New York State Department of Environmental Conservation unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by Bergmann Associates, Inc. on October 25 and 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

6. Restricted Use Soil Cleanup Objective values for commercial use from NYSDEC Table 375 – 6.8 (b).

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TABLE 5 Soil Sample Analysis Summary (test pit/monitoring well) Metals

Volunteers of America of Western New York – Supplemental Investigation 214 Lake Avenue Rochester, New York

Metals Page 4 of 8	TP-132 (8.0-10.0 ft.)	TP-133 (8.0-10.0 ft.)	TP-134 (8.0-10.0 ft.)	MW-107 (12.0 – 14.0 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	8,470	2,840	2,630	3,670	-	-	-
Antimony	ND<7.1	ND<8.3	ND<7.6	ND<7.3	-	-	-
Arsenic	4.5	140 *	132 *	28.1 *	13	16	16
Barium	53.6	133	71.1	51.6	350	400	820
Beryllium	ND<0.595	ND<0.690	ND<0.630	ND<0.604	7.2	590	47
Cadmium	ND<0.595	0.751	ND<0.630	ND<0.604	2.5	9.3	7.5
Calcium	11,700	5,170	1,320	34,500	-	-	-
Chromium	9.9	7.7	6.2	10.6	1	400	-
Cobalt	6.2	ND<6.9	ND<6.3	ND<6.0	-	-	-
Copper	18.9	72.6	11.5	176	50	270	1,720
Iron	14,700	108,000	53,700	51,300	-	-	-
Lead	64.7	169	128	269	63	1,000	450
Magnesium	3,720	552	702	6,320	-	-	-
Manganese	196	165	50.4	850	1,600	10,000	2,000
Mercury	0.199	0.107	0.111	0.505	0.18	2.8	0.73
Nickel	11.2	9.3	ND<5.0	12.5	30	310	130
Potassium	913	1,200	1,240	602	-	-	-
Selenium	ND<1.2	6.9 *	8.3 *	6.5 *	3.9	1,500	4
Silver	ND<1.2	ND<1.4	ND<1.3	ND<1.2	2	1,500	8.3
Sodium	ND<119	338	1,630	ND<121	-	-	-
Thallium	ND<1.2	ND<1.4	ND<1.3	ND<1.2	-	-	-
Vanadium	17.7	34.1	13.8	14.3	-	-	-
Zinc	49.1	55.6	21.5	110	109	10,000	2,480

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates concentration detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by Bergmann Associates, Inc. on October 25 through October 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

TABLE 5 Soil Analysis Summary (surface)Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 5 of 8	VOA SS-1	VOA SS-2	VOA SS-3	VOA SS-4	VOA SS-5	VOA SS-6	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	NA	NA	NA	NA	NA	NA	-	-	-
Antimony	0.96B	0.30ND	0.29ND	1.4B	0.32ND	0.28ND	-	-	-
Arsenic	11.3	8.1	4.1	5.8	5.5	4.0	13	16	16
Barium	NA	NA	NA	NA	NA	NA	350	400	820
Beryllium	0.27B	0.39B	0.20B	0.29B	1.6	0.30B	7.2	590	47
Cadmium	0.18B	0.40B	0.73	0.11B	1.9	0.23B	2.5	9.3	7.5
Calcium	NA	NA	NA	NA	NA	NA	-	-	-
Chromium	138	10.5	5.2	6.9	11.0	4.6	1	400	-
Cobalt	NA	NA	NA	NA	NA	NA	-	-	-
Copper	139	36.9	14.2	45.5	80.1	21.6	50	270	1,720
Iron	NA	NA	NA	NA	NA	NA	-	-	-
Lead	1,050 *	343	74.8	457 *	418	26.7	63	1,000	450
Magnesium	NA	NA	NA	NA	NA	NA	-	-	-
Manganese	NA	NA	NA	NA	NA	NA	1,600	10,000	2,000
Mercury	10.1 *	0.46	0.07B	0.72	0.68	0.03B	0.18	2.8	0.73
Nickel	9.9	11.0	5.3	9.2	144 *	5.8	30	310	130
Potassium	NA	NA	NA	NA	NA	NA	-	-	-
Selenium	2.6B	0.73B	0.38B	1.3B	2.5B	0.27ND	3.9	1,500	4
Silver	0.56B	0.65B	1.1B	0.61B	0.66B	0.21B	2	1,500	8.3
Sodium	NA	NA	NA	NA	NA	NA	-	-	-
Thallium	0.39B	1.0B	2.4B	0.14ND	1.2B	2.8	-	-	-
Vanadium	NA	NA	NA	NA	NA	NA	-	-	-
Zinc	192	123	90.9	79.6	748	31.4	109	10,000	2,480
Total Cyanide	1.3ND	1.2ND	1.2ND	1.47ND	1.1ND	0.98ND	27	27	40

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates concentration detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on February 17, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 5 Soil Analysis Summary (soil pile) Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 6 of 8	TP-121 (Soil Pile)	TP-122 (Soil Pile)	TP-123 (Soil Pile)	TP-124 (Soil Pile)	TP-125 (Soil Pile)	TP-126 (Soil Pile)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	5,180	4,220	4,900	5,870	4,190	5,700	-	-	-
Antimony	32.4	1.7B	1.2B	4.0B	0.39B	1.6B	-	-	-
Arsenic	11.8	7.7	6.5	9.6	5.2	6.8	13	16	16
Barium	145	90.4	153	121	43.2	79.6	350	400	820
Beryllium	0.40B	0.33B	0.34B	0.40B	0.29B	0.39B	7.2	590	47
Cadmium	1.6	0.64	0.58	1.0	0.25B	0.85	2.5	9.3	7.5
Calcium	58,700	75,300	62,000	54,800	57,800	60,200	-	-	-
Chromium	19.6	11.4	11.9	12.0	8.0	11.4	1	400	-
Cobalt	4.0B	3.2	4.0B	4.2B	3.3B	4.5B	-	-	-
Copper	93.7	63.7	55.5	46.7	25.7	40.3	50	270	1,720
Iron	27,100	9,940	11,500	13,400	10,200	11,300	-	-	-
Lead	2,540 *	396	366	641 *	78.6	247	63	1,000	450
Magnesium	22,500	32,200	22,200	22,500	21,900	20,500	-	-	-
Manganese	409	358	374	539	345	456	1,600	10,000	2,000
Mercury	1.3 *	0.58	2.9 *	0.69	0.10B	0.41	0.18	2.8	0.73
Nickel	24.6	10.8	12.1	11.9	9.1	11.5	30	310	130
Potassium	943	901	1,140	1,140	885	1,070	-	-	-
Selenium	1.1B	0.53B	0.73B	1.1B	0.72B	0.69B	3.9	1,500	4
Silver	0.09ND	0.09ND	0.09ND	0.09ND	0.08ND	0.08ND	2	1,500	8.3
Sodium	158B	142B	132B	123B	149B	136B	-	-	-
Thallium	1.1B	2.2B	1.0B	1.1B	1.3B	1.2B	-	-	-
Vanadium	16.1	11.4	12.9	15.0	10.8	14.9	-	-	-
Zinc	417	167	156	263	65.8	143	109	10,000	2,480
Total Cyanide	1.08ND	1.07ND	1.10ND	1.14ND	1.07ND	1.08ND	27	27	40

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentrations shown in shaded background with bold type indicate concentration detected above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objectives for Commercial Use.

2. Bold type indicates concentration detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on November 2, 2007 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 5 Soil Analysis Summary (biocell) Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 7of 8	VOAbiocell101	VOAbiocell102	VOAbiocell103	VOAbiocell104	VOAbiocell105	VOAbiocell106	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	5,020	4,030	5,650	4,690	4,190	3,430	-	-	-
Antimony	6.3ND	6.2ND	6.3ND	6.4ND	6.7ND	6.4ND	-	-	-
Arsenic	5.4	1.5	3.7	4.9	1.4	1.8	13	16	16
Barium	253	25	43	44	22	21	350	400	820
Beryllium	0.53ND	0.52ND	0.53ND	0.53ND	0.56ND	0.54ND	7.2	590	47
Cadmium	0.72	0.52ND	0.53ND	0.71	0.56ND	0.54ND	2.5	9.3	7.5
Calcium	36,400	23,900	14,300	83,100	27,700	48,300	-	-	-
Chromium	18.4	6.1	8.6	7.7	5.8	4.9	1	400	-
Cobalt	5.3ND	5.2ND	5.3ND	5.3ND	5.6ND	5.4ND	-	-	-
Copper	247	12.9	28.9	24.4	10.0	9.6ND	50	270	1,720
Iron	12,500	9,380	11,600	10,900	9,880	8,260	-	-	-
Lead	366	19.6	39.4	95.5	12.4	9.7	63	1,000	450
Magnesium	15,100	5,810	4,610	24,500	5,120	6,830	-	-	-
Manganese	377	311	502	362	366	475	1,600	10,000	2,000
Mercury	0.81 *	0.10ND	0.11ND	0.14	0.11ND	0.11ND	0.18	2.8	0.73
Nickel	26.8	8.0	11.3	9.7	8.2	6.2	30	310	130
Potassium	720	620	780	930	870	600	-	-	-
Selenium	3.7ND	3.6ND	3.7ND	3.7ND	3.9ND	3.7ND	3.9	1,500	4
Silver	1.1ND	1.0ND	1.1ND	1.1ND	1.1ND	1.1ND	2	1,500	8.3
Sodium	530ND	520ND	530ND	530ND	560ND	540ND	-	-	-
Thallium	2.6ND	2.6ND	2.6ND	2.7	2.8ND	2.7ND	-	-	-
Vanadium	11.2	9.2	11.4	11.2	9.2	7.7	-	-	-
Zinc	556	43.3	54.0	75.6	39.3	28.8	109	10,000	2,480
Total Cyanide	NA	NA	NA	NA	NA	NA	27	27	40

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates concentration detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on August 6, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 5 Soil Analysis Summary (Biocell) Metals and Total Cyanide Volunteers of America of Western New York – RI Report

214 Lake Avenue Rochester, New York

Metals and Cyanide Page 8 of 8	VOAbiocell107	VOAbiocell108	VOAbiocell109	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Aluminum	3,950	4,260	3,510	-	Commercial	-
	6.2ND	4,200 6.6ND	6.6ND	-	-	-
Antimony				-	-	-
Arsenic	1.8	2.4	1.7	13	16	16
Barium	26	25	27	350	400	820
Beryllium	0.52ND	0.55ND	0.55ND	7.2	590	47
Cadmium	0.52ND	0.55ND	0.55ND	2.5	9.3	7.5
Calcium	14,100	18,900	34,300	-	-	-
Chromium	5.7	6.1	4.9	1	400	-
Cobalt	5.2ND	5.5ND	5.5ND	-	-	-
Copper	12.2	13.6	10.9	50	270	1,720
Iron	8,630	10,600	8,460	-	-	-
Lead	20.9	11.5	11.2	63	1,000	450
Magnesium	5,330	5,330	4,970	-	-	-
Manganese	391	416	365	1,600	10,000	2,000
Mercury	0.10ND	0.11ND	0.11ND	0.18	2.8	0.73
Nickel	6.9	8.7	6.8	30	310	130
Potassium	620	720	680	-	-	-
Selenium	3.6ND	3.8ND	3.8ND	3.9	1,500	4
Silver	1.0ND	1.1ND	1.1ND	2	1,500	8.3
Sodium	520ND	550ND	550ND	-	-	-
Thallium	2.6ND	2.7ND	2.7ND	-	-	-
Vanadium	9.0	9.5	7.9	-	-	-
Zinc	57.4	37.7	30.8	109	10,000	2,480
Total Cyanide	NA	NA	NA	27	27	40

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Restricted Use Soil Cleanup Objective for Commercial Use.

2. Bold type indicates detection above New York State Department of Environmental Conservation Unrestricted Use Soil Cleanup Objective for Residential Use.

3. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

4. Concentrations are expressed in parts per million (ppm) equivalent to MG/KG.

5. Samples collected by GeoQuest Environmental, Inc. on August 6, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).



TABLE 6 Soil Sample Analytical Summary (from Monitoring Wells)Volatile Organic Compounds – Method OLMVolunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 1 of 8	MW-101 (22.0-23 ft.)	MW-102 (22.0-22.5 ft.)	MW-103 (3.5-4.0 ft.)	MW-104 (30.0-32.0 ft.)	MW-105 (26.0-26.3 ft.)	MW-106 (26.0-28.0 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acetone	0.016	0.041B	0.0057JB	0.010JB	0.0091JB	0.029B	100	500	0.05
Benzene	0.016	0.014	0.011	0.015	0.010	0.0013J	2.9	44	0.06
Bromodichloromethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Bromoform	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Bromomethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
2- Butanone (MEK)	0.0035J	0.009J	0.011	0.0026J	0.010	0.0044J	100	500	-
Methyl Tert- Butyl Éther	0.016	0.014	0.011	0.015	0.010	0.013	62	500	-
Carbon Disulfide	0.016	0.002J	0.011	0.015	0.0013J	0.0020J	-	-	-
Carbon Tetrachloride	0.016	0.014	0.011	0.015	0.010	0.013	1.4	22	0.76
Chlorobenzene	0.016	0.014	0.011	0.015	0.010	0.019	100	500	1.1
Chloroethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Chloroform	0.016	0.014	0.011	0.015	0.010	0.013	10	350	0.37
Chloromethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,2- Dibromo-3- Chloropropane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Cyclohexane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Dibromochloromethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,2- Dibromoethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,2- Dichlorobenzene	0.016	0.014	0.011	0.015	0.010	0.0045J	100	500	1.1
1,4- Dichlorobenzene	0.016	0.014	0.011	0.015	0.010	0.0025J	9.8	130	1.8
1,3- Dichlorobenzene	0.016	0.014	0.011	0.015	0.010	0.0013J	17	280	2.4
Dichlorodifluoromethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,1- Dichloroethane	0.016	0.014	0.011	0.0011J	0.010	0.013	19	240	0.27
1,2- Dichloroethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	0.02
1,1- Dichloroethene	0.016	0.014	0.011	0.015	0.010	0.0011J	-	-	0.33
Trans-1,2- Dichloroethene	0.016	0.014	0.011	0.015	0.010	0.013	100	500	0.19
Cis-1,2-Dichloroethene	0.016	0.014	0.011	0.015	0.010	0.013	59	500	0.25
1,2- Dichloropropane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Trans-1,3- Dichloropropene	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Cis-1,3- Dichloropropene	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Ethylbenzene	0.016	0.014	0.011	0.015	0.010	0.013	30	390	1
2- Hexanone	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
lsopropylbenzene	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Methyl Acetate	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Methylcyclohexane	0.016	0.011J	0.011	0.015	0.010	0.013	-	-	-
Methylene Chloride	0.016	0.014	0.011	0.015	0.010	0.013	51	500	0.05
4- Methyl-2- Pentanone	0.016	0.014	0.011	0.010	0.015	0.013	-	-	-

TABLE 6 Soil Sample Analytical Summary (from Monitoring Wells) Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 2 of 8	MW-101 (22-23 ft.)	MW-102 (22-22.5 ft.)	MW-103 (3.5-4.0 ft.)	MW-104 (30.0-32.0ft.)	MW-105 (26.0-26.3 ft.)	MW-106 (26.0 -28.0 ft.)	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Styrene	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,1,2,2- Tetrachloroethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Tetrachloroethene	0.016	0.014	0.011	0.015	0.010	0.013	5.5	150	1.3
Toluene	0.016	0.014	0.00066J	0.015	0.0028J	0.0020J	100	500	0.7
1,2,4- Trichlorobenzene	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,1,1- Trichloroethane	0.016	0.014	0.011	0.015	0.010	0.013	100	500	0.68
1,1,2- Trichloroethane	0.016	0.014	0.011	0.015	0.00063J	0.013	-	-	-
Trichloroethene	0.016	0.014	0.011	0.015	0.010	0.0012J	10	200	0.47
Trichlorofluoromethane	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	0.016	0.014	0.011	0.015	0.010	0.013	-	-	-
Vinyl Chloride	0.016	0.014	0.011	0.015	0.010	0.013	0.21	13	0.02
M+P- Xylene	0.016	0.014	0.011	0.015	0.0020J	0.013	100	500	-
O- Xylene	0.016	0.014	0.011	0.015	0.010	0.013	100	500	1.6

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits.

2. - = No standards available.

3. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.

4. Samples collected by GeoQuest Environmental, Inc. on June 27, 2008, July 2, 2008, July 3, 2008 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

5. Restricted and Unrestricted Use Soil Cleanup Objective values for commercial and residential use from NYSDEC Table 375 – 6.8 (b).



Table 6 Soil Sample Analytical Summary (subsurface)
Volatile Organic Compounds – Method OLMVolunteers of America of Western New York – RI Report (Supplemental Investigation)
214 Lake Avenue Rochester, New York

VOC – 8260 Compound	TP-131 (8.0-10.0 ft.)	TP-132 (8.0-10.0 ft.)	TP-133 (8.0-10.0 ft.)	Unrestricted Use Soil Cleanup Objectives	Restricted Use Soil Cleanup Objectives	Protection of
Page 3 of 8	(0.0-10.0 n.) ppm	ppm	ppm	Residential	Commercial	Groundwater
Acetone	0.100 *	0.190J *	0.025J	100	500	0.05
Benzene	0.0031J	0.039J	ND<0.0072	2.9	44	0.06
Bromodichloromethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Bromoform	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Bromomethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
2- Butanone (MEK)	0.029	ND<1.5	0.0056J	100	500	-
Methyl Tert- Butyl Ether	ND<0.0063	ND<0.750	ND<0.0072	62	500	-
Carbon Disulfide	0.0011J	ND<1.5	0.00086J	100	-	-
Carbon Tetrachloride	ND<0.0063	ND<0.750	ND<0.0072	1.4	22	0.76
Chlorobenzene	ND<0.0063	ND<0.750	ND<0.0072	100	500	1.1
Chloroethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Chloroform	ND<0.0063	ND<0.750	ND<0.0072	10	350	0.37
Chloromethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,2- Dibromo-3- Chloropropane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Cyclohexane	0.0023J	ND<1.5	ND<0.014	-	-	-
Dibromochloromethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,2- Dibromoethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,2- Dichlorobenzene	ND<0.0063	ND<0.750	ND<0.0072	100	500	1.1
1,4- Dichlorobenzene	ND<0.0063	ND<0.750	ND<0.0072	9.8	130	1.8
1,3- Dichlorobenzene	ND<0.0063	ND<0.750	ND<0.0072	17	280	2.4
Dichlorodifluoromethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,1- Dichloroethane	ND<0.0063	ND<0.750	ND<0.0072	19	240	0.27
1,2- Dichloroethane	ND<0.0063	ND<0.750	ND<0.0072	2.3	30	0.02
1,1- Dichloroethene	ND<0.0063	ND<0.750	ND<0.0072	100	500	0.33
Trans-1,2- Dichloroethene	ND<0.0063	ND<0.750	ND<0.0072	100	500	0.19
Cis-1,2-Dichloroethene	ND<0.0063	ND<0.750	ND<0.0072	59	500	0.25
1,2- Dichloropropane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Trans-1,3- Dichloropropene	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Cis-1,3- Dichloropropene	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Ethylbenzene	0.006J	27.000 *	0.025	30	390	1
2- Hexanone	ND<0.013	ND<1.5	ND<0.014	-	-	-
Isopropylbenzene	0.0042J	8.4	0.0054J	-	-	-
Methyl Acetate	0.00078J	ND<1.5	ND<0.014	-	-	-
Methylcyclohexane	0.013	1.3J	0.001J	-	-	-
Methylene Chloride	ND<0.0063	ND<0.750	ND<0.0072	51	500	0.05
4- Methyl-2- Pentanone	ND<0.013	ND<1.5	ND<0.014	-	-	-

Table 6 Soil Sample Analytical Summary (subsurface) Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York - RI Report (Supplemental Investigation)

214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 4 of 8	TP-131 (8.0 – 10.0 ft.) ppm	TP-132 (8.0 – 10.0 ft.) ppm	TP-133 (8.0 – 10.0 ft.) ppm	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Styrene	0.0078	ND<0.750	ND<0.0072	-	-	-
1,1,2,2- Tetrachloroethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Tetrachloroethene	ND<0.0063	ND<0.750	ND<0.0072	5.5	150	1.3
Toluene	0.0072	0.220J	0.00078J	100	500	0.7
1,2,4- Trichlorobenzene	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,1,1- Trichloroethane	ND<0.0063	ND<0.750	ND<0.0072	100	500	0.68
1,1,2- Trichloroethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Trichloroethene	ND<0.0063	ND<0.750	ND<0.0072	10	200	0.47
Trichlorofluoromethane	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	ND<0.0063	ND<0.750	ND<0.0072	-	-	-
Vinyl Chloride	ND<0.0063	ND<0.750	ND<0.0072	0.21	13	0.02
M+P- Xylene	0.016	1.2	0.0014J	100	500	-
O- Xylene	0.012	6.6 *	0.0066J	100	500	1.6

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank. Concentrations shown in **bold type** indicate detection above laboratory method limits.

2. * Concentration exceeds Protection of Groundwater Part 375 – 6.5 values.

3. - = No standards available.

- 4. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.
- 5. Samples collected by Bergmann Associates, Inc. on October 25 and 26, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 6. Restricted Use Soil Cleanup Objective values for commercial use from NYSDEC Table 375 6.8 (b).

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TABLE 6 Soil Analytical Summary (surface)Volatile Organic Compounds – Method OLMVolunteers of America of Western New York

214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 5 of 8	VOA SS-1	VOA SS-2	VOA SS-3	VOA SS-4	VOA SS-5	VOA SS-6	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Acetone	0.012	0.012	0.004J	0.012	0.013	0.011	100	500	0.05
Benzene	0.012	0.012	0.011	0.012	0.013	0.011	2.9	44	0.06
Bromodichloromethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Bromoform	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Bromomethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
2- Butanone (MEK)	0.012	0.012	0.011	0.012	0.013	0.011	100	500	-
Methyl Tert- Butyl Ether	0.012	0.012	0.011	0.012	0.013	0.011	62	500	-
Carbon Disulfide	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Carbon Tetrachloride	0.012	0.012	0.011	0.012	0.013	0.011	1.4	22	0.76
Chlorobenzene	0.012	0.012	0.011	0.012	0.013	0.011	100	500	1.1
Chloroethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Chloroform	0.012	0.012	0.011	0.012	0.013	0.011	10	350	0.37
Chloromethane	0.012	0.012	0.011	0.002J	0.009J	0.001J	-	-	-
1,2- Dibromo-3- Chloropropane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Cyclohexane	0.012	0.0005J	0.011	0.012	0.013	0.011	-	-	-
Dibromochloromethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,2- Dibromoethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,2- Dichlorobenzene	0.012	0.012	0.011	0.012	0.013	0.011	100	500	1.1
1,4- Dichlorobenzene	0.012	0.012	0.011	0.012	0.013	0.011	9.8	130	1.8
1,3- Dichlorobenzene	0.012	0.012	0.011	0.012	0.013	0.011	17	280	2.4
Dichlorodifluoromethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,1- Dichloroethane	0.012	0.012	0.011	0.012	0.013	0.011	19	240	0.27
1,2- Dichloroethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	0.02
1,1- Dichloroethene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	0.33
Trans-1,2- Dichloroethene	0.012	0.012	0.011	0.012	0.013	0.011	100	500	0.19
Cis-1,2-Dichloroethene	0.012	0.012	0.011	0.012	0.013	0.011	59	-	0.25
1,2- Dichloropropane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Trans-1,3- Dichloropropene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Cis-1,3- Dichloropropene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Ethylbenzene	0.012	0.0004J	0.0004J	0.012	0.013	0.011	30	390	1
2- Hexanone	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Isopropylbenzene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Methyl Acetate	0.004J	0.005J	0.006J	0.004J	0.004J	0.005J	-	-	-
Methylcyclohexane	0.012	0.0009J	0.011	0.012	0.013	0.011	-	-	-
Methylene Chloride	0.001J	0.002J	0.001J	0.012	0.004J	0.002J	51	500	0.05
4- Methyl-2- Pentanone	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-

TABLE 6 Soil Analytical Summary (surface) Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 6 of 8	VOA SS-1	VOA SS-2	VOA SS-3	VOA SS-4	VOA SS-5	VOA SS-6	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Styrene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,1,2,2- Tetrachloroethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Tetrachloroethene	0.012	0.012	0.011	0.012	0.013	0.011	5.5	150	1.3
Toluene	0.012	0.002J	0.002J	0.012	0.013	0.011	100	500	0.7
1,2,4- Trichlorobenzene	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,1,1- Trichloroethane	0.012	0.001J	0.011	0.012	0.013	0.011	100	500	0.68
1,1,2- Trichloroethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Trichloroethene	0.012	0.031	0.0004J	0.012	0.013	0.011	10	200	0.47
Trichlorofluoromethane	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	0.012	0.012	0.011	0.012	0.013	0.011	-	-	-
Vinyl Chloride	0.012	0.012	0.011	0.012	0.013	0.011	0.21	13	0.02
M+P- Xylene	0.012	0.001J	0.001J	0.012	0.013	0.011	100	500	-
O- Xylene	0.012	0.001J	0.011	0.012	0.013	0.011	100	500	1.6
TICS total and number of TICS	ND (0)	0.019J (2)	0.029J,JN (2)	0.013JN (1)	ND (0)	0.008J (1)	-	-	-

Notes:

- 1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JN = estimated value and on a TIC compound indicates the presumptive evidence of a particular compound, concentrations shown in bold font indicate detection above laboratory limits.
- 2. = No standards available.
- 3. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.
- 4. Samples collected by GeoQuest Environmental, Inc. on February 17, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 5. Restricted Use Soil Cleanup Objective values for commercial use from NYSDEC Table 375 6.8 (b).



TABLE 6 Soil Sample Analytical Summary (soil piles) Volatile Organic Compounds – Method OLM Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 7 of 8	TP-121 (Soil Pile)	TP-122 (Soil Pile.)	TP-123 (Soil Pile)	TP-124 (Soil Pile)	TP-125 (Soil Pile)	TP-126 (Soil Pile)	Cooler Blank	Unrestricted Use Soil Cleanup Objectives* Residential	Restricted Use Soil Cleanup Objectives* Commercial	Protection of Groundwater
Acetone	0.011	0.003JB	0.011	0.002JB	0.001JB	0.002JB	0.002JB	100	500	0.05
Benzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	2.9	44	0.06
Bromodichloromethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Bromoform	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Bromomethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
2- Butanone (MEK)	0.011	0.011	0.011	0.011	0.011	0.046	0.010	100	500	-
Methyl Tert- Butyl Ether	0.011	0.011	0.011	0.011	0.011	0.011	0.010	62	500	-
Carbon Disulfide	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Carbon Tetrachloride	0.011	0.011	0.011	0.011	0.011	0.011	0.010	1.4	22	0.76
Chlorobenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	1.1
Chloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-		-
Chloroform	0.011	0.011	0.011	0.011	0.011	0.011	0.010	10	350	0.37
Chloromethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,2- Dibromo-3- Chloropropane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Cyclohexane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Dibromochloromethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,2- Dibromoethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,2- Dichlorobenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	1.1
1,4- Dichlorobenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	9.8	130	1.8
1,3- Dichlorobenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	17	280	2.4
Dichlorodifluoromethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,1- Dichloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	19	240	0.27
1,2- Dichloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	0.02
1,1- Dichloroethene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	0.33
Trans-1,2- Dichloroethene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	0.19
Cis-1,2-Dichloroethene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	59	-	0.25
1,2- Dichloropropane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Trans-1,3- Dichloropropene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Cis-1,3- Dichloropropene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Ethylbenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	30	390	1
2- Hexanone	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Isopropylbenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Methyl Acetate	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Methylcyclohexane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Methylene Chloride	0.011	0.011	0.011	0.011	0.011	0.011	0.010	51	500	0.05
4- Methyl-2- Pentanone	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-

TABLE 6 Soil Sample Analytical Summary (soil piles) Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 8 of 8	TP-121 (soil pile)	TP-122 (soil pile)	TP-123 (soil pile)	TP-124 (soil pile)	TP-125 (soil pile)	TP-126 (soil pile)	Cooler Blank	Unrestricted Use Soil Cleanup Objectives Residential	Restricted Use Soil Cleanup Objectives Commercial	Protection of Groundwater
Styrene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,1,2,2- Tetrachloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Tetrachloroethene	0.0007J	0.0006J	0.0008J	0.0008J	0.011	0.011	0.010	5.5	150	1.3
Toluene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	0.7
1,2,4- Trichlorobenzene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,1,1- Trichloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	0.68
1,1,2- Trichloroethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Trichloroethene	0.003J	0.0005J	0.002J	0.0005J	0.011	0.001J	0.010	10	200	0.47
Trichlorofluoromethane	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	0.011	0.011	0.011	0.011	0.011	0.011	0.010	-	-	-
Vinyl Chloride	0.011	0.011	0.011	0.011	0.011	0.011	0.010	0.21	13	0.02
M+P- Xylene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	-
O- Xylene	0.011	0.011	0.011	0.011	0.011	0.011	0.010	100	500	1.6

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold font indicate detection above laboratory limits.

2. - = No standards available.

3. Concentrations are expressed in parts per million (ppm) equivalent to mg/kg or mg/L.

4. Samples collected by GeoQuest Environmental, Inc. on October 31 to November 2, 2007 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

5. Restricted Use Soil Cleanup Objective values for commercial use from NYSDEC Table 375 – 6.8 (b).



TABLE 7 Groundwater Sample Analysis Summary Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 1 of 5	VOAMW-101 (10/30/08)	VOAMWR-101 (10/30/08)	VOAMW-102 (10/31/08)	VOAMWR-102 (10/31/08)	VOAMW-103 (10/31/08)	VOAMW-104 (10/30/08)	NYSDEC Groundwater Standards
Aluminum	4,270	366	19,400	31.0B	31,700	6,310	-
Antimony	0.81B	5.0B	0.57ND	0.57ND	142	0.57ND	3
Arsenic	3.6B	2.7B	13.5	1.9ND	99.2	4.1B	25
Barium	249	20.0B	457	77.0B	1,660	179B	1,000
Beryllium	0.31B	0.05ND	0.84B	0.05ND	3.8B	0.35B	-
Cadmium	0.31B	0.25B	0.50B	0.06ND	4.7B	0.23B	5
Calcium	161,000	39,500	269,000	168,000	368,000	342,000	-
Chromium	11.7	0.90B	25.1	0.27B	121	12.6	50
Cobalt	2.8B	0.25ND	5.0B	0.48B	35.7B	2.9B	-
Copper	78.7	12.3B	55.6	4.0B	8,840	67.2	200
Iron	21,000	460	50,900	529	80,500	31,300	300
Lead	489	6.3B	109	0.99ND	6,600	106	25
Magnesium	87,900	12,300	107,000	104,000	84,300	70,500	-
Manganese	677	45.4	1,120	114	1,060	728	300
Mercury	5.9	0.04B	0.93	0.01B	193	0.59	0.7
Nickel	7.5B	3.6B	13.8B	4.0B	155	8.9B	100
Potassium	14,000	13,700	33,700	14,100	18,000	16,200	-
Selenium	3.5B	2.4B	1.5ND	1.5ND	11.4B	2.5B	10
Silver	1.7B	0.65ND	2.4B	0.74B	12.9	2.0B	50
Sodium	131,000	86,200	499,000	350,000	188,000	225,000	20,000
Thallium	1.3ND	1.3ND	1.3ND	1.3ND	1.3ND	1.3ND	-
Vanadium	11.8B	0.86B	23.3B	0.13ND	125	12.8B	-
Zinc	130	37.2	98.8	2.9ND	4,070	104	-
Total Cyanide	12.4	10.0ND	10.0ND	10.0ND	10.0ND	10.0ND	200

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in bold type indicates detection above New York State Department of Environmental Conservation groundwater standards.

2. Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l.

3. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008, analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

4. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 7 Groundwater Sample Analysis Summary Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 2 of 5	VOAMW-105 (10/31/08)	VOAMW-105 (10/31/08) dup.	VOAMW-106 (10/30/08)	NYSDEC Groundwater Standards
Aluminum	83,100	115,000	3,090	-
Antimony	0.57ND	0.57ND	0.58B	3
Arsenic	35.2	40.6	2.6B	25
Barium	157B	205	282	1,000
Beryllium	4.1B	5.4	0.09B	-
Cadmium	1.1B	1.1B	0.25B	5
Calcium	821,000	916,000	116,000	-
Chromium	86.2	116	8.7B	50
Cobalt	28.5B	36.6B	1.2B	-
Copper	74.5	87.9	47.4	200
Iron	79,500	101,000	10,200	300
Lead	115	145	92.7	25
Magnesium	330,000	366,000	61,400	-
Manganese	1,630	1,860	376	300
Mercury	0.29	0.41	0.75	0.7
Nickel	66.5	87.7	3.6B	100
Potassium	52,000	67,600	18,600	-
Selenium	1.5ND	1.5ND	1.5ND	10
Silver	2.2B	2.0B	0.93B	50
Sodium	61,600	62,500	282,000	20,000
Thallium	8.7B	11.9B	1.3ND	-
Vanadium	94.6	127	6.1B	-
Zinc	71.0	85.0	97.8	-
Total Cyanide	10.0ND	10.0ND	10.0ND	200

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in **bold font indicates detection above New York State** Department of Environmental Conservation groundwater standards.

- 2. Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l.
- 3. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008, analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 4. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 7 Groundwater Sample Analysis Summary Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 3 of 5	VOAMW-101 (7/27/09)	VOAMW- 101Duplicate (7/27/09)	VOAMWR-101 (7/27/09)	VOAMW-102 (7/27/09)	VOAMWR-102 (7/27/09)	VOAMW-103 (7/27/09)	NYSDEC Groundwater Standards
Aluminum	74,700	93,900	120B	7,400	770	47,000	-
Antimony	10B	6B	60ND	60ND	60ND	165	3
Arsenic	144	167	10ND	10ND	10ND	145	25
Barium	1,840	2,110	20B	420	60B	2,310	1,000
Beryllium	6.0	7.2	5.0ND	0.2B	5.0ND	5.4	-
Cadmium	5.6	6.8	5.0ND	0.3B	5.0ND	7.7	5
Calcium	381,000	443,000	222,000	265,000	24,100	340,000	-
Chromium	229	271	10ND	12	4B	163	50
Cobalt	60	72	50ND	50ND	50ND	47B	-
Copper	2,050	2,440	5B	32	8B	11,700	200
Iron	140,000	165,000	220	44,700	1,300	127,000	300
Lead	14,100	16,500	5B	64	8B	11,700	25
Magnesium	152,000	182,000	88,800	100,000	3,600B	78,100	-
Manganese	3,840	4,380	78	1,270	14B	1,410	300
Mercury	1.87	8.93	0.20B	0.21	0.02B	15.1	0.7
Nickel	132	161	40ND	7B	40ND	209	100
Potassium	23,000	27,600	12,400	27,500	4,200B	18,600	-
Selenium	11B	16B	6B	5B	35ND	17B	10
Silver	16	19	10ND	10ND	10ND	18	50
Sodium	125,000	134,000	336,000	628,000	102,000	192,000	20,000
Thallium	25ND	25ND	25ND	25ND	25ND	25ND	-
Vanadium	252	296	50B	12B	50B	170	-
Zinc	3,080	3,660	143	286	915	7,030	-
Total Cyanide	0.010ND	0.010ND	0.010ND	0.010ND	0.010ND	NA	200

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in bold type indicates detection above New York State Department of Environmental Conservation groundwater standards.

- 2. Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l.
- 3. Samples collected by GeoQuest Environmental, Inc. on July 27,2009, analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

4. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 7 Groundwater Sample Analysis Summary Metals and Total Cyanide

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Metals and Cyanide Page 4 of 5	VOAMW-104 (7/27/09)	VOAMW-105 (7/27/09)	VOAMW-106 (7/27/09)	NYSDEC Groundwater Standards
Aluminum	18,800	170,000	36,900	-
Antimony	60ND	60ND	9B	3
Arsenic	29	102	44	25
Barium	450	320	790	1,000
Beryllium	0.9B	8.9	1.6B	-
Cadmium	1.2B	3.7B	4.5B	5
Calcium	350,000	1,820,000	229,000	-
Chromium	37	177	118	50
Cobalt	9B	74	19B	-
Copper	204	204	1,040	200
Iron	104,000	210,000	60,000	300
Lead	364	327	2,010	25
Magnesium	81,900	761,000	76,000	-
Manganese	1,260	3,810	1,690	300
Mercury	0.53	0.20ND	1.24	0.7
Nickel	26B	171	57	100
Potassium	16,600	83,500	23,200	-
Selenium	4B	35ND	12B	10
Silver	10ND	10ND	10ND	50
Sodium	200,000	58,700	351,000	20,000
Thallium	25ND	25ND	25ND	-
Vanadium	41B	180	81	-
Zinc	313	163	1,500	-
Total Cyanide	NA	NA	NA	200

Notes:

1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, - = No standard. Concentration in bold type indicates detection above New York State Department of Environmental Conservation groundwater standards.

- Concentrations of metals are expressed in parts per billion (ppb) equivalent to ug/l. 2.
- 3.
- Samples collected by GeoQuest Environmental, Inc. on July 27, 2009, analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145). NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000. 4.



Table 7 Groundwater Sample Analysis Summary Metals

Volunteers of America of Western New York – Supplemental Investigation 214 Lake Avenue Rochester, New York

Metals	MW-107	NYSDEC Groundwater
Page 5 of 5	ppb	Standards (ppb)
Aluminum	52,100	
Antimony	154	3
Arsenic	160	25
Barium	1,370	1,000
Beryllium	ND<5.0	
Cadmium	6.2	5
Calcium	393,000	
Chromium	319	50
Cobalt	ND<50.0	
Copper	1,360	200
Iron	127,000	300
Lead	4,230	25
Magnesium	101,000	
Manganese	1,920	300
Mercury	29.2	0.7
Nickel	209	100
Potassium	20,200	
Selenium	21.8	10
Silver	ND<10.0	50
Sodium	178,000	20,000
Thallium	ND<10.0	
Vanadium	161	
Zinc	3,420	

Notes:

- 1. NA = Not analyzed, ND = Less than laboratory detection limits, B = metal detected in blank, -- = No standard. Concentration in shaded background and bold type indicates detection above New York State Department of Environmental Conservation Part 703.5 GA Groundwater Quality Standards and June 1998 Division of Technical and Operational Guidance Series T.O.G.S. 1.1.1 and as amended April 2000.
- 2. Concentrations are expressed in parts per billion (ppb) equivalent to ug/L.
- 3. Sample collected by Bergmann Associates, Inc. on November 4, 2010 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

TABLE 8 Groundwater Sample Analytical SummarySemi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi-volatile Organic	VOAMW - 101	VOAMWR - 101	VOAMW - 102	VOAMWR - 102	VOAMW – 103	VOAMW – 104	NYSDEC
Compounds	VOANNY - 101		V 0741111 - 102	VOANNIN - 102	VOANIW - 105	VOANNY - 104	Groundwater
Page 1 of 4	10/30/08	10/30/08	10/31/08	10/31/08	10/31/08	10/30/08	Standards
Acenaphthene	9ND	9ND	9ND	9ND	2.0J	9ND	20
Acenaphthylene	9ND	9ND	9ND	9ND	9ND	9ND	-
Acetophenone	9ND	9ND	9ND	9ND	9ND	9ND	-
Anthracene	1.0J	9ND	9ND	9ND	9ND	9ND	50
Atrazine	9ND	9ND	9ND	9ND	9ND	9ND	7.5
Benzaldehyde	9ND	9ND	9ND	9ND	9ND	9ND	-
Benzo (a) Anthracene	2.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Benzo (a) Pyrene	2.0J	9ND	9ND	9ND	2.0J	1.0J	ND
Benzo (b) Fluoranthene	1.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Benzo (g,h,i) Perylene	1.0J	9ND	9ND	9ND	2.0J	9ND	-
Benzo (k) Fluoranthene	1.0J	9ND	9ND	9ND	9ND	9ND	0.002
Biphenyl	9ND	9ND	9ND	9ND	9ND	9ND	-
Butyl Benzyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Di-N-Butylphthalate	3.0JB	3.0JB	3.0JB	3.0JB	3.0JB	3.0JB	50
Caprolactam	24ND	3.0J	9ND	9ND	8.0J	9ND	-
Carbazole	9ND	9ND	9ND	9ND	9ND	9ND	-
Indeno (1,2,3-cd) Pyrene	1.0J	9ND	9ND	9ND	1.0J	9ND	0.002
4-Chloroaniline	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (-2-Chloroethoxy) Methane	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (-2-Chloroethyl) Ether	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2-Chloronaphthalene	9ND	9ND	9ND	9ND	9ND	9ND	10
2-Chlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,2'- Oxybis (1-Chloropropane)	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Chrysene	2.0J	9ND	9ND	9ND	1.0J	1.0J	0.002
Dibenz (a,h) Anthracene	9ND	9ND	9ND	9ND	9ND	9ND	-
Dibenzofuran	9ND	9ND	9ND	9ND	2.0J	9ND	-
3,3'- Dichlorobenzidine	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2,4- Dichlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
Diethylphthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Dimethyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
2,4- Dimethylphenol	24ND	24ND	24ND	24ND	1.0J	9ND	1.0
2,4- Dinitrophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,4- Dinitrotoluene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2,6- Dinitrotoluene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Bis (2-Ethylhexyl) Phthalate	2.0JB	4.0JB	3.0JB	9.0JB	4.0JB	3.0JB	5.0

TABLE 8 Groundwater Sample Analytical SummarySemi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

Semi – volatile Organic Compounds Page 2 of 4	VOAMW - 101 10/30/08	VOAMWR - 101 10/30/08	VOAMW - 102 10/31/08	VOAMWR - 102 10/31/08	VOAMW – 103 10/31/08	VOAMW – 104 10/30/08	NYSDEC Groundwater Standards
Fluoranthene	4.0J	9ND	9ND	9ND	9ND	2.0J	50
Fluorene	9ND	9ND	9ND	9ND	9ND	9ND	50
Hexachlorobenzene	9ND	9ND	9ND	9ND	9ND	9ND	0.04
Hexachlorobutadiene	9ND	9ND	9ND	9ND	9ND	9ND	0.5
Hexachlorocyclopentadiene	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Hexachloroethane	9ND	9ND	9ND	9ND	9ND	9ND	5.0
Isophorone	9ND	9ND	9ND	9ND	9ND	9ND	5.0
2- Methylnaphthalene	9ND	9ND	9ND	9ND	2.0J	9ND	-
4,6- Dinitro-2- Methylphenol	24ND	24ND	24ND	24ND	24ND	9ND	1.0
4- Chloro-3- Methylphenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2- Methylphenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
4- Methylphenol	36.0	9ND	9ND	9ND	3.0J	1.0J	1.0
Naphthalene	2.0J	9ND	9ND	9ND	6.0J	9ND	10
2- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
3- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
4- Nitroaniline	24ND	24ND	24ND	24ND	24ND	24ND	5.0
Nitrobenzene	9ND	9ND	9ND	9ND	9ND	9ND	0.4
2- Nitrophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
4- Nitrophenol	24ND	24ND	24ND	24ND	24ND	24ND	1.0
N- Nitrosodiphenylamine	9ND	9ND	9ND	9ND	9ND	9ND	50
Di-n-octyl Phthalate	9ND	9ND	9ND	9ND	9ND	9ND	50
Pentachlorophenol	24ND	24ND	24ND	24ND	24ND	24ND	5.0
Phenanthrene	4.0J	9ND	9ND	9ND	3.0J	1.0J	5.0
Phenol	6.0J	9ND	9ND	9ND	2.0J	9ND	1.0
4- Bromophenyl- Phenylether	9ND	9ND	9ND	9ND	9ND	9ND	-
4- Chlorophenyl- Phenylether	9ND	9ND	9ND	9ND	9ND	9ND	-
N- nitroso-di-n- Propylamine	9ND	9ND	9ND	9ND	9ND	9ND	-
Pyrene	3.0J	9ND	9ND	9ND	2.0J	2.0J	5.0
2,4,6- Trichlorophenol	9ND	9ND	9ND	9ND	9ND	9ND	1.0
2,4,5- Trichlorophenol	24ND	24ND	24ND	24ND	24ND	24ND	1.0
Total TICs Concentration and Number of TICs Detected	53.0J,JB (16)	8.0 J,JB (3)	12.0 J,JB,JN (5)	2.0JB (1)	18.0 J,JB,JN (7)	40.0 J,JB,JN (8)	NA

Notes: Groundwater samples collected on October 300, 2008 and October 31, 2008 by GeoQuest Environmental,

Inc. concentrations expressed in parts per billion (ppb). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed NYSDEC Groundwater standard. See laboratory case narrative page 3 for **J**, **JN**, **JB** estimated values. - = No standard, ND = non detection above limits. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

TABLE 8 Groundwater Sample Analytical Summary Semi-Volatile Organic Compounds – Method OLM 4.2 Volunteers of America of Western New York

214 Lake Avenue Rochester, New York

Semi-volatile Organic Compounds	VOAMW - 105	VOAMW - 105	VOAMW - 106	NYSDEC Groundwater
Page 3 of 4	10/31/08	10/30/08 dup.	10/30/08	Standards
Acenaphthene	9ND	9ND	3.0J	20
Acenaphthylene	9ND	9ND	9ND	-
Acetophenone	9ND	9ND	9ND	-
Anthracene	9ND	9ND	4.0J	50
Atrazine	9ND	9ND	9ND	7.5
Benzaldehyde	9ND	9ND	9ND	-
Benzo (a) Anthracene	9ND	9ND	10.0J	0.002
Benzo (a) Pyrene	9ND	9ND	10.0J	ND
Benzo (b) Fluoranthene	9ND	9ND	7.0J	0.002
Benzo (g,h,i) Perylene	9ND	9ND	6.0J	-
Benzo (k) Fluoranthene	9ND	9ND	8.0J	0.002
Biphenyl	9ND	9ND	9ND	-
Butyl Benzyl Phthalate	9ND	9ND	9ND	50
Di-N-Butylphthalate	2.0JB	3.0JB	3.0JB	50
Caprolactam	24ND	24ND	24ND	-
Carbazole	9ND	9ND	9ND	-
Indeno (1,2,3-cd) Pyrene	9ND	9ND	5.0J	0.002
4-Chloroaniline	9ND	9ND	9ND	5.0
Bis (-2-Chloroethoxy) Methane	9ND	9ND	9ND	5.0
Bis (-2-Chloroethyl) Ether	9ND	9ND	9ND	1.0
2-Chloronaphthalene	9ND	9ND	9ND	10
2-Chlorophenol	9ND	9ND	9ND	1.0
2,2'- Oxybis (1-Chloropropane)	9ND	9ND	9ND	5.0
Chrysene	9ND	9ND	9.0J	0.002
Dibenz (a,h) Anthracene	9ND	9ND	9ND	-
Dibenzofuran	9ND	9ND	9ND	-
3,3'- Dichlorobenzidine	9ND	9ND	9ND	5.0
2,4- Dichlorophenol	9ND	9ND	9ND	1.0
Diethylphthalate	9ND	9ND	9ND	50
Dimethyl Phthalate	9ND	9ND	9ND	50
2,4- Dimethylphenol	24ND	24ND	24ND	1.0
2,4- Dinitrophenol	9ND	9ND	9ND	1.0
2,4- Dinitrotoluene	9ND	9ND	9ND	5.0
2,6- Dinitrotoluene	9ND	9ND	9ND	5.0
Bis (2-Ethylhexyl) Phthalate	2.0JB	2.0JB	5.0JB	5.0

TABLE 8 Groundwater Sample Analytical Summary

Semi-Volatile Organic Compounds – Method OLM 4.2

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

	214 Lake Avenue	Rochester, New York		
Semi – volatile Organic Compounds Page 4 of 4	VOAMW - 105 10/31/08	VOAMW - 105 10/31/08 dup.	VOAMW - 106 10/30/08	NYSDEC Groundwater Standards
Fluoranthene	9ND	9ND	22.0	50
Fluorene	9ND	9ND	3.0J	50
Hexachlorobenzene	9ND	9ND	9ND	0.04
Hexachlorobutadiene	9ND	9ND	9ND	0.5
Hexachlorocyclopentadiene	9ND	9ND	9ND	5.0
Hexachloroethane	9ND	9ND	9ND	5.0
Isophorone	9ND	9ND	9ND	5.0
2- Methylnaphthalene	9ND	9ND	9ND	-
4,6- Dinitro-2- Methylphenol	24ND	24ND	24ND	1.0
4- Chloro-3- Methylphenol	9ND	9ND	9ND	1.0
2- Methylphenol	9ND	9ND	9ND	1.0
4- Methylphenol	9ND	9ND	9ND	1.0
Naphthalene	9ND	9ND	4.0J	10
2- Nitroaniline	24ND	24ND	24ND	5.0
3- Nitroaniline	24ND	24ND	24ND	5.0
4- Nitroaniline	24ND	24ND	24ND	5.0
Nitrobenzene	9ND	9ND	9ND	0.4
2- Nitrophenol	9ND	9ND	9ND	1.0
4- Nitrophenol	24ND	24ND	24ND	1.0
N- Nitrosodiphenylamine	9ND	9ND	9ND	50
Di-n-octyl Phthalate	9ND	9ND	9ND	50
Pentachlorophenol	24ND	24ND	24ND	5.0
Phenanthrene	9ND	2.0J	11.0J	5.0
Phenol	9ND	9ND	9ND	1.0
4- Bromophenyl- Phenylether	9ND	9ND	9ND	-
4- Chlorophenyl- Phenylether	9ND	9ND	9ND	-
N- nitroso-di-n- Propylamine	9ND	9ND	9ND	-
Pyrene	9ND	9ND	18.0J	5.0
2,4,6- Trichlorophenol	9ND	9ND	9ND	1.0
2,4,5- Trichlorophenol	24ND	24ND	24ND	1.0
Total TICs Concentration and Number of TICs Detected	2.0 JB (1)	9.0 J,JB,JN (4)	60.0 J,JB,JN, (9)	NA

Notes: Groundwater samples collected on October 30, 2008 and October 31, 2008 by GeoQuest Environmental, Inc. All concentrations expressed in parts per billion (ppb). Bold type indicates concentration above the laboratory detection limit and shaded concentrations exceed NYSDEC groundwater standard. See laboratory case narrative page 3 for J, JN, JB estimated values. - = No standard, ND = non-detection above detection limits. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.

TABLE 9 Groundwater Analytical SummaryVolatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 1 of 8	VOAMW-101 (10/30/08)	VOAMWR-101 (10/30/08)	VOAMW-102 (10/31/08)	VOAMWR-102 (10/31/08)	VOAMW-103 (10/31/08)	VOAMW-104 (10/30/08)	NYDEC Groundwater Standard
Acetone	2.0JB	10ND	10ND	1.0JB	2.0JB	1.0JB	50
Benzene	10ND	10ND	10ND	10ND	10ND	10ND	0.7
Bromodichloromethane	10ND	3.0J	10ND	10ND	10ND	10ND	50
Bromoform	10ND	10ND	10ND	10ND	10ND	10ND	50
Bromomethane	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	10ND	10ND	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	10ND	10ND	31.0	10ND	10ND	10
Carbon Disulfide	10ND	10ND	10ND	0.9J	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	10ND	10ND	10ND	10ND	5
Chlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroform	10ND	6.0J	10ND	10ND	10ND	10ND	7
Chloromethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	10ND	10ND	10ND	10ND	-
Cyclohexane	10ND	10ND	10ND	10ND	10ND	10ND	-
Dibromochloromethane	10ND	1.0J	10ND	10ND	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	10ND	10ND	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
1,4- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
1,3- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1- Dichloroethane	10ND	10ND	10ND	10ND	10ND	0.7J	5
1,2- Dichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	10ND	1.0J	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	5
Ethylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Hexanone	10ND	10ND	10ND	10ND	10ND	10ND	50
Isopropylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	-
Methyl Acetate	10ND	10ND	10ND	10ND	10ND	10ND	-
Methylcyclohexane	10ND	0.4J	3.0J	10ND	10ND	10ND	-
Methylene Chloride	10ND	10ND	10ND	10ND	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	10ND	10ND	10ND	10ND	5

TABLE 9 Groundwater Analytical Summary Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 2 of 8	VOAMW-101 (10/30/08)	VOAMWR-101 (10/30/08)	VOAMW-102 (10/31/08)	VOAMWR-102 (10/31/08)	VOAMW-103 (10/31/08)	VOAMW-104 (10/30/08)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Toluene	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	0.3J	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	5
Tentatively Indentified Compounds Total and number detected	ND	ND	39J,JN (5)	8J (1)	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standards.

- 2. = No standards available and ND = non detection above the laboratory limits.
- 3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
- 4. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 9 Groundwater Analytical SummaryVolatile Organic Compounds – Method OLMVolunteers of America of Western New York

214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 3 of 8	VOAMW-105 (10/31/08)	VOAMW-105 (10/31/08)dup.	VOAMW-106 (10/30/08)	TRIP BLANK (10/30/08)	NYDEC Groundwater Standard
Acetone	10ND	10ND	2.0JB	0.7JB	50
Benzene	10ND	10ND	10ND	10ND	0.7
Bromodichloromethane	10ND	10ND	10ND	10ND	50
Bromoform	10ND	10ND	10ND	10ND	50
Bromomethane	10ND	10ND	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	10ND	10ND	10ND	10
Carbon Disulfide	10ND	10ND	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	10ND	10ND	5
Chlorobenzene	10ND	10ND	2.0J	10ND	5
Chloroethane	10ND	10ND	10ND	10ND	5
Chloroform	10ND	10ND	10ND	10ND	7
Chloromethane	10ND	10ND	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	10ND	10ND	-
Cyclohexane	10ND	10ND	10ND	10ND	-
Dibromochloromethane	10ND	10ND	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	10ND	0.4J	10ND	3
1,4- Dichlorobenzene	10ND	10ND	10ND	10ND	3
1,3- Dichlorobenzene	10ND	10ND	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	10ND	10ND	-
1,1- Dichloroethane	10ND	10ND	10ND	10ND	5
1,2- Dichloroethane	10ND	10ND	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	10ND	10ND	5
Ethylbenzene	10ND	10ND	10ND	10ND	5
2- Hexanone	10ND	10ND	10ND	10ND	50
lsopropylbenzene	10ND	10ND	10ND	10ND	-
Methyl Acetate	10ND	10ND	10ND	10ND	-
Methylcyclohexane	0.3J	0.4J	10ND	10ND	-
Methylene Chloride	10ND	10ND	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	10ND	10ND	5

TABLE 9 Groundwater Analytical Summary Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 4 of 8	VOAMW-105 (10/31/08)	VOAMW-105 (10/31/08)dup.	VOAMW-106 (10/30/08)	TRIP BLANK (10/30/08)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	5
Toluene	0.3J	0.4J	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	5
Tentatively Indentified Compounds Total and number detected	ND	ND	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory detection limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standard.

- 2. = No standards available and ND = non detection above the laboratory detection limits.
- 3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
- 4. Samples collected by GeoQuest Environmental, Inc. on October 30, 2008 and October 31, 2008 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 9 Groundwater Analytical SummaryVolatile Organic Compounds – Method OLMVolunteers of America of Western New York

214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 5 of 8	VOAMW-101 (7/27/09)	VOAMW- 101Duplicate (7/27/09)	VOAMWR-101 (7/27/09)	VOAMW-102 (7/27/09)	VOAMWR-102 (7/27/09)	VOAMW-103 (7/27/09)	VOAMW-104 (7/27/09)	NYDEC Groundwater Standard
Acetone	1.4J	3.6J	2.1J	4.2J	2.0J	1.3J	1.3J	50
Benzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	0.7
Bromodichloromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	50
Bromoform	10ND	10ND	10ND	10ND	10ND	10ND	10ND	50
Bromomethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	10ND	10ND	10ND	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	10ND	1.7J	10ND	10ND	10ND	10ND	10
Carbon Disulfide	10ND	10ND	10ND	10ND	0.38J	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Chlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Chloroform	10ND	10ND	10ND	10ND	10ND	10ND	10ND	7
Chloromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Cyclohexane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Dibromochloromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	3
1,4- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	3
1,3- Dichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1- Dichloroethane	10ND	10ND	0.91J	10ND	10ND	10ND	0.68J	5
1,2- Dichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	0.35J	10ND	10ND	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	8.2J	10ND	10ND	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Ethylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
2- Hexanone	10ND	10ND	10ND	10ND	10ND	10ND	10ND	50
Isopropylbenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Methyl Acetate	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Methylcyclohexane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Methylene Chloride	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5

TABLE 9 Groundwater Analytical Summary Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 6 of 8	VOAMW-101 (7/27/09)	VOAMW-101 Duplicate (7/27/09)	VOAMWR-101 (7/27/09)	VOAMW-102 (7/27/09)	VOAMWR-102 (7/27/09)	VOAMW-103 (7/27/09)	VOAMW-104 (7/27/09)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Tetrachloroethene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Toluene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichloroethene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	10ND	10ND	10ND	10ND	10ND	-
Vinyl Chloride	10ND	10ND	10ND	10ND	10ND	10ND	10ND	2
M+P- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
O- Xylene	10ND	10ND	10ND	10ND	10ND	10ND	10ND	5
Tentatively Indentified Compounds Total and number detected	ND	ND	ND	6.1JN (1)	9.4JN (1)	ND	ND	NA

Notes:

1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standards.

- 2. = No standards available and ND = non detection above the laboratory limits.
- 3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
- 4. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).

5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



TABLE 9 Groundwater Analytical SummaryVolatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 7 of 8	VOAMW-105 (7/27/09)	VOAMW-106 (7/27/09)	NYDEC Groundwater Standard
Acetone	2.6J	1.5J	50
Benzene	10ND	10ND	0.7
Bromodichloromethane	10ND	10ND	50
Bromoform	10ND	10ND	50
Bromomethane	10ND	10ND	5
2- Butanone (MEK)	10ND	10ND	50
Methyl Tert- Butyl Ether	10ND	0.41J	10
Carbon Disulfide	10ND	10ND	5
Carbon Tetrachloride	10ND	10ND	5
Chlorobenzene	10ND	22	5
Chloroethane	10ND	10ND	5
Chloroform	10ND	10ND	7
Chloromethane	10ND	10ND	5
1,2- Dibromo-3- Chloropropane	10ND	10ND	-
Cyclohexane	10ND	10ND	-
Dibromochloromethane	10ND	10ND	50
1,2- Dibromoethane	10ND	10ND	0.6
1,2- Dichlorobenzene	10ND	1.7J	3
1,4- Dichlorobenzene	10ND	1.2J	3
1,3- Dichlorobenzene	10ND	10ND	3
Dichlorodifluoromethane	10ND	10ND	-
1,1- Dichloroethane	10ND	0.37J	5
1,2- Dichloroethane	10ND	10ND	5
1,1- Dichloroethene	10ND	10ND	5
Trans-1,2- Dichloroethene	10ND	10ND	5
Cis-1,2-Dichloroethene	10ND	10ND	5
1,2- Dichloropropane	10ND	10ND	5
Trans-1,3- Dichloropropene	10ND	10ND	5
Cis-1,3- Dichloropropene	10ND	10ND	5
Ethylbenzene	10ND	10ND	5
2- Hexanone	10ND	10ND	50
Isopropylbenzene	10ND	10ND	-
Methyl Acetate	10ND	10ND	-
Methylcyclohexane	10ND	10ND	-
Methylene Chloride	10ND	10ND	5
4- Methyl-2- Pentanone	10ND	10ND	5

TABLE 9 Groundwater Analytical Summary Volatile Organic Compounds – Method OLM

Volunteers of America of Western New York 214 Lake Avenue Rochester, New York

VOC – 8260 Compounds Page 8 of 8	VOAMW-105 (7/27/09)	VOAMW-106 (7/27/09)	NYSDEC Groundwater Standard
Styrene	10ND	10ND	5
1,1,2,2- Tetrachloroethane	10ND	10ND	5
Tetrachloroethene	10ND	10ND	5
Toluene	10ND	10ND	5
1,2,4- Trichlorobenzene	10ND	10ND	-
1,1,1- Trichloroethane	10ND	10ND	5
1,1,2- Trichloroethane	10ND	10ND	5
Trichloroethene	10ND	10ND	5
Trichlorofluoromethane	10ND	10ND	-
1,1,2-Trichloro-1,2,2- Trifluoroeth	10ND	10ND	-
Vinyl Chloride	10ND	10ND	2
M+P- Xylene	10ND	10ND	5
O- Xylene	10ND	10ND	5
Tentatively Indentified Compounds Total and number detected	ND	ND	NA

Notes:

- 1. NA = Not Applicable, ND = Less than laboratory detection limits, J = estimated value, JB = estimated value and compound detected in blank, concentrations shown in bold type indicate detection above laboratory limits. Concentrations in bold type and shaded exceed the NYSDEC groundwater standard.
- 2. = No standards available and ND = non detection above the laboratory detection limits.
- 3. Concentrations are expressed in parts per billion (ppb) equivalent to ug/l.
- 4. Samples collected by GeoQuest Environmental, Inc. on July 27, 2009 and analyzed by Columbia Analytical Services, Rochester, New York (Lab ID # 10145).
- 5. NYSDEC groundwater standards 703.5 and June 1998 Division of Technical and Operational guidance series T.O.G.S. 1.1.1 and as amended April 2000.



Table 10 – XRF Metals Field Screen Results

Metals	TP-128	TP-129	TP-130	TP-131	TP-132	TP-133	TP-134
	(12 -14 ft.)	(1.5 - 2 ft.)	(18 -20 ft.)	(8 -10 ft.)	(4 -6 ft.)	(6 -8 ft.)	(18 -20 ft.)
Arsenic	< LOD	34.86	< LOD	< LOD	< LOD	136.89	136.2
Chromium	< LOD	< LOD	< LOD	< LOD	< LOD	< LOD	449.46
Copper	404.55	171.1	56.32	248.07	< LOD	< LOD	< LOD
Iron	22,981,7	54,621.32	31,522.28	18,236.69	14,422.69	73,483.41	60,796.38
Lead	358.36	192.04	71.09	281.46	87.77	< LOD	30.87
Manganese	1,395.45	562.11	< LOD	487.85	< LOD	< LOD	< LOD
Mercury	< LOD	< LOD	< LOD	< LOD	< LOD	< LOD	< LOD
Molybdenum	< LOD	< LOD	< LOD	< LOD	< LOD	< LOD	< LOD
Nickel	55.54	66.83	< LOD	189.88	< LOD	< LOD	98.37
Rubidium	34.38	26.35	42.51	38.28	33.11	30.49	37.8
Selenium	< LOD	8.83	< LOD	< LOD	< LOD	< LOD	< LOD
Strontium	96.53	87.95	61.73	102.58	125.28	145.82	146.17
Zinc	502.02	142.52	< LOD	95.75	< LOD	< LOD	< LOD
Zirconium	317.46	256.29	297.98	261.02	187.5	404.81	348.78

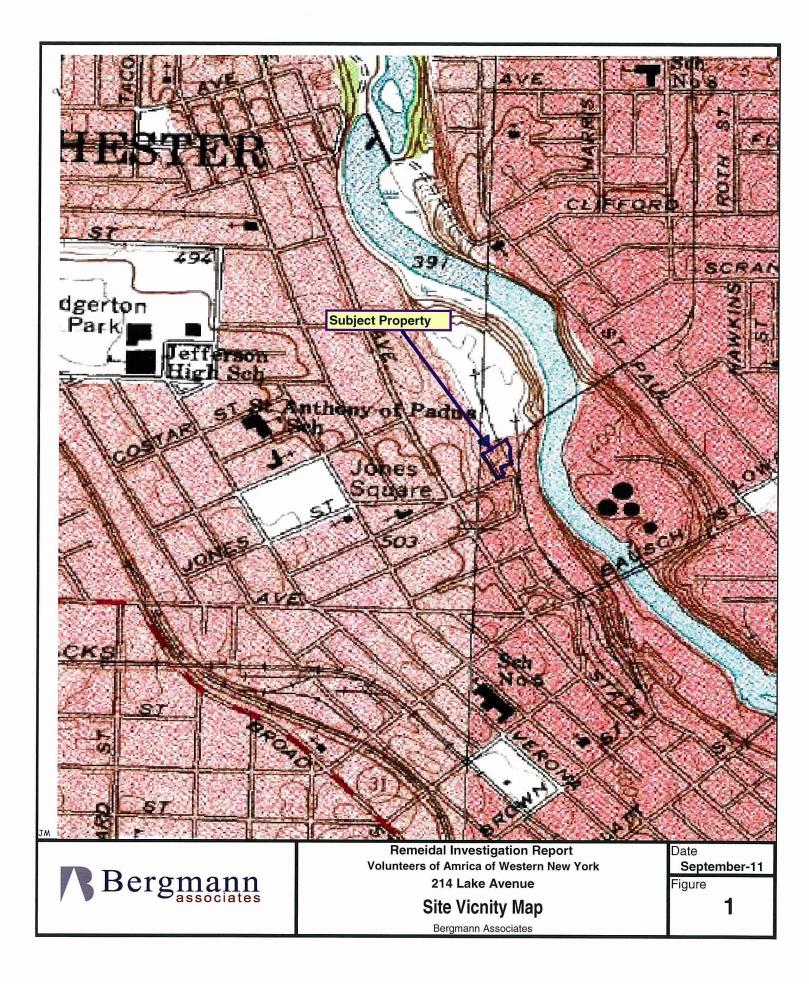
Volunteers of America of Western New York - Supplemental Investigation 214 Lake Avenue Rochester, New York

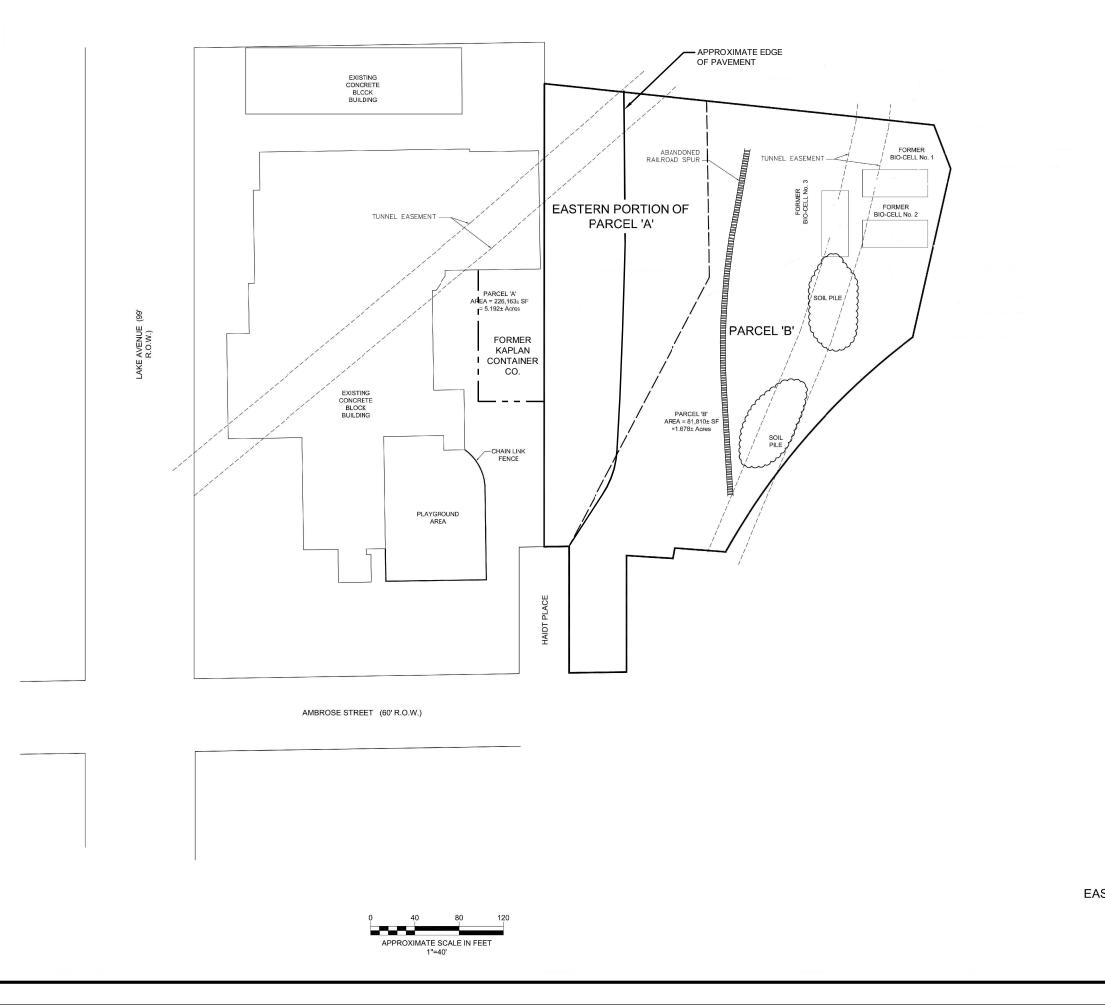
Notes:

- 1. Measurements were taken with an Olympus Innov-x DP-4000 hand held XRF Analyzer from random test pit soil screen depths intervals on October 25 and 26, 2010 for the purpose of field screening excavated soils.
- 2. There are no NYSDEC criteria for comparing these field screen results.
- 3. <LOD = non detection.

C:\Documents and Settings\ifredericks\Desktop\Work For\DeMeo\VOA XRF metals_subsurfacesoiltestpitsSIFinalreposrtp1(TP).docx

Figures







LEGEND:

ABANDONED RAILROAD SPUR
 APPROXIMATE EDGE OF PAVEMENT

EXISTING BUILDING

- PROJECT SITE BOUNDARY
- ----- EAST BOUNDARY OF PARCEL 'A'
- AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL

FIG. 2

- SOIL PILE
- - FORMER KAPLAN CONTAINER CO.

ALL LOCATIONS ARE APPLICABLE



SITE PLAN

FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK SEPTEMBER 22, 2009





LEGEND:

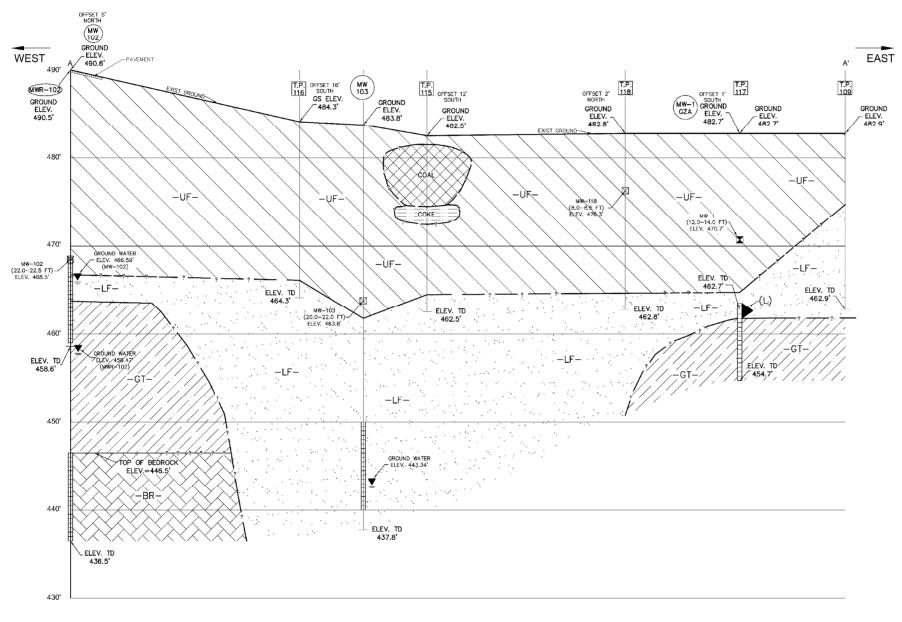
- ABANDONED RAILROAD SPUR
 - APPROXIMATE EDGE OF PAVEMENT
 - EXISTING BUILDING
 - PROJECT SITE BOUNDARY
- - EAST BOUNDARY OF PARCEL 'A'
 - AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL
- SOIL PILE
- APPROXIMATE CENTERLINE OF FORMER RAVINE
- APPROXIMATE EDGE OF FORMER RAVINE FROM 1875 CITY OF ROCHESTER NY MAP.

FIG. 2a



APPROXIMATE LOCATION OF FORMER RAVINE

FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK SEPTEMBER 22, 2009



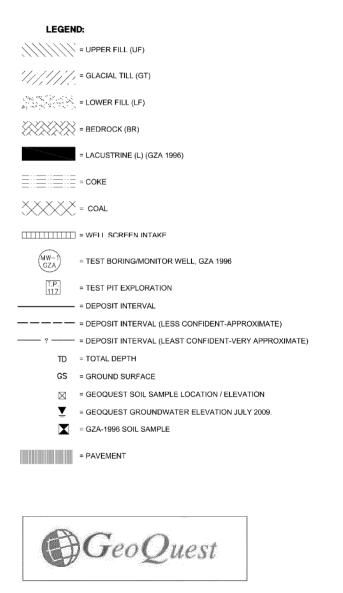
GEOLOGIC CROSS SECTION A TO A'

SCALE:

HORIZONTAL SCALE = 1" = 20' VERTICAL SCALE = 1" = 5' (VERTICAL EXAGGERATION IS 4x)

NOTES:

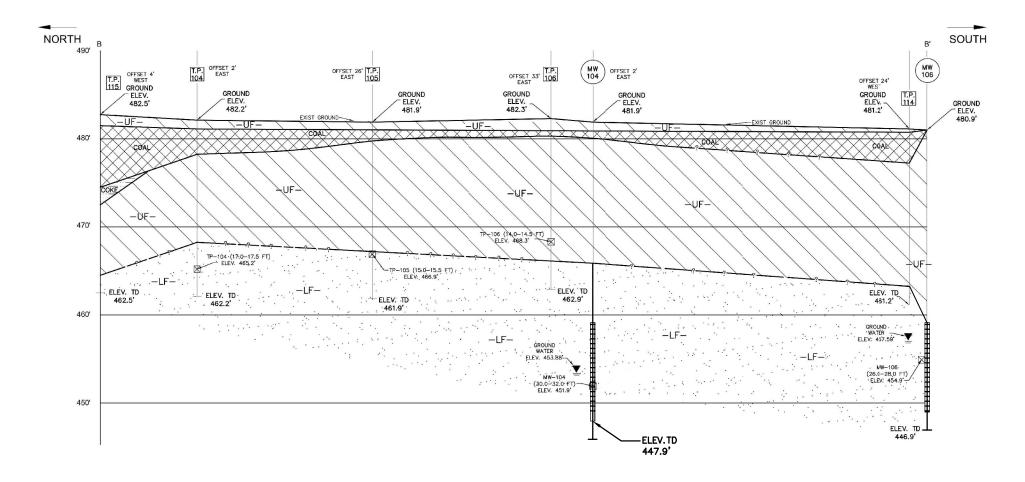
- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SEE TEST BORING LOGS AND ENVIRONMENTAL TEST PIT LOGS FOR SUBSURFACE DESCRIPTIONS.



GEOLOGIC CROSS SECTION A TO A'

FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK DECEMBER 16, 2009

FIG. 3



GEOLOGIC CROSS SECTION B TO B'

NOTES:

1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.

2. SEE TEST BORING LOGS AND ENVIRONMENTAL TEST PIT LOGS FOR SUBSURFACE DESCRIPTIONS.

SCALE:

HORIZONTAL SCALE = 1" = 20'

VERTICAL SCALE = 1" = 5' (VERTICAL EXAGGERATION IS 4x)

LEGEN	ID:
///////	S = UPPER FILL (UF)
11/1/1/	, = GLACIAL TILL (GT)
ana na mangangang ang ang ang ang ang ang ang ang ang ang	_ = LOWER FILL (LF)
	= BEDROCK (BR)
	= COKE
XXXXX	<pre>< = COAL</pre>
] = WELL SCREEN INTAKE
T.P. 117	= TEST PIT EXPLORATION
	- = DEPOSIT INTERVAL
	- = DEPOSIT INTERVAL (LESS CONFIDENT-APPROXIMATE)
?	- = DEPOSIT INTERVAL (LEAST CONFIDENT-VERY APPROXIMATE)
TD	= TOTAL DEPTH
GS	= GROUND SURFACE
\boxtimes	= GEOQUEST SOIL SAMPLE LOCATION / ELEVATION
Ţ	= GEOQUEST GROUNDWATER ELEVATION JULY 2009.



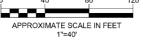
GEOLOGIC CROSS SECTION B TO B'

FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK DECEMBER 16, 2009

FIG. 4



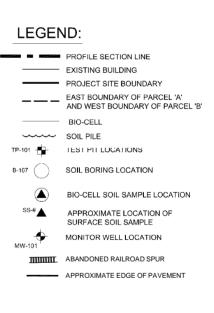
OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.





NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. LOCATIONS SURVEYED ON OCT. 12, 2009, BY PARRONE ENGINEERING.

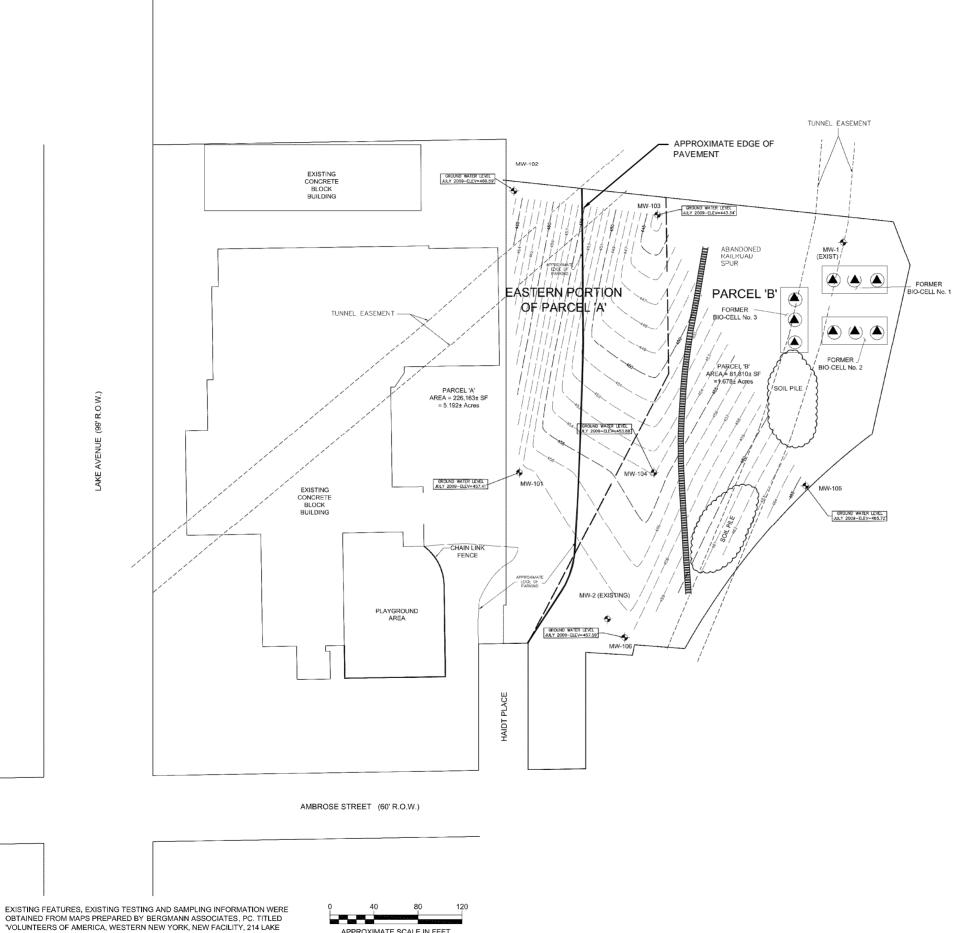




GEOLOGIC SECTION LINE PLAN A TO A' & B TO B'

FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK NOVEMBER 23, 2009





VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.

APPROXIMATE SCALE IN FEET 1"=40'



NOTES:

1. GROUNDWATER LEVEL INFORMATION COLLECTED FROM MONITOR WELLS ON JULY 27, 2009.

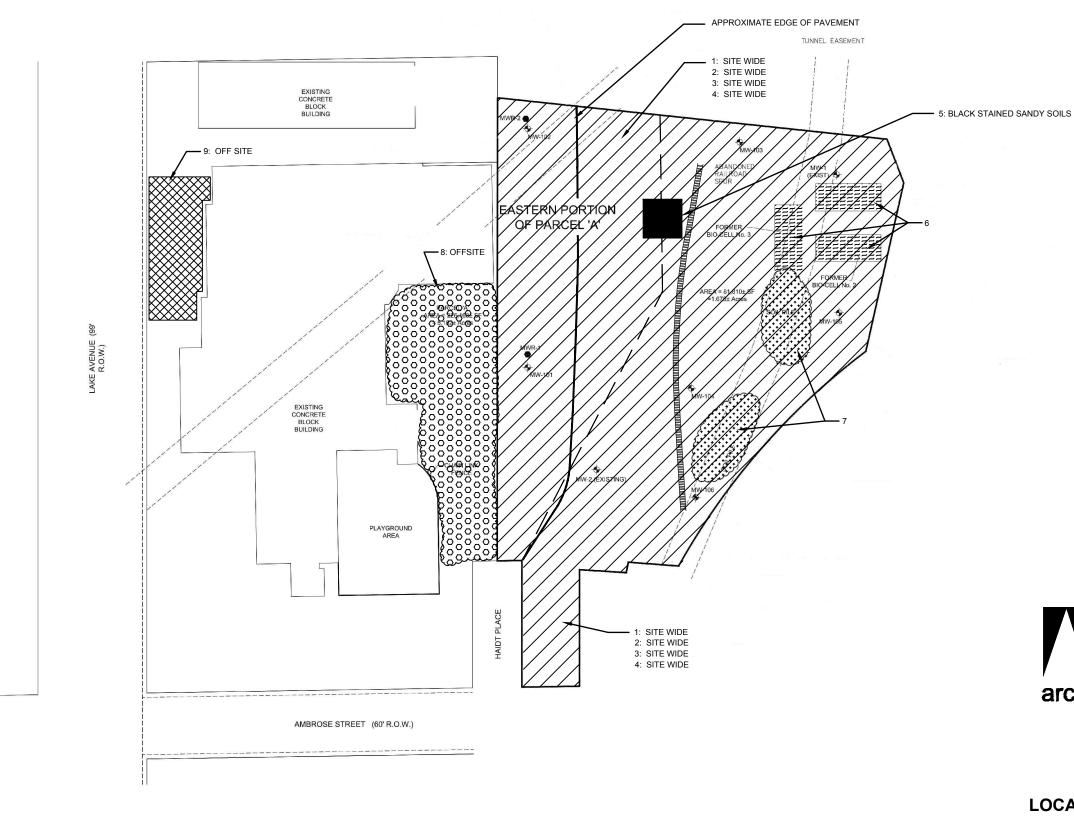
LEGEND:

	EXISTING BUILDING
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B'
	BIO-CELL
·····	SOIL PILE
MW-101	MONITOR WELL LOCATION
	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT

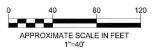


GROUND WATER CONTOUR MAP REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK DECEMBER 15, 2009





EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC, TITLED VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.





NOTES:

- 1. ALL LOCATIONS ARE APPROXIMATE.
- 2. SEE REPORT TEXT (PAGE 25) FOR DESCRIPTION OF BLACK STAINED SANDY SOILS.

LEGEND:



- 1: HISTORIC FILL SOILS (SITE WIDE)
- 2: FORMER COAL PILE STORAGE (SITE WIDE)
- 3: BURIED COAL TAR (SITE WIDE)
- 4: FORMER AUTOMOBILE PARKING AREA (SITE WIDE)

5: BLACK STAINED SANDY SOILS (LIMITED AREA)
6: SOILS IN FORMER BIO-CELLS

7: SOIL PILES



 $\times\!\!\times\!\!\times$

8: FORMER BARREL CLEANING AND BARREL RECONDITIONING OPERATIONS (OFF SITE)

9: FORMER GASOLINE SPILL (OFF SITE)

Bergmann architects // engineers // planners

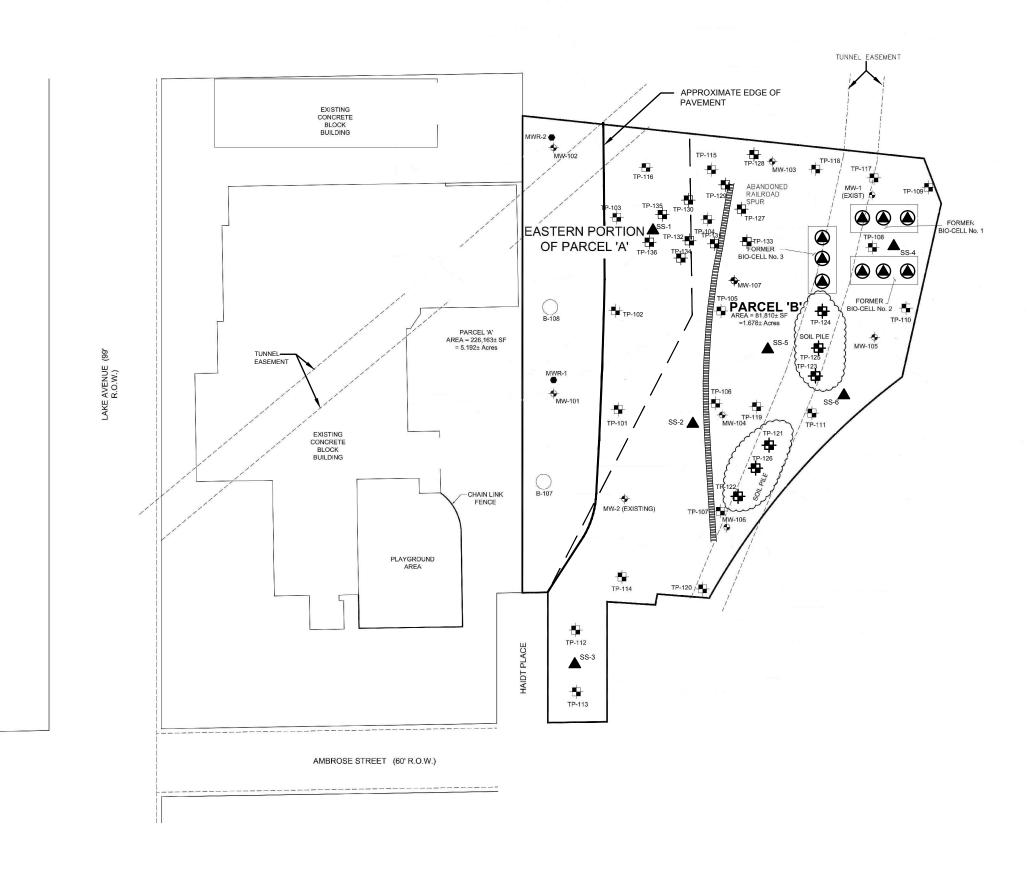
LOCATIONS OF ENVIRONMENTAL CONDITIONS

FIG. 7

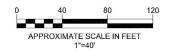
REMEDIAL INVESTIGATION

EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE

ROCHESTER, NEW YORK



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED 'VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.





NOTES:

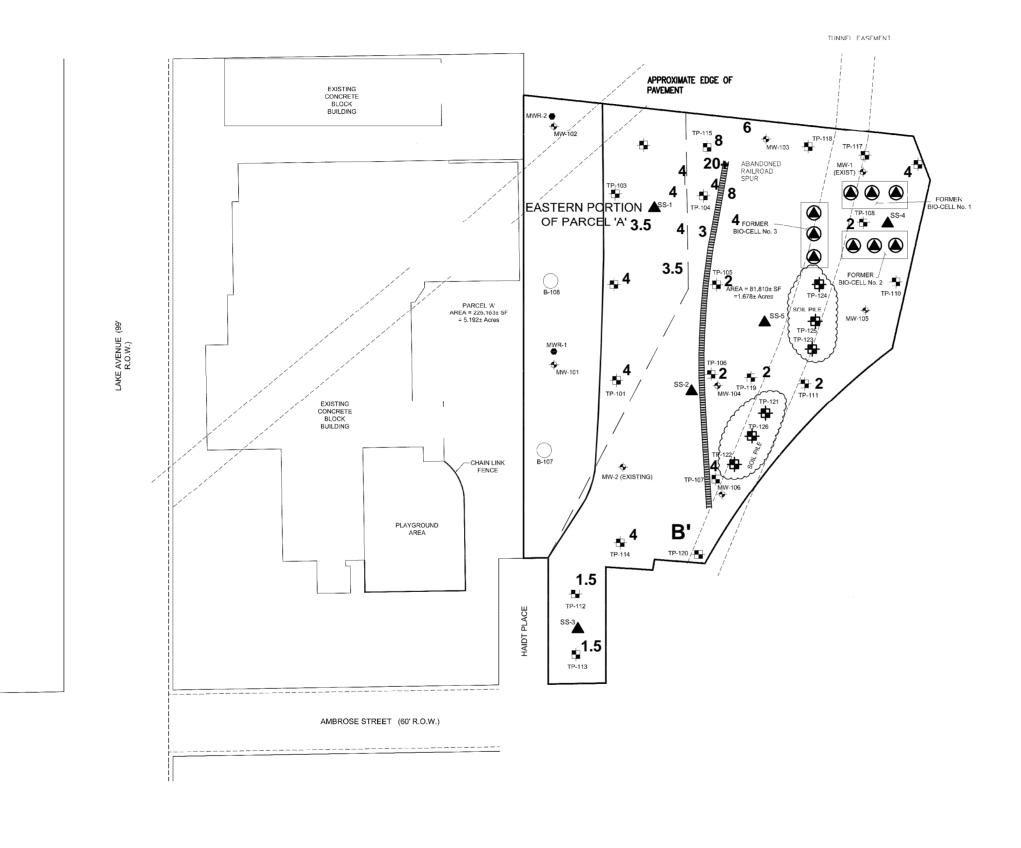
- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.

LEGEND:

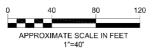
,,	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL
·····	SOIL PILE
rp-101 –	TEST PIT LOCATIONS
B-107 ()	SOIL BORING LOCATION
MW-101	MONITOR WELL LOCATION
۲	BIO-CELL COIL SAMPLE LOCATION
SS-#	APPROXIMATE LOCATION OF SURFACE SOIL SAMPLE
	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT

SUBSURFACE EXPLORATIONS PLAN

FOR REMEDIAL INVESTIGATIONS EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK FIG. 8



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED 'VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.

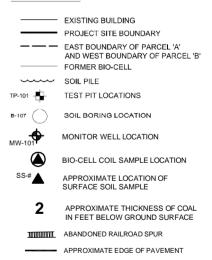




NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- SAMPLES COLLECTED FROM SELECTED TEST PIT EXPLORATIONS OCTOBER 31, 2007 THROUGH NOVEMBER 2, 2007. SOIL SAMPLES COLLECTED FROM SOIL BORINGS FROM JUNE 27, 2008 THROUGH JULY 9, 2008.
- 3. THICKNESS OF COAL ARE APPROXIMATE AND VARY THROUGHOUT THE SITE.

LEGEND:

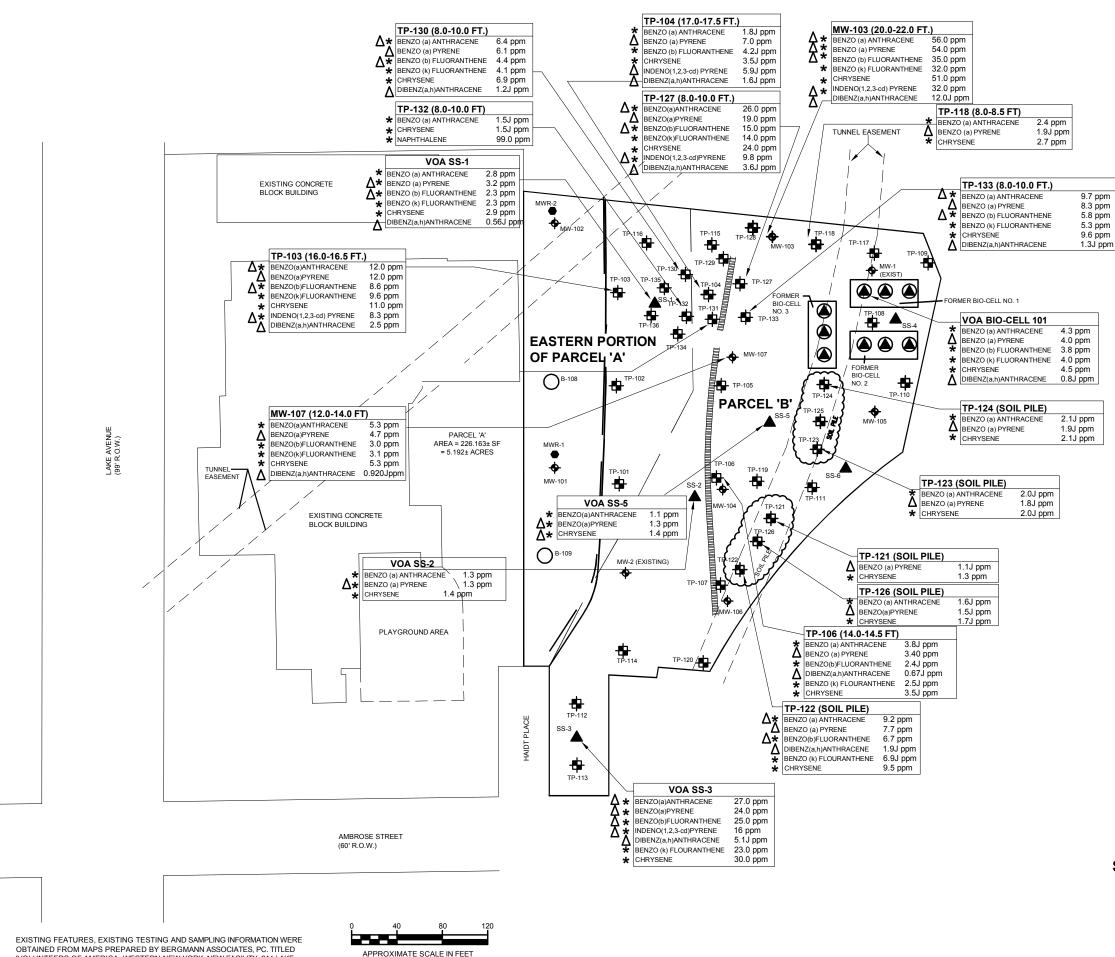


COAL DISTRIBUTION PLAN

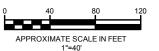
FOR

EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK





OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED 'VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00 DATED FEB. 10, 1998.





NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.
- 3. CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm).
- 4. CONCENTRATIONS COMPARED TO NYSDEC RESTRICTED USE SOIL CLEANUP OBJECTIVE FOR COMMERCIAL USE AND PROTECTION OF GROUNDWATER.
- 5. SVOCS WERE DETECTED AT SEVERAL SAMPLE LOCATIONS AT LOW LEVELS. SEE TABLE 4 IN THE RI REPORT.

FIG. 10

LEGEND

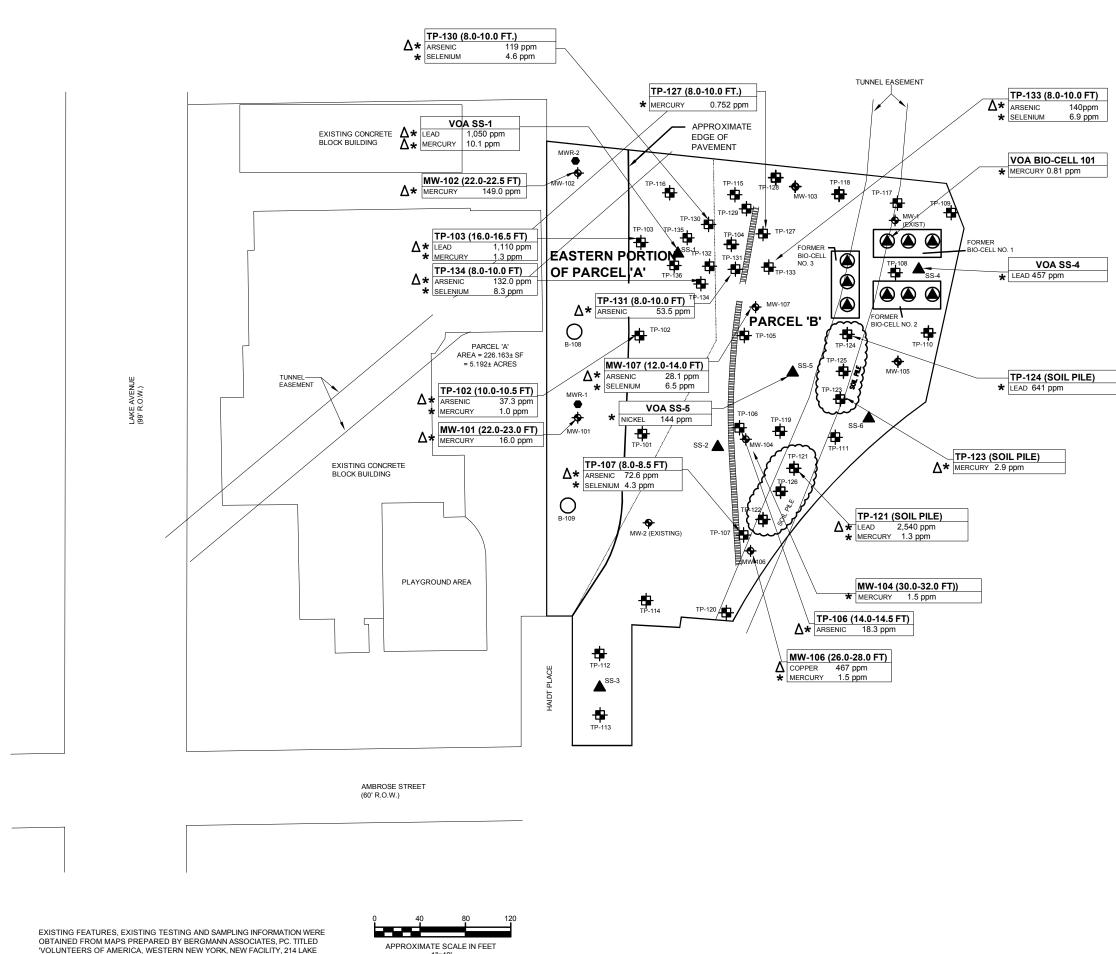
SVOC COMPOUND AND CONCENTRATIONS EXCEEDS PROTECTION OF GROUNDWATER RESTRICTED SOIL CLEANUP OBJECTIVES. CONCENTRATIONS FOR SVOC COMPOUNDS Δ EXCEEDS RESTRICTED USE SOIL CLEANUP OBJECTS FOR COMMERCIAL USE. EXISTING BUILDING PROJECT SITE BOUNDARY EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL SOIL PILE TP-101 TEST PIT LOCATIONS B-107 SOIL BORING LOCATION MW-101 MONITOR WELL LOCATION **BIO-CELL COIL SAMPLE LOCATION** SS-# APPROXIMATE LOCATION OF SURFACE SOIL SAMPLE

ABANDONED RAILROAD SPUR

APPROXIMATE EDGE OF PAVEMENT

SOIL SAMPLE RESULTS SEMI-VOLATILE ORGANIC COMPOUNDS FOR

REMEDIAL INVESTIGATIONS EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK



VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00 DATED FEB. 10, 1998.

1"=40'



NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND 2. SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.
- CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm). 3.
- CONCENTRATIONS COMPARED TO NYSDEC RESTRICTED USE 4. SOIL CLEANUP OBJECTIVE FOR COMMERCIAL USE AND PROTECTION OF GROUNDWATER.
- 5. METALS WERE DETECTED AT SEVERAL SAMPLE LOCATIONS AT LOW LEVELS. SEE TABLE 5 IN THE RI REPORT.

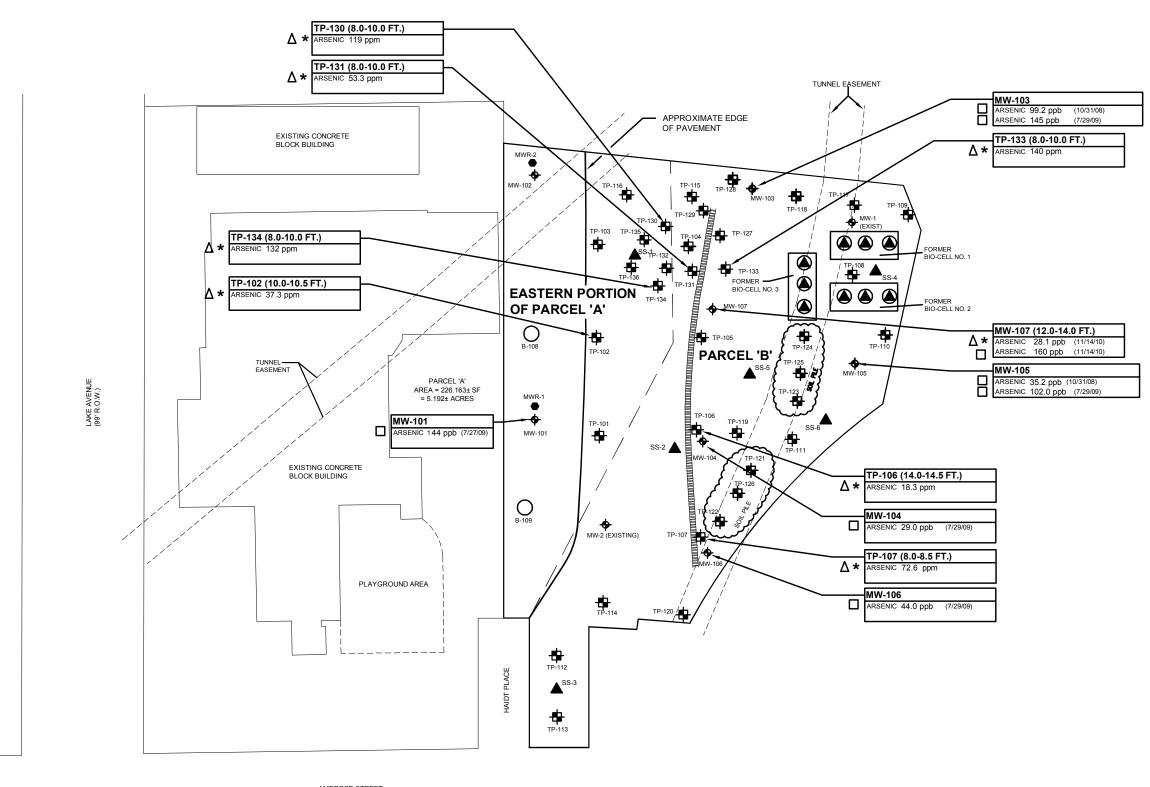
LEGEND

*	METALS AND CONCENTRATIONS EXCEEDS PROTECTION OF GROUNDWATER RESTRICTED USE SOIL CLEANUP OBJECTIVES.
Δ	CONCENTRATIONS FOR HEAVY METALS DETECTED EXCEED RESTRICTED USE SOIL CLEANUP OBJECTS FOR COMMERCIAL USE.
	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B'
	FORMER BIO-CELL
	SOIL PILE
TP-101	TEST PIT LOCATIONS
в-107	SOIL BORING LOCATION
MW-101	MONITOR WELL LOCATION
۵	BIO-CELL COIL SAMPLE LOCATION
SS#	APPROXIMATE LOCATION OF SURFACE SOIL SAMPLE
THURSDAY	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT
CONTAMINANT	DISTRIBUTION PLAN

FIG. 11

SOIL SAMPLE RESULTS **HEAVY METALS** FOR **REMEDIAL INVESTIGATIONS** EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK

DECEMBER 14, 2010

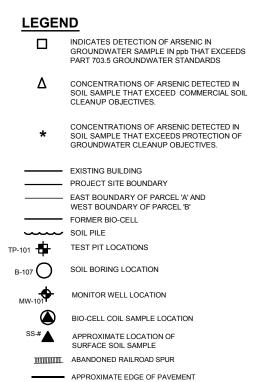


AMBROSE STREET (60' R.O.W.)



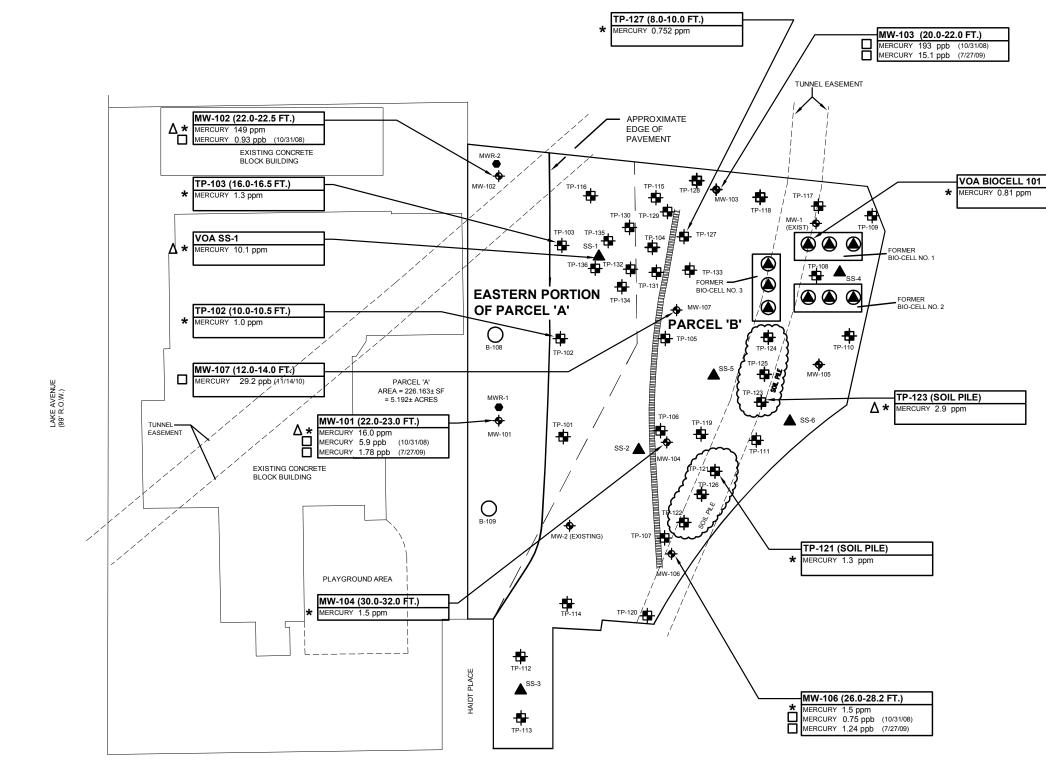
NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.
- 3. ARSENIC WAS DETECTED IN SEVERAL SOIL AND GROUNDWATER SAMPLES WITH LOWER CONCENTRATIONS. SEE TABLES 5 AND 7 IN THE RI REPORT.



DISTRIBUTION OF ARSENIC IN SOIL AND GROUNDWATER SAMPLES

FOR REMEDIAL INVESTIGATIONS EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK FIG. 12



AMBROSE STREET (60' R.O.W.)

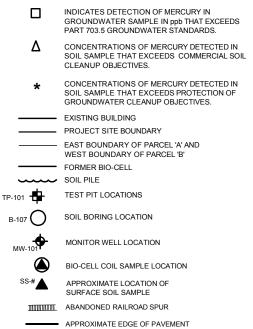


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NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.
- 3. MERCURY WAS DETECTED IN SEVERAL SOIL AND GROUNDWATER SAMPLES WITH LOWER CONCENTRATIONS. SEE TABLES 5 AND 7 IN THE RI REPORT..

LEGEND



DISTRIBUTION OF MERCURY IN SOIL AND GROUNDWATER SAMPLES

FOR REMEDIAL INVESTIGATIONS EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK FIG. 13



NOTES:

- 2. SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010 AND OCTOBER 25 & 26, 2010.
- 3. CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm).
- (SCO).
- 5. CONCENTRATIONS COMPARED TO NYSDEC RESTRICTED USE SOIL CLEANUP OBJECTIVE FOR COMMERCIAL USE.

LEGEND

	ABANDONED RA
	APPROXIMATE E
	EXISTING BUIL
	PROJECT SITE
	EAST BOUNDAR WEST BOUNDA
	FORMER BIO-C
\cdots	SOIL PILE
01 +	TEST PIT LOCA
107 🔵	SOIL BORING L
WR-2	BEDROCK MON
W-101	OVERBURDEN
	BIO-CELL COIL COMMERCIAL (
	BIO-CELL COIL SVOC COMMER
SS-3	APPROXIMATE SAMPLES THAT UP SVOC STAN
SS-6	APPROXIMATE SAMPLES THAT CLEAN UP SVO
+	SOIL PILE SAME COMMERCIAL C
+	SOIL PILE SAME COMMERCIAL (
∲ ₽	ALL SUB-SURF COMMERCIAL (
⊕ ⊕	ALL SUB-SURFA BELOW COMM STANDARDS
\bigcirc	METALS THAT E STANDARDS

1. LOCATIONS OF SOIL SAMPLES ARE APPROXIMATE.

4. CONCENTRATIONS FOR SVOC METALS COMPOUNDS EXCEED RESTRICTED USE SOIL CLEANUP OBJECTS FOR COMMERCIAL USE.

ED RAILROAD SPUR ATE EDGE OF PAVEMENT BUILDING NDARY OF PARCEL 'A' AND

SITE BOUNDARY JNDARY OF PARCEL 'B' BIO-CELL

OCATIONS

NG LOCATION

MONITOR WELL LOCATION

DEN MONITOR WELL LOCATION

COIL SAMPLES THAT EXCEED SVOC IAL CLEAN UP STANDARDS

COIL SAMPLES THAT ARE BELOW

IMERCIAL CLEAN UP STANDARDS ATE LOCATION OF SURFACE SOIL THAT EXCEED COMMERCIAL CLEAN STANDARDS

ATE LOCATION OF SURFACE SOIL THAT ARE BELOW COMMERCIAL SVOC STANDARDS

SAMPLES THAT EXCEED SVOC IAL CLEAN UP STANDARDS

SAMPLES THAT ARE BELOW SVOC CIAL CLEAN UP STANDARDS

URFACE SOIL SAMPLES THAT EXCEED CIAL CLEAN UP SVOC STANDARDS

URFACE SOIL SAMPLES THAT ARE OMMERCIAL CLEAN UP SVOC

HAT EXCEED COMMERCIAL CLEAN UP

REMEDIAL INVESTIGATION

Volunteers of America of Western, New York

Volunteers of America

214 Lake Avenue Rochester, New York



28 East Main Street 200 First Federal Plaza Rochester, New York 14614-1909 office: 585.232.5135 fax: 585.232.4652 www.bergmannpc.com

REVISIONS NO. DATE DESCRIPTION REV. CK'D



NOTE: Unauthorized alteration or addition to this drawing is a violation of the New York State Education Law Article 145, Section 7209.

FIG. 14

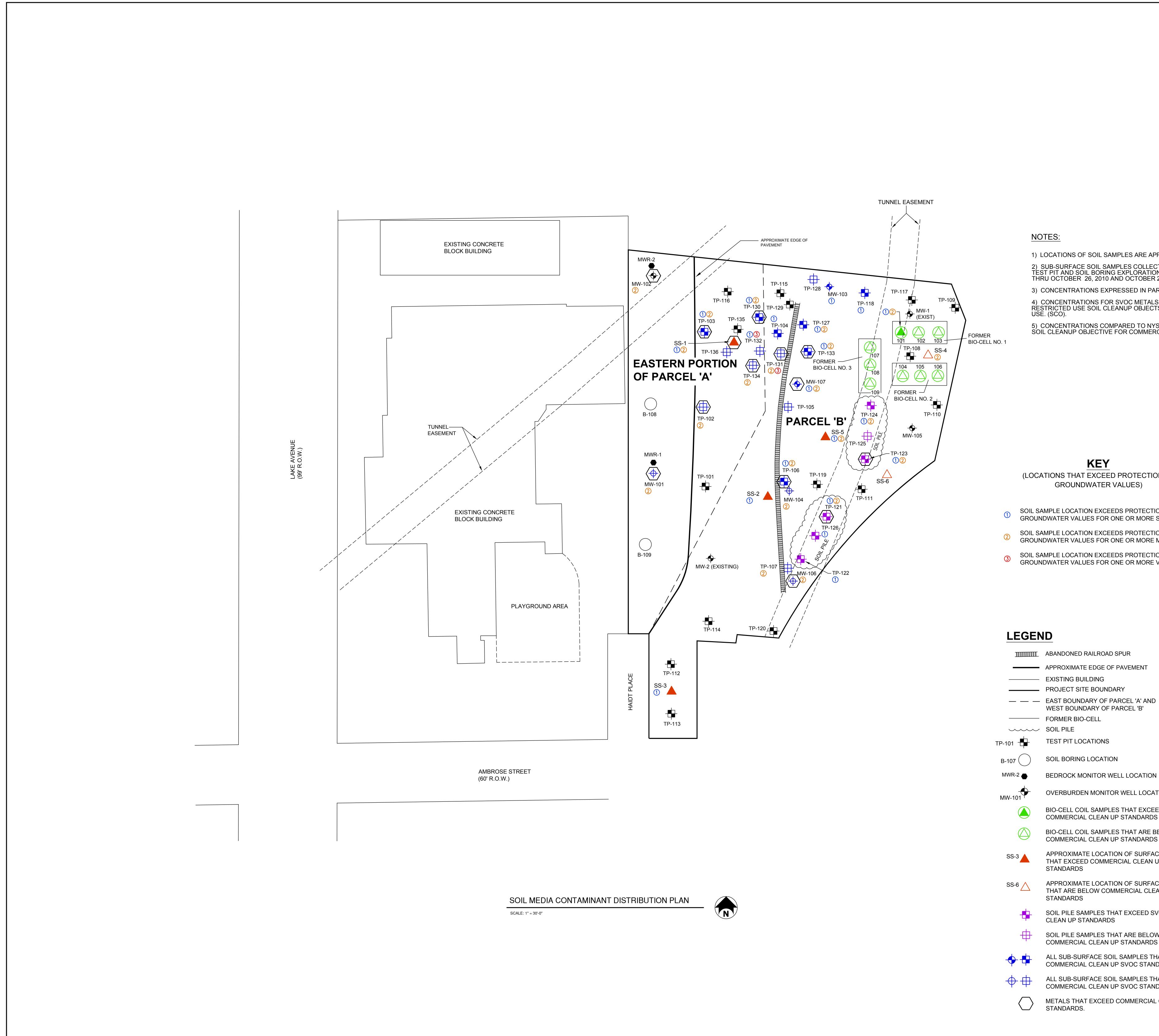
Date

Project Number:

Drawing Number:

	Project Manager:	
	G. FLISNIK	
	Designed by:	
	S. DEMEO	
	Drawn by:	
	M. TINGLEY	
	Checked by:	
	Date Issued:	
	MARCH, 2012	
	Scale:	
-	Scale: SOIL SAMPLE	

of



1) LOCATIONS OF SOIL SAMPLES ARE APPROXIMATE. 2) SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010 AND OCTOBER 25 & 26, 2010. 3) CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm). 4) CONCENTRATIONS FOR SVOC METALS COMPOUNDS EXCEED RESTRICTED USE SOIL CLEANUP OBJECTS FOR COMMERCIAL USE. (SCO).

5) CONCENTRATIONS COMPARED TO NYSDEC RESTRICTED USE SOIL CLEANUP OBJECTIVE FOR COMMERCIAL USE.

KEY

(LOCATIONS THAT EXCEED PROTECTION OF GROUNDWATER VALUES)

SOIL SAMPLE LOCATION EXCEEDS PROTECTION OF GROUNDWATER VALUES FOR ONE OR MORE SVOC SOIL SAMPLE LOCATION EXCEEDS PROTECTION OF GROUNDWATER VALUES FOR ONE OR MORE METALS

SOIL SAMPLE LOCATION EXCEEDS PROTECTION OF GROUNDWATER VALUES FOR ONE OR MORE VOC

PROJECT SITE BOUNDARY

WEST BOUNDARY OF PARCEL 'B'

BEDROCK MONITOR WELL LOCATION

OVERBURDEN MONITOR WELL LOCATION

BIO-CELL COIL SAMPLES THAT EXCEED SVOC COMMERCIAL CLEAN UP STANDARDS

BIO-CELL COIL SAMPLES THAT ARE BELOW SVOC COMMERCIAL CLEAN UP STANDARDS

APPROXIMATE LOCATION OF SURFACE SOIL SAMPLES THAT EXCEED COMMERCIAL CLEAN UP SVOC

APPROXIMATE LOCATION OF SURFACE SOIL SAMPLES THAT ARE BELOW COMMERCIAL CLEAN UP SVOC

SOIL PILE SAMPLES THAT EXCEED SVOC COMMERCIAL

SOIL PILE SAMPLES THAT ARE BELOW SVOC COMMERCIAL CLEAN UP STANDARDS

ALL SUB-SURFACE SOIL SAMPLES THAT EXCEED COMMERCIAL CLEAN UP SVOC STANDARDS

ALL SUB-SURFACE SOIL SAMPLES THAT ARE BELOW COMMERCIAL CLEAN UP SVOC STANDARDS. METALS THAT EXCEED COMMERCIAL CLEANUP



Volunteers of America of Western, New York

Volunteers of America

214 Lake Avenue Rochester, New York



28 East Main Street 200 First Federal Plaza Rochester, New York 14614-1909 office: 585.232.5135 fax: 585.232.4652 www.bergmannpc.com

REVISIONS NO. DATE DESCRIPTION REV. CK'D



NOTE: Unauthorized alteration or addition to this drawing is a violation of the New York State Education Law Article 145, Section 7209.

File Name:

FIG. 15

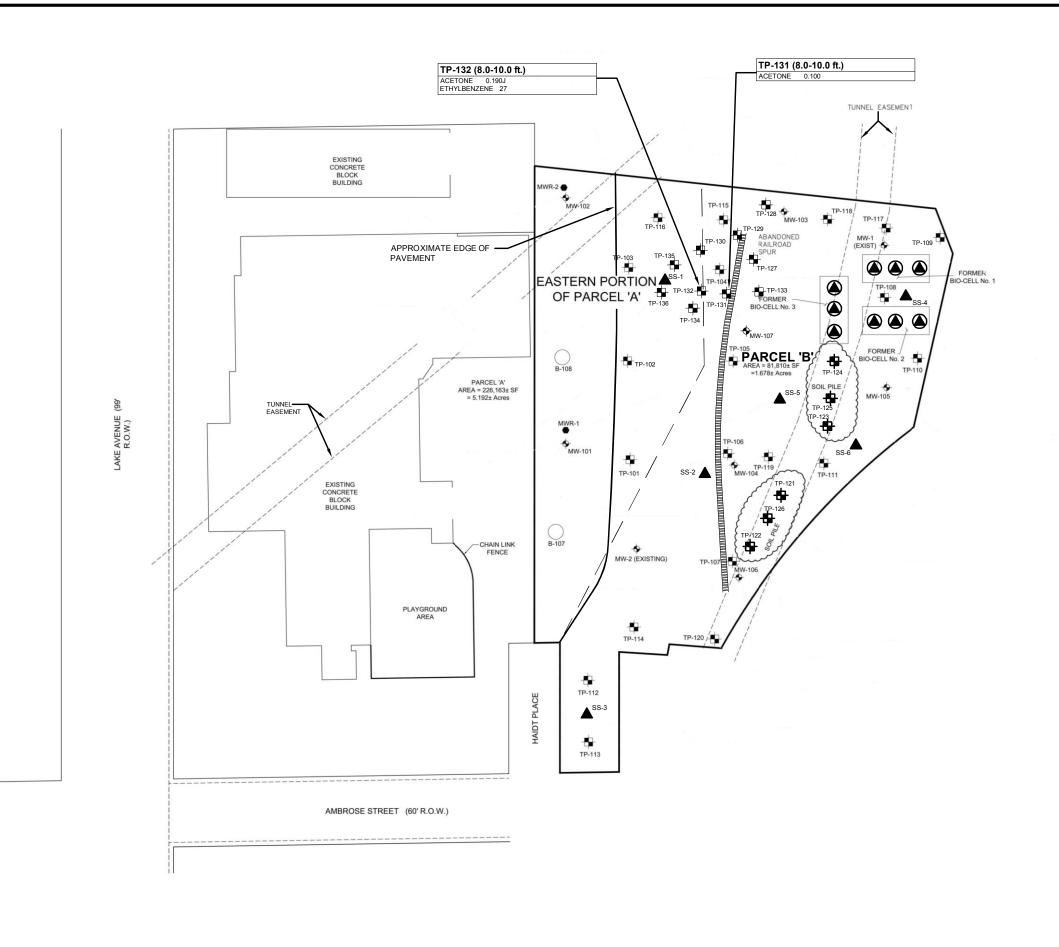
Date

Project Number:

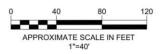
Drawing Number:

Project Manager: G. FLISNIK Designed by: S. DEMEO Drawn by: M. TINGLEY/C. WOOD Checked by: Date Issued: MARCH, 2012 Scale: 1" = 30'

of



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE' BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.





NOTES:

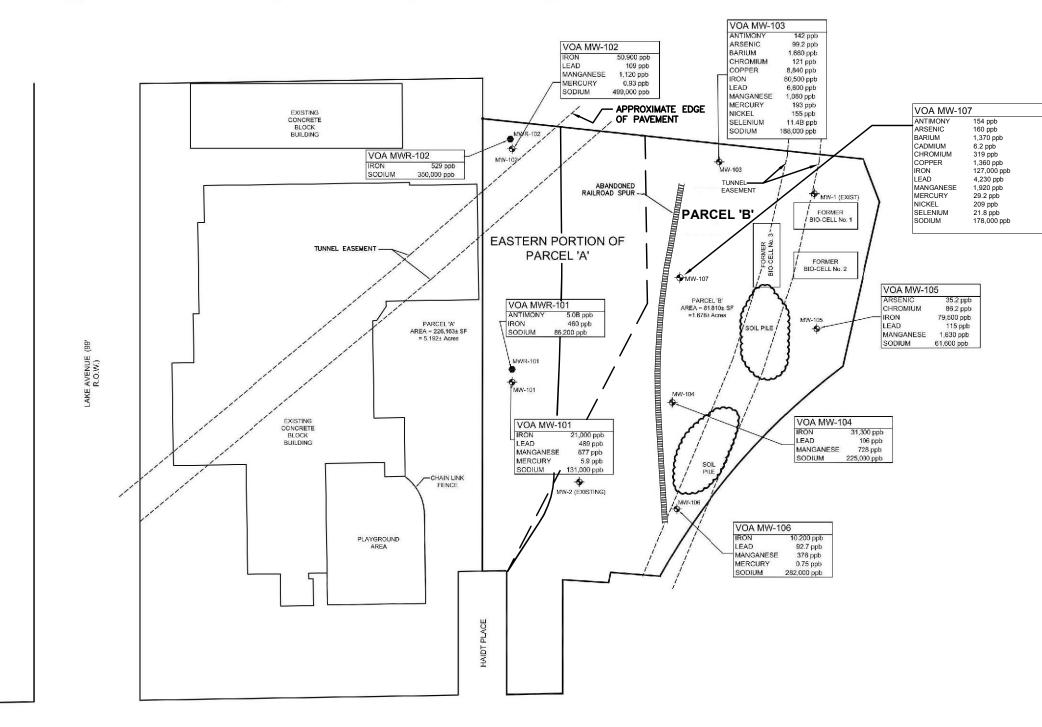
- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SUB-SURFACE SOIL SAMPLES COLLECTED FROM SELECTED TEST PIT AND SOIL BORING EXPLORATIONS OCTOBER 31, 2007 THRU OCTOBER 26, 2010.
- 3. UNITS FOR VOC CONCENTRATIONS EXPRESSED IN PARTS PER MILLION (ppm).
- 4. CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS IN SOIL SAMPLES EXCEED PROTECTION OF GROUNDWATER PART 375-6.5 VALUES.

LEGEND:

	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL
\dots	SOIL PILE
TP-101 -	TEST PIT LOCATIONS
B-107	SOIL BORING LOCATION
MW-101	MONITOR WELL LOCATION
۵	BIO-CELL COIL SAMPLE LOCATION
SS-#	APPROXIMATE LOCATION OF SURFACE SOIL SAMPLE
THURSDAY	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT

VOLATILE ORGANIC SOIL SAMPLE LOCATIONS THAT EXCEED PROTECTION OF **GROUNDWATER SOIL CLEANUP OBJECTIVES**

FOR REMEDIAL INVESTIGATIONS EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK FIG. 16



AMBROSE STREET (60' R.O.W.)

EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREFARED BY BERGMANN ASSOCIATES, PC, TIT_ED VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE" BERGMANN PROJECT #3091.00. DATED FEB. 10, 1998.





NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SAMPLES COLLECTED FROM MONITORING WELLS ON OCTOBER 30 & OCTOBER 31, 2008. SAMPLE FROM MW-107 COLLECTED ON NOVEMBER 4, 2010
- 3. CONCENTRATIONS EXPRESSED IN PARTS PER BILLION (ppb).
- 4. CONCENTRATIONS FOR METALS EXCEED NEW YORK STATE GROUNDWATER STANDARDS,

LEGEND:

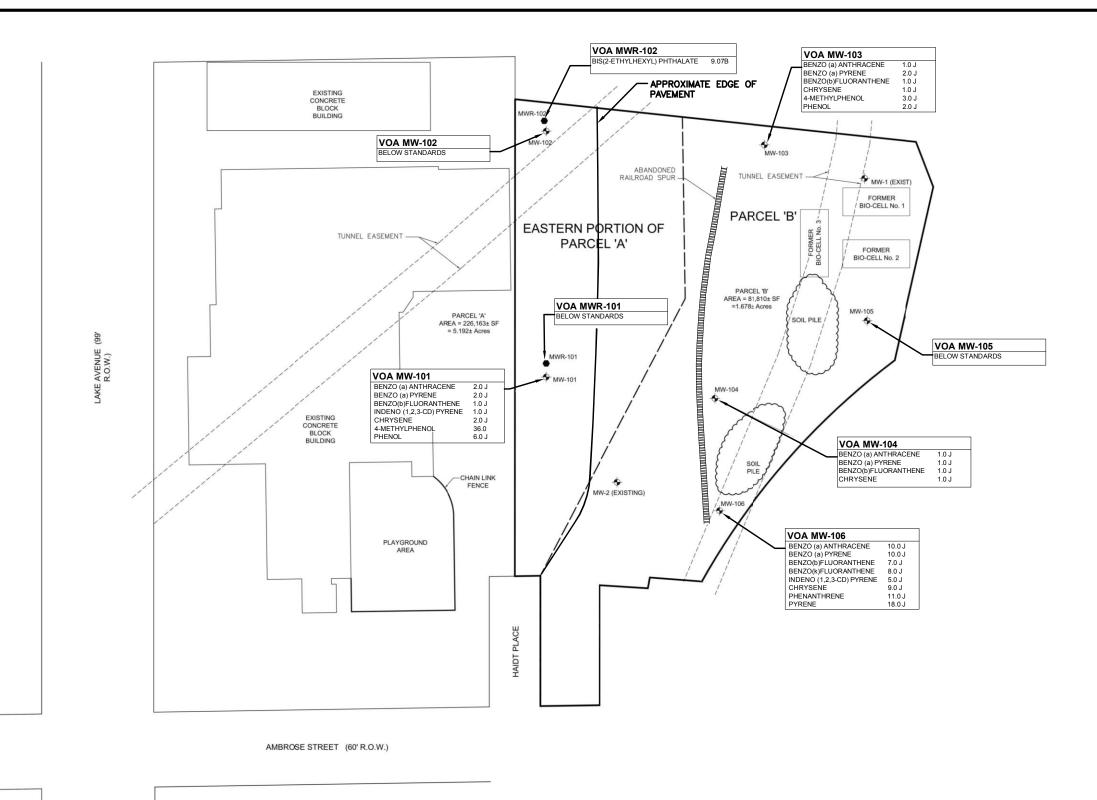
MWR-102	BEDROCK MONITORING WELL
4 MW-102	OVERBURDEN MONITORING WELL
	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B'
	FORMER BIO-CELL
·····	SOIL PILE
THURSDAY.	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT

GROUNDWATER CONTAMINANT DISTRIBUTION PLAN METALS OCTOBER 30 AND 31, 2008

FIG. 17

REMEDIAL INVESTIGATIONS

EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK **DECEMBER 22, 2010**



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. TITLED "VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE" BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998





NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SAMPLES COLLECTED FROM MONITORING WELLS ON OCTOBER 30 AND 31, 2008.
- 3. CONCENTRATIONS EXPRESSED IN PARTS PER BILLION (ppb).
- CONCENTRATIONS FOR SVOC COMPOUNDS EXCEED NEW 4. YORK STATE CLASS GA GROUNDWATER STANDARDS.

LEGEND:

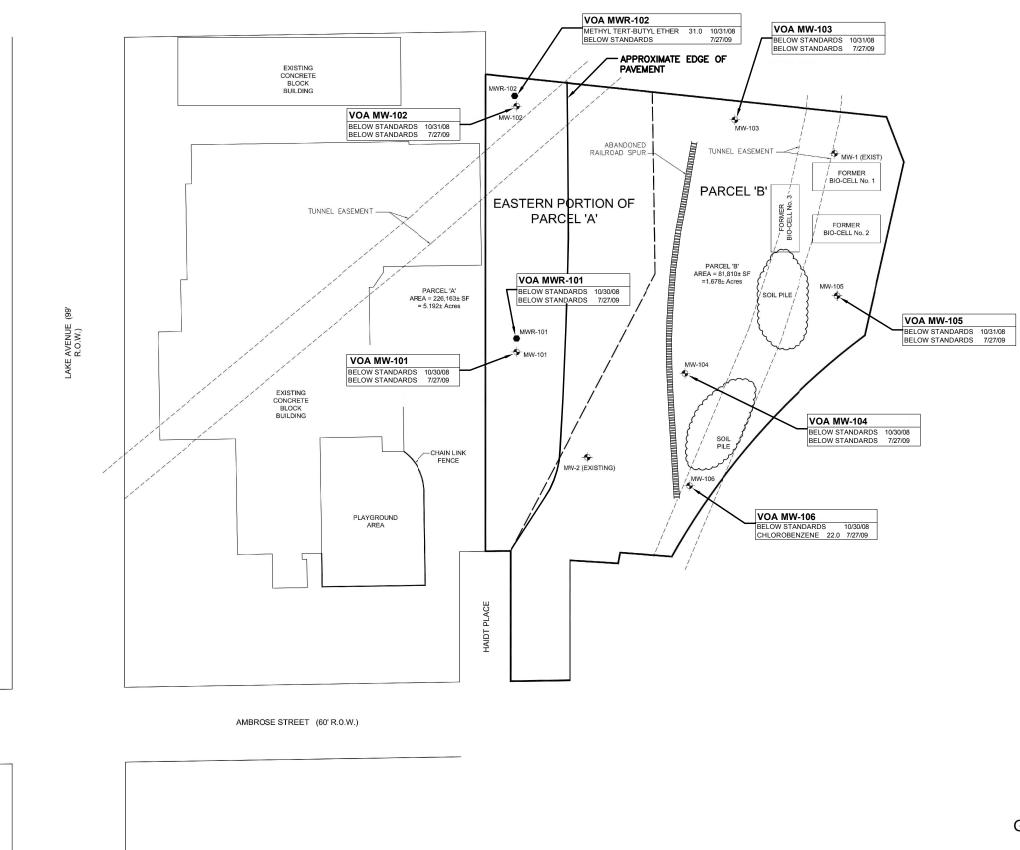
WWR-102	BEDROCK MONITORING WELL
↔ MW-102	OVERBURDEN MONITORING WELL
	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL
\cdots	SOIL PILE
IIIIIIIII	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT

FIG. 18

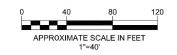


GROUNDWATER CONTAMINANT DISTRIBUTION PLAN SEMI-VOLATILE ORGANIC COMPOUNDS OCTOBER 30 and 31, 2008 FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE

ROCHESTER, NEW YORK SEPTEMBER 22, 2009



EXISTING FEATURES, EXISTING TESTING AND SAMPLING INFORMATION WERE OBTAINED FROM MAPS PREPARED BY BERGMANN ASSOCIATES, PC. ITILED "VOLUNTEERS OF AMERICA, WESTERN NEW YORK, NEW FACILITY, 214 LAKE AVENUE" BERGMANN PROJECT #3091.00, DATED FEB. 10, 1998.



GROUNDWATER CONTAMINANT DISTRIBUTION PLAN VOLATILE ORGANIC COMPOUNDS OCTOBER 30 and 31, 2008 and JULY 27, 2009 FOR REMEDIAL INVESTIGATION EASTERN PORTION OF PARCEL A AND PARCEL B 214 LAKE AVENUE ROCHESTER, NEW YORK SEPTEMBER 22, 2009



NOTES:

- 1. LOCATIONS OF SUBSURFACE LOCATIONS ARE APPROXIMATE.
- 2. SAMPLES COLLECTED FROM MONITORING WELLS ON OCTOBER 30 AND 31, 2008 AND JULY 27, 2009.
- 3. CONCENTRATIONS EXPRESSED IN PARTS PER BILLION (ppb).
- 4. CONCENTRATIONS FOR VOC COMPOUNDS EXCEED NEW YORK STATE CLASS GA GROUNDWATER STANDARDS.

LEGEND:

MWR-102	BEDROCK MONITORING WELL
MW-102	OVERBURDEN MONITORING WELL
	EXISTING BUILDING
	PROJECT SITE BOUNDARY
	EAST BOUNDARY OF PARCEL 'A' AND WEST BOUNDARY OF PARCEL 'B' FORMER BIO-CELL
\dots	SOIL PILE
TRUTTURE.	ABANDONED RAILROAD SPUR
	APPROXIMATE EDGE OF PAVEMENT



Appendix A

AQTESOLV for Windows

Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\mw-101 permeability.aqt Title: 214 Lake Avenue VOA - MW-101 Permeability Test 1 Date: 12/19/11 Ime: 14:36:58

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00.01 Location: 214 Lake Avenue Test Date: 3/22/11 Test Well: MW-101

AQUIFER DATA

Saturated Thickness: 5.63 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MW-101

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.24 ft Static Water Column Height: 24.37 ft Casing Radius: 0.09 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 10. ft

o. of Observations: 164

Time (min)	Observatio		
Time (min) 0.05	Displacement (ft) 0.24	Time (min) 4.15	Displacement (ft)
0.1	0.24	4.2	0.12
0.15 0.2	0.24 0.24	4.25 4.3	0.11
0.25	0.24	4.35	0.11 0.11
0.3 0.35	0.24 0.23	4.4 4.45	0.11
0.4	0.23	4.5	0.1 0.1
0.45 0.5	0.23 0.23	4.55	0.1
0.55	0.23	4.6 4.65	0.1 0.1
0.6 0.65	0.22 0.22	4.7	0.09
0.7	0.22	4.75 4.8	0.09 0.09
0.75 0.8	0.22 0.22	4.85	0.09
0.85	0.22	4.9 4.95	0.09 0.09
0.9 0.95	0.22 0.21	5.	0.09
1.	0.21	5.05 5.1	0.09 0.09
1.05 1.1	0.21 0.2	5.15	0.08
1.15	0.2	5.2 5.25	0.08 0.08
1.2 1.25	0.2 0.2	5.3	0.08
1.3	0.2	5.35 5.4	0.08 0.08
1.35 1.4	0.19	5.45	0.08
1.45	0.19 0.19	5.5 5.55	0.07 0.07
1.5	0.19	5.6	0.07



AQTESOLV for Windows

Time (min)Displacement (ft) 1.65 0.19 1.65 0.19 1.65 0.19 1.7 0.18 1.7 0.18 1.7 0.18 1.7 0.18 1.8 0.17 1.9 0.17 1.9 0.17 2.5 0.22 2.1 0.21 2.25 0.2 2.35 0.19 2.4 0.19 2.5 0.19 2.4 0.19 2.45 0.19 2.55 0.19 2.55 0.19 2.55 0.19 2.6 0.18 2.75 0.17 2.7 0.18 2.75 0.17 2.8 0.17 2.7 0.18 2.75 0.17 2.8 0.17 2.8 0.17 2.8 0.17 2.8 0.17 2.8 0.16 3.3 0.16 3.1 0.15 3.25 0.16 3.3 0.15 3.25 0.15 3.33 0.15 3.35 0.14 3.4 0.14 3.55 0.14 3.65 0.13 3.77 0.13 3.75 0.12 3.99 0.12 4.1 0.12	Time (min) 5.65 5.7 5.75 5.8 5.85 5.9 5.95 6. 6.05 6.1 6.15 6.2 6.25 6.3 6.35 6.4 6.45 6.55 6.65 6.55 6.6 6.65 6.7 6.75 6.8 6.85 6.95 7.1 7.05 7.1 7.25 7.3 7.25 7.35 7.45 7.55 7.65 7.7 7.75 7.85 7.95 7.95 7.85 7.95 8.8 8.05 8.1 8.15 8.2	Displacement (ft) 0.07 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.03 0.02
--	---	---

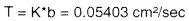
SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0003149	cm/sec
y0	0.3886	ft







Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\mwR-101 permeability.aqt Title: 214 Lake Avenue VOA - MWR-101 Permeability Test 1 Pate: 12/19/11 Ime: 14:38:41

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00.01 Location: 214 Lake Avenue Test Date: 3/22/11 Test Well: MWR-101

AQUIFER DATA

Saturated Thickness: 29.82 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MWR-101

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.18 ft Static Water Column Height: 24.68 ft Casing Radius: 0.09 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 54.5 ft

o. of Observations: 164

Time (min)Displacement (ft)Time (min)Displacement (ft)0.050.184.150.120.10.184.20.110.150.184.250.11	
0.10.184.20.110.150.184.250.11	
0.15 0.18 4.25 0.11	
11 2 (11 V / 12 () 11	
0.20.184.30.110.250.184.350.11	
0.3 0.18 4.4 0.11	
0.350.184.450.10.40.234.50.1	
0.45 0.23 4.55 0.1	
0.5 0.23 4.6 0.1	
0.550.234.650.10.60.224.70.09	
0.65 0.22 4.75 0.09	
0.70.224.80.090.750.224.850.09	
0.8 0.22 4.9 0.09	
0.85 0.22 4.95 0.09	
0.90.225.0.090.950.215.050.09	
1. 0.21 5.1 0.09	
1.050.215.150.081.10.25.20.08	
1.15 0.2 5.25 0.08	
1.2 0.2 5.3 0.08	
1.250.25.350.081.30.25.40.08	
1.35 0.19 5.45 0.08	
1.40.195.50.071.450.195.550.07	
1.450.195.550.071.50.195.60.07	

AQTESOLV for Windows

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		-	
Time (min) 1.55 1.6 1.65 1.7 1.75 1.8 1.85 1.9 1.95 2. 2.05 2.1 2.15 2.2 2.25 2.35 2.4 2.45 2.5 2.5 2.6 2.65 2.7 2.75 2.8 2.85 2.9 2.95 3. 3.05 3.1 3.15 3.2 3.25 3.3 3.35 3.4 3.45 3.55 3.6 3.65 3.7 3.75 3.8 3.9 3.95 4. 4.05 4.1	Displacement (ft) 0.19 0.19 0.19 0.18 0.18 0.17 0.17 0.17 0.17 0.17 0.21 0.22 0.21 0.22 0.21 0.22 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.19 0.117 0.16 0.16 0.16 0.16 0.15 0.12 0.12 0.12 0.12 0.12 0.12	$\begin{array}{c} \text{Time (min)} \\ 5.65 \\ 5.7 \\ 5.75 \\ 5.8 \\ 5.85 \\ 5.9 \\ 5.95 \\ 6. \\ 6.05 \\ 6.1 \\ 6.15 \\ 6.2 \\ 6.25 \\ 6.3 \\ 6.35 \\ 6.4 \\ 6.45 \\ 6.55 \\ 6.6 \\ 6.65 \\ 6.7 \\ 6.75 \\ 6.8 \\ 6.85 \\ 6.9 \\ 6.95 \\ 7. \\ 7.05 \\ 7.1 \\ 7.15 \\ 7.2 \\ 7.25 \\ 7.3 \\ 7.45 \\ 7.5 \\ 7.65 \\ 7.7 \\ 7.75 \\ 7.8 \\ 7.85 \\ 7.9 \\ 7.95 \\ 8. \\ 8.05 \\ 8.1 \\ 8.15 \\ 8.2 \end{array}$	Displacement (ft) 0.07 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.05 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.03 0.02

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

P	Parameter	
	K	
	уO	

Estimate 0.0003149 cm/sec 0.3886 ft $T = K^*b = 0.2862 \text{ cm}^2/\text{sec}$



Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\mw-102 permeability.aqt Title: 214 Lake Avenue - MW-102 Permeability Test Date: 12/19/11 me: 14:37:15

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00 Location: 214 Lake Avenue Test Date: 3/22/11 Test Well: MW-102

AQUIFER DATA

Saturated Thickness: 7.61 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MW-102

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.8 ft Static Water Column Height: 23.39 ft Casing Radius: 0.09 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 31. ft

b. of Observations: 10

	Observatio	on Data	
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1.5 ′	0.48	6.5	0.03
2.5	0.25	7.5	0.02
3.5	0.11	8.5	0.01
4.5	0.08	9.5	0.
5.5	0.06	10.5	0.

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005525	cm/sec
y0	0.3498	ft

 $T = K^*b = 0.1282 \text{ cm}^2/\text{sec}$



Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\mwR-102 permeability.aqt Title: 214 Lake Avenue - MWR-102 Permeability Test Date: 12/19/11 me: 14:38:56

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00 Location: 214 Lake Avenue Test Date: 3/22/11 Test Well: MWR-102

AQUIFER DATA

Saturated Thickness: 22.43 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MWR-102

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.48 ft Static Water Column Height: 31.57 ft Casing Radius: 0.09 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 54.4 ft

b. c

b. of Observations: 10

	Observatio	on Data	
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1.5 ′	0.48	6.5 ´	0.03
2.5	0.25	7.5	0.02
3.5	0.11	8.5	0.01
4.5	0.08	9.5	0.
5.5	0.06	10.5	0.

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005525	cm/sec
уO	0.3498	ft

 $T = K^*b = 0.3777 \text{ cm}^2/\text{sec}$



Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\mw-103 permeability.aqt Title: 214 Lake Avenue - MW-103 Permeability Test Date: 12/19/11 Jime: 14:37:31

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00 Location: 1200 East Main Test Date: 3/22/11 Test Well: MW-103

AQUIFER DATA

Saturated Thickness: 0.98 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MW-103

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.08 ft Static Water Column Height: 43.02 ft Casing Radius: 0.083 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 44. ft

b. of Observations: 66

	Observatio		
Time (min) 0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.65 0.7 0.75 0.8 0.9 0.95 1. 1.05 1.1 1.25 1.3 1.35 1.4 1.45	Observatic Displacement (ft) 0.08 0.07 0.07 0.07 0.07 0.07 0.07 0.07	on Data Time (min) 1.7 1.75 1.8 1.85 1.9 1.95 2. 2.05 2.1 2.05 2.1 2.25 2.3 2.35 2.4 2.45 2.55 2.6 2.65 2.7 2.75 2.8 2.85 2.9 2.95 3. 3.05 3.1	Displacement (ft) 0.04 0.03 0.03 0.02 0.01
1.5	0.04	3.15	0.

AQTESOLV for Windows

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
1.55 1.6	0.04 0.04	3.2 3.25	0
1.65	0.03	3.3	0. 0.

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005688	cm/sec
y0	0.07769	ft

 $T = K^*b = 0.01699 \text{ cm}^2/\text{sec}$



12/19/11

Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\MW-104 permeability.aqt Title: 214 Lake Avenue - MW-104 Permeability Test Date: 12/19/11 Time: 14:37:46

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00 Location: 214 Lake Avenue East Main Test Date: 3/22/11 Test Well: MW-104

AQUIFER DATA

Saturated Thickness: 3.31 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MW-104

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.72 ft Static Water Column Height: 30.69 ft Casing Radius: 0.083 ft Well Radius: 0.33 ft Well Skin Radius: 0.33 ft Screen Length: 10. ft Total Well Penetration Depth: 34. ft

o. of Observations: 115

Observation Data				
Time (min) 0.05 0.1 0.15 0.2 0.25 0.3 0.35	Displacement (ft) 0.72 0.7 0.69 0.68 0.66 0.65 0.64	Time (min) 2.95 3. 3.05 3.1 3.15 3.2 3.25	Displacement (ft) 0.25 0.25 0.25 0.24 0.24 0.24 0.23 0.23	
0.4 0.45 0.5 0.55 0.6 0.65 0.7 0.75 0.8	0.63 0.62 0.61 0.6 0.59 0.58 0.57 0.55 0.55	3.3 3.35 3.4 3.45 3.5 3.55 3.6 3.65 3.7	0.22 0.22 0.21 0.21 0.2 0.19 0.19 0.18 0.18	
0.85 0.9 1. 1.05 1.1 1.15 1.2 1.25	0.54 0.53 0.52 0.51 0.5 0.5 0.5 0.49 0.48 0.48	3.75 3.8 3.85 3.9 3.95 4. 4.05 4.1 4.15	0.17 0.17 0.16 0.16 0.15 0.15 0.15 0.14 0.14 0.13	
1.3 1.35 1.4 1.45 1.5	0.47 0.46 0.46 0.44 0.44	4.2 4.25 4.3 4.35 4.4	0.13 0.13 0.12 0.12 0.12 0.11	

Time (min) 1.55 1.6 1.65 1.7 1.75 1.8 1.85 1.9 1.95 2. 2.05 2.1 2.15 2.2 2.25 2.3 2.35 2.4 2.45	Displacement (ft) 0.43 0.43 0.42 0.41 0.4 0.39 0.38 0.37 0.37 0.37 0.36 0.35 0.35 0.35 0.34 0.33 0.32 0.32 0.32	Time (min) 4.45 4.5 4.55 4.6 4.65 4.7 4.75 4.8 4.85 4.9 4.95 5. 5.05 5.1 5.15 5.2 5.25 5.3 5.35	Displacement (ft) 0.11 0.1 0.1 0.09 0.08 0.08 0.08 0.07 0.07 0.07 0.07 0.07 0.07 0.06 0.06 0.05 0.05 0.05 0.05 0.04 0.04 0.04 0.03
2.3	0.33	5.2	0.04
2.35	0.33	5.25	0.04
2.4	0.32	5.3	0.04

SOLUTION

Slug Test quifer Model: Unconfined olution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0004187	cm/sec
уO	0.7226	ft

 $T = K^*b = 0.04224 \text{ cm}^2/\text{sec}$



12/19/11

	4 Lake Avenue - 2/19/11) 214 Lake Avenue and . MW-105 Permeability Te		eports\MW-105 permea	ability.aqt
PROJEC		N		·····	
Client: A Project: Location Test Dat	y: Bergmann Ass /olunteers of Ame 8726.00 :: 214 Lake Avenu :e: 3/22/11 II: MW-105	erica			
AQUIFE	R DATA				
	d Thickness: 9.7 py Ratio (Kz/Kr):				
SLUG TI	EST WELL DATA				
Test We	ll: MW-105				
X Locatio Y Locatio					
Casing F Casing F Well Rac Well Skir Screen L	splacement: 0.12 ater Column Heig Radius: 0.083 ft dius: 0.161 ft n Radius: 0.161 f length: 10. ft ell Penetration Dep	ht: 18.29 ft t			
No. of Ol	bservations: 102				
		Observati	on Data		
 :	ime (min)	Displacement (ft)	Time (min)	Displacement (ft)	
	0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.55 0.55 0.6 0.65 0.7 0.75 0.8	0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.11 0.11 0.11 0.11 0.1 0.1 0.1	$\begin{array}{c} 2.6\\ 2.65\\ 2.7\\ 2.75\\ 2.8\\ 2.85\\ 2.9\\ 2.95\\ 3.\\ 3.05\\ 3.1\\ 3.15\\ 3.2\\ 3.25\\ 3.3\\ 3.35\end{array}$	0.05 0.05 0.04 0.04 0.04 0.04 0.04 0.04	

0.

	vo		
Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.85	0.1	3.4	0.03
0.9	0.09	3.45	0.03
0.95	0.1	3.5	0.03
1.	0.09	3.55	0.03
1.05	0.09	3.6	0.03
1.1	0.09	3.65	0.02
1.15	0.09	3.7	0.02
1.2	0.09	3.75	0.02
1.25	0.08	3.8	0.02
1.3	0.08	3.85	0.02
1.35	0.08	3.9	0.02
1.4	0.08	3.95	0.02
1.45	0.08	4.	0.02
1.5	0.08	4.05	0.02
1.55	0.07	4.1	0.02
1.6	0.08	4.15	0.02
1.65	0.08	4.2	0.01
1.7	0.07	4.25	0.01
1.75	0.07	4.3	0.01
1.8	0.07	4.35	0.02
1.85	0.07	4.4	0.01
1.9	0.07	4.45	0.01
1.95	0.06	4.5	0.01
2.	0.06	4.55	0.02
2.05	0.07	4.6	0.02
2.1	0.06	4.65	0.01
2.15	0.05	4.7	0.01
2.2	0.05	4.75	0.01
2.25	0.06	4.8	0.
2.3	0.05	4.85	0.
2.35	0.05	4.9	0.01
2.4	0.05	4.95	0.
2.45	0.05	5.	0.
2.5	0.05	5.05	0.
0.55	0.05	F 4	0

0.05

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice ln(Re/rw): 0.

2.55

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0003486	cm/sec
уO	0.1278	ft

 $= K^*b = 0.1032 \text{ cm}^2/\text{sec}$

5.1

Data Set: I:\VOA\8726.00 214 Lake Avenue and .01 .02\3.0 Design\3.8 Reports\MW-106 permeability.aqt Title: 214 Lake Avenue - MW-106 Permeability Test Date: 12/19/11 me: 14:38:11

PROJECT INFORMATION

Company: Bergmann Associates Client: Volunteers of America Project: 8726.00 Location: 214 Lake Avenue Test Date: 3/22/11 Test Well: MW-106

AQUIFER DATA

Saturated Thickness: 6.54 ft Anisotropy Ratio (Kz/Kr): 0.01

SLUG TEST WELL DATA

Test Well: MW-106

X Location: 0. ft Y Location: 0. ft

Initial Displacement: 0.13 ft Static Water Column Height: 25.46 ft Casing Radius: 0.083 ft Well Radius: 0.161 ft Well Skin Radius: 0.161 ft Screen Length: 10. ft Total Well Penetration Depth: 32. ft

b. of Observations: 102

Observati	on Data	
Displacement (ft) 0.13 0.13 0.13 0.13 0.13 0.12 0.09 0.08 0.08 0.08 0.08	Time (min) 2.6 2.65 2.7 2.75 2.8 2.95 3. 3.05 3.1 3.25 3.35 3.4 3.45 3.55 3.6 3.65 3.7 3.75 3.8 3.85	Displacement (ft) 0.05 0.04 0.02 0.02 0.02 0.02 0.02 0.02 0.02
0.08 0.08 0.08 0.08 0.08 0.08 0.08	3.8 3.85 3.9 3.95 4. 4.05	0.02 0.02 0.02 0.02 0.02 0.02 0.02
	Displacement (ft) 0.13 0.13 0.13 0.13 0.13 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.11 0.1 0.1 0.1 0.1 0.1 0.1 0.	



Time (min) 1.55 1.6 1.65 1.7 1.75	Displacement (ft) 0.07 0.08 0.08 0.07 0.07 0.07	Time (min) 4.1 4.15 4.2 4.25 4.3	Displacement (ft) 0.02 0.02 0.01 0.01 0.01 0.01
1.8	0.07	4.35	0.02
1.85	0.07	4.4	0.01
1.9	0.07	4.45	0.01
1.95	0.06	4.5	0.01
2.	0.06	4.55	0.02
2.05	0.07	4.6	0.02
2.1	0.06	4.65	0.01
2.15	0.05	4.7	0.01
2.2	0.05	4.75	0.01
2.25 2.3 2.35 2.4	0.06 0.05 0.05 0.05 0.05	4.8 4.85 4.9 4.95	0. 0. 0.01 0.
2.45	0.05	5.	0.
2.5	0.05	5.05	0.
2.55	0.05	5.1	0.

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter K v0	Estimate 0.0003486 0.1278	cm/sec ft
yU	0.1270	16

 $T = K^*b = 0.06948 \text{ cm}^2/\text{sec}$



Title: 214 Lake Avenue ate: 12/19/11 Time: 14:57:05	.00 214 Lake Avenue and .0 e - MW-107 Permeability Te	01 .02\3.0 Design\3.8 R st	eports\mw-107 permeabi	lity.aqt
PROJECT INFORMAT	ION			
Company: Bergmann A Client: Volunteers of A Project: 8726.00 Location: 1200 East M Test Date: 3/22/11 Test Well: MW-107	merica			
AQUIFER DATA				
Saturated Thickness: (Anisotropy Ratio (Kz/K				
SLUG TEST WELL DA	TA			
Test Well: MW-107				
X Location: 0. ft Y Location: 0. ft				
hitial Displacement: 0 tatic Water Column H Casing Radius: 0.083 Well Radius: 0.33 ft Well Skin Radius: 0.33 Screen Length: 10. ft Total Well Penetration	leight: 43.02 ft ft 3 ft			
No. of Observations: 6	6			
	Observatio	on Data		
Time (min) 0.05 0.1 0.15 0.2 0.25 0.3 0.35 0.4 0.45 0.5 0.5 0.5 0.6 0.65 0.7 0.75	Displacement (ft) 0.08 0.07 0.07 0.07 0.07 0.07 0.07 0.07 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.05	Time (min) 1.7 1.75 1.8 1.85 1.9 1.95 2. 2.05 2.1 2.15 2.2 2.25 2.3 2.35 2.4	Displacement (ft) 0.04 0.03 0.02	
0.8	0.05	2.45	0.01	

Time (min)	Displacement (ft)	Time (min)	Displacement (ft)
0.85	0.05	2.5	0.02
0.9	0.05	2.55	0.01
0.95	0.05	2.6	0.01
1.	0.05	2.65	0.01
1.05	0.05	2.7	0.01
1.1	0.04	2.75	0.01
1.15	0.05	2.8	0.
1.2	0.04	2.85	0.01
1.25	0.04	2.9	0.
1.3	0.04	2.95	0.
1.35	0.04	3.	0.
1.4	0.04	3.05	0.
1.45	0.04	3.1	0.
1.5	0.04	3.15	0.
1.55	0.04	3.2	0.
1.6	0.04	3.25	0.
1.65	0.03	3.3	0.

SOLUTION

Slug Test Aquifer Model: Unconfined Solution Method: Bouwer-Rice In(Re/rw): 0.

VISUAL ESTIMATION RESULTS

Estimated Parameters

Parameter	Estimate	
K	0.0005688	cm/sec
у0	0.07769	ft

 $T = K^*b = 0.01404 \text{ cm}^2/\text{sec}$

(A	GeoQuest Environmental, Inc. Test Boring Report						ort		MW - 10		
Clie	oject: ent:	Volunteers of America, 214 Lake Avenue, BCA Index #B 8-0688-05-04, Site C828126 Volunteers of America of Western New York						File No: Sheet No:	110204 1 of 2		
Co	ntractor	SJB Serv	vices, Inc.							Location:	See Plan
Ite	m	Ca	asing	Drive Sampler	Core	Barrel		Drilling Equipment a	nd Procedures	Elevation:	482.3
уре:			uger	SS	NX		Rig Type		ounted	Datum:	NGVD
nside Diame Iemmer Wei			NA 140	1.8 NA	N/		Bit Type: Drill Mud:			Start:	7/1/2008
lammer Fall			30	NA	N/ N/		Other:	: water		Finish	7/2/2008
Other:			NA	NA	NA					Driller:	R. Brown
Depth	Sam		Sampler Blov	ws Head Space	Sample Numb	er Stra	ta			GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs		and Recover				Visual Clas	sification and Remark	S
0	C)				0.5	5 P	AVEMENT			
		0.5	0.445								
		25.	,3,4,15		S1			oose gray GRAVEL,	with coal fragmer	its, damp.	
2	2				20"/24"			Dense black to gra	y GRAVEL, with	brick and coal fragments, o	dampUPPER FILL-
2				ND	S2						
		100	,18,15,12		22"/24"						
4	4		,10,13,12								
4	4										
	4				S3			Medi	um dense black t	o gray CINDERS and SLA	G, damp.
6	6	10	,11,8,7	ND	21"/24"						
D	0		,11,0,7		S4						
	6				04		L	oose black to gray Cl	NDERS and SLA	G, with ash dampL	IPPER FILL-
			1,3,4	ND	22"/24"						
8	8										
					S5		S	ame.			
	10			ND	20"/24"				-	UPPER FILL -	
10		7,2	,2,2		20724		S	ame.			
	10				S6						
	10										
12	12		,2,1	ND	0"/24"						
					S7						
	14	1.1	,1,1		20"/24"			Same.		- UPPER FILL-	
14	14	1,1,	<u></u>	ND	S8						
	14				20"/24"		Sa	ame.			
16	16	1.1	0.0						,	UPPER FILL -	
10	16	1,1,	,2,2	ND	S9			Same.			
					00						
					24"/24"						
18	18	1 1	,2,2	ND	S10						
.0	18		, mar () fan								
					17"/24"		Sa	ame.			
20	20	1.2	2,2	ND						UPPER FILL -	
		1,2,	,						-	orren ritt."	
			- Second Second								
			Ground	l Water Data				Summary			
		Elapsed Ti	ime Bottom	Of	Depth	roundwater			4.0	GeoOu	est
Date	Time	Elapsed II (HR)	Casin			roundwater ncountered	Rock Core	ed (Lin FT) N	AL		ental, Inc.
7/2/2008	NA	NA	NA	34.0 F		Yes	Samples:		16		

Appendix B

(A	GeoQuest Environmental, Inc. Test Boring Report						ort		MW - 10		
Clie	oject: ent:	Volunteers of America, 214 Lake Avenue, BCA Index #B 8-0688-05-04, Site C828126 Volunteers of America of Western New York						File No: Sheet No:	110204 1 of 2		
Co	ntractor	SJB Serv	vices, Inc.							Location:	See Plan
Ite	m	Ca	asing	Drive Sampler	Core	Barrel		Drilling Equipment a	nd Procedures	Elevation:	482.3
уре:			uger	SS	NX		Rig Type		ounted	Datum:	NGVD
nside Diame Iemmer Wei			NA 140	1.8 NA	N/		Bit Type: Drill Mud:			Start:	7/1/2008
lammer Fall			30	NA	N/ N/		Other:	: water		Finish	7/2/2008
Other:			NA	NA	NA					Driller:	R. Brown
Depth	Sam		Sampler Blov	ws Head Space	Sample Numb	er Stra	ta			GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs		and Recover				Visual Clas	sification and Remark	S
0	C)				0.5	5 P	AVEMENT			
		0.5	0.445								
		25.	,3,4,15		S1			oose gray GRAVEL,	with coal fragmer	its, damp.	
2	2				20"/24"			Dense black to gra	y GRAVEL, with	brick and coal fragments, o	dampUPPER FILL-
2				ND	S2						
		100	,18,15,12		22"/24"						
4	4		,10,13,12								
4	4										
	4				S3			Medi	um dense black t	o gray CINDERS and SLA	G, damp.
6	6	10	,11,8,7	ND	21"/24"						
D	0		,11,0,7		S4						
	6				04		L	oose black to gray Cl	NDERS and SLA	G, with ash dampL	IPPER FILL-
			1,3,4	ND	22"/24"						
8	8										
					S5		S	ame.			
	10			ND	20"/24"				-	UPPER FILL -	
10		7,2	,2,2		20724		S	ame.			
	10				S6						
	10										
12	12		,2,1	ND	0"/24"						
					S7						
	14	1.1	,1,1		20"/24"			Same.		- UPPER FILL-	
14	14	1,1,	<u></u>	ND	S8						
	14				20"/24"		Sa	ame.			
16	16	1.1	0.0						,	UPPER FILL -	
10	16	1,1,	,2,2	ND	S9			Same.			
					00						
					24"/24"						
18	18	1 1	,2,2	ND	S10						
.0	18		, mar () fan								
					17"/24"		Sa	ame.			
20	20	1.2	2,2	ND						UPPER FILL -	
		1,2,	,						-	orren ritt."	
			- Second Second								
			Ground	l Water Data				Summary			
		Elapsed Ti	ime Bottom	Of	Depth	roundwater			4.0	GeoOu	est
Date	Time	Elapsed II (HR)	Casin			roundwater ncountered	Rock Core	ed (Lin FT) N	AL		ental, Inc.
7/2/2008	NA	NA	NA	34.0 F		Yes	Samples:		16		

	GeoQues Environmen	ai, Inc.		Te	est Bori	ng Report	MW - 101
Proj		unteers of America, 214 La	ake Avenue. BCA			File No:	110204
Clie		unteers of America of Wes				Sheet No:	2 of 2
Con	tractor SJE	3 Sevices, Inc.					
		-					
Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number and Recovery	Strata Change (FT)	Visual Classification and Ren	narks
20	20					Medium dense CINDERS and SLAG with ash, moist.	
	22	WOH,2,2,7	ND	S11			
	22			24"/24"		Same.	
22	22						
			ND	S12			
				24"/24"		-UPPER FILL-	
24	24	3,3,3,2,			24.0		
	24			S13			
			ND			Medium dense gray to white CINDERS and ASH with glass, shell, ar	d leather fragments, damp.
26	26	1,1,1,2		21"/24"			
		1,1,1,2					
	26 28		ND	S14		Loose gray to white CINDERS and ASH, dampLOWER FI	LL-
28		3,3,5,7		23"/24"			
	28			S15		Same, except with shell fragments	
			ND	24"/24"			
20	20	1045					
30	30	1,3,4,5	_				
	30			S16		Same.	
			ND	20"/24"			
32	32	2,2,3,2					
	32			S17		Loose CINDERS and ASH, little silt, wet.	
			ND				
			ND				
34	34	2,4,5,9		24"/24"		-LOWER FI	LL-
36						Notes: Monitoring well MW-101 installed in completed test boring].
						See Well Completion Log MW-101	
20							
38							
40							
10							

			Ground Wate	r Data					Summa	ary	
		Elapsed Time	Bottom Of	D Bottom C	epth	Groun		Overburden Rock Cored		34.0 NA	GeoQuest Environmental, Inc.
7/2/2008	NA	(HR) NA	Casing	34.0			ntered es	Samples:	(20111)	S17	Environmental, Inc.

	GeoQu Environn	iest nental	, Inc.			Te	est E	Bor	ing Report		MWR - 10
Pro	ject:	Volunt	teers of America	a, 214 Lake Avenue,	BCA Index	#B 8-0688-05	5-04, Site C	828126		File No:	110204
Clie	nt:	Volunt	teers of America	a of Western New Yo	rk					Sheet No:	1 of 1
Cor	tractor	SJB S	ervices, Inc.							Location:	See Plan
Iter	n		Casing	Drive Sampler		Core Barrel			Drilling Equipment and Procedures	Elevation:	482.2
ype:			Auger	SS		NX		Rig Typ		Datum:	NGVD
side Diame	er (IN):		NA	1.8		NA		Bit Typ	e: Rorary Augers	Start:	7/9/2008
emmer Wei	ght (LB):		140	NA		NA		Drill Mu	ud: water	Finish	7/10/2008
ammer Fall	(IN):		30	NA		NA		Other:	NX core barrel - rock core		· <u>····</u> ·····
ther:			NA	NA		NA				Driller: GeoQuest Rep	R. Brown D: S. DeMeo
Depth	Samp		Sampler Blo			e Number	Strat		Vieual Clar		
(FT)	Depth ((FT)	Per 6 Inch	is (PPM)	and F	ecovery	Change	(FI)		ssification and Remar	
34									Augers without sampling from ground s	surface to 34.0 ft. see MW	-101 for soil description
	34		12,18,14,	20					Dense light brown SILT, some coarse t	to fine sand, little gravel, v	vet.
		20									
36	36	36							same, except very dense.		
			35,30,36,40						- G	GLACIAL TILL-	
		38									
38	38										
			10,22,34,31						Dense light brown to gray GRAVEL, so	ome silt, little coarse to fine	e sand, tracy clay, wet.
	40										
40	40		8,16,18, 22						same.		
	-										
		42									
	42		22,28,40,45						Same, except very dense.		
42		44									
	Augered 44 -4	4.5								-GLACIAL	TILL-
44		-	100/.5								
	44.5								TOP OF BEDROCK AT APPROXI	MATELY 44.5 ft.	
46			R1						Medium hard gray shaley mudstor	Ne ROCHESTER SHALE	with calcarenite lenses
			57"/60								init calculotine folioco,
			E2"/60"						occasional horizontal partings and	high angle joints.	
48			52"/60"								
	49.5		REC. 95.0%								
	49.5		RQD. 86.7%								
50	10.5								Medium hard gray shaley muc	Istone ROCHESTER SHA	LE, with calcarenite
50	49.5								lenses and occasional horizontal p	artings.	
			R2								
50			501/001								
52			56"/60'								
			51"/60"								
			REC.93.3%								
54	54.5										
			RQD.85.0%								
									Bottom of boring at 54.5 ft. Installe	d monitoring well MWR-10	01 in completed borehol
	•		Grou	nd Water Data	•		•		Summary		
		• • • •			Depth	-		Overbu	rden (Lin FT) 44.5	😭 GeoQi	vest
Date	Time		ed Time Botto HR) Cas		Of Hole	Ground Encour		Rock C	cored (Lin FT) 10		nental, Inc.
					_			Sampl	es: S6		
7/10/2008	NA		NA N	A 54	5	Ye	es				

	GeoQu Environm	est iental, li	nc.			Τe	est B	Borii	ng Rep		MW - 10	
Proj	ect:	Voluntee	rs of America, 2	14 Lake Avenue, I	BCA Index #	#B 8-0688-05	-04, Site C8	328126		_	File No:	110204
Clie	nt:	Voluntee	rs of America of	Western New Yor	k					-	Sheet No:	1 of 2
Con	tractor	SJB Serv	rices, Inc.							-	Location:	See Plan
Iten	n	C	asing	Drive Sampler		Core Barrel			Drilling Equipmer	and Procedure	s Elevation:	490.6
pe:			uger	SS		NX		Rig Type			Datum:	NGVD
side Diamet	er (IN):		NA	1.8		NA		Bit Type:	Rorary Auger	rs	Start:	7/7/2008
emmer Weig	ght (LB):		140	NA		NA		Drill Mud	: water		Finish	7/7/2008
ammer Fall ((IN):		30	NA		NA	1	Other:				·····
ther:			NA	NA		NA					Driller: GeoQuest Rep:	R. Brown S. DeMeo
Depth	Samp		Sampler Blows			Number	Strata				· · ·	•
(FT)	Depth (FT)	Per 6 Inchs	(PPM)	and R	ecovery	Change	(FT)		Visual C	Classification and Remarks	8
0	0						0.5	F	AVEMENT			
		36	6,8,9,9		c	51			Aedium dense ara		coal, cinders, and brick fragme	ante damo
		50	,0,0,5			51			ieulum dense gra	y OKAVEE, with	coal, cinders, and blick hagine	ino, damp.
2	2			_	22"/24"				Same.		-UPPER FILL-	
2	2			ND	5	32						
					22'	'/24"						
		9,6	6,6,6									
4	4											
	4				60				Loose He-1		IS and SI AC with ach and	al fragmente dama
	4				S3				LOUSE DIACK	to gray CINDEF	S and SLAG, with ash and coa	a nayments, damp.
6	6	2,3	3,2,2	ND	22'	'/24"						
	6				5	64			same.			
	0											
8	8		3,1,1	ND	22'	'/24"						
0	0							s	Same.			
					S	S5						
	10			ND		'/24"					- UPPER FILL -	
10		1,2	2,4,2					s	Same.			
					Ş	56						
	10											
12	12	3,3	3,2,1	ND	0"/	/24"						
	12				5	67						
					21'	'/24"			Same.		- UPPER FILL-	
14	14	3,3	3,4,1	ND		20						
14	14			UNI		58		N	ledium dense bro	wn SAND. with c	inders, slag and ash, damp.	
					23'	'/24"				- ,		
16	16	4,4	4,5,6								- UPPER FILL -	
	16			ND	S9				Medium dense	gray SILT and S	AND, with cinders, slag, and a	sh, damp.
					24"/	24"						
18	18	5 1	5,4,6	ND	9	10						
	18	0,	- , - , - , - , - , - , - , - , - , - ,									
					24'	'/24"		S	Same.			
20	20											
		2,6	6,8,4	ND							- UPPER FILL -	
	I		Ground	Water Data	L				Summary			
		• . • . • .			Depth			Overburg	den (Lin FT)	32.0		1
Date	Time	Elapsed			-	Ground	lwater		red (Lin FT)	NA	GeoQu	est ental, inc.
		(HR)) Casing]		Encour	ilereu				Environm	
7/7/2008	NA	NA	NA	32.0	Ft.	Ye	s	Samples	S:	S15		

	GeoQuest Environmenta	l, Inc.		Τε	est Bor	ing Report	MW - 102
Proj	ect: Volun	teers of America, 214 L	ake Avenue, BCA	Index #B 8-0688-05-04,	, Site C828126	File No:	110204
Clie	nt: Volun	teers of America of Wes	stern New York			Sheet No:	2 of 2
Con	tractor SJB S	Sevices, Inc.					
Depth	Sample	Sampler Blows	Line d Orange	Sample Number	Strata		
(FT)	Depth (FT)	Per 6 Inchs	Head Space (PPM)	and Recovery	Change (FT)	Visual Classification and F	temarks
20	20	6,5,5,5	ND	S11		Medium dense black to gray CINDERS and SLAG and brick fr	agments, moist.
22	22			23"/24"		Same.	
24	24	9,5,5,5	ND	S12 24"/24"	24.0	-LOWER FILL-	
	24		ND	S13		Loose gray to white CINDERS and ASH with glass, shell, and lea	her fragments, damp.
26	26 26 28	2,1,2,2	ND	22"/24" S14		Loose gray to white CINDERS and ASH, dampLOWER	FILL-
28	28	2,9,7,7		23"/24" S15		Medium dense light brown GRAVEL, some silt, little coarse to fine Same, except moist to wet.	e sand, moistGLACIAL TILL-
30	30	4,5,7,9	ND	20"/24"			
	30		ND	S16 23"/24"		Same, except wet.	-GLACIAL TILL-
32	32	10,17,20,31					
34							
36						Notes: Monitoring well MW-102 installed in completed test bo See Well Completion Log MW-102	ring.
38							
40							
		Ground W		Pepth	Overt	Summary	
Date	Time Elaps	sed Time Bottom Of (HR) Casing	Bottom C	Groun	dwatar	Cored (Lin FT) 32.0 NA Cored (Lin FT) NA Cored (Lin FT) NA	est Jental, Inc.

S16

Samples:

Yes

7/7/2008

NA

NA

NA

32.0 Ft.

		uest nental,	, Inc.				Te	est E	Bori	ing Repo	ort		MWR - 10
Pro	ject:	Volunt	eers of Americ	a, 214 Lake	Avenue, B	CA Index #	B 8-0688-05	5-04, Site C8	328126			File No:	110204
Clie	ent:	Volunt	eers of Americ	a of Wester	n New York							Sheet No:	1 of 1
Co	ntractor	SJB Se	ervices, Inc.									Location:	See Plan
Ite	m		Casing	Drive S	ampler		Core Barrel			Drilling Equipment a	nd Procedures	Elevation:	490.5
ype:			Auger	S			NX		Rig Typ			Datum:	NGVD
iside Diame	eter (IN):		NA	1.	8		NA		Bit Type	e: Rorary Augers		Start:	7/7/2008
emmer Wei	ight (LB):		140	N	A		NA		Drill Mu	ıd: water		Finish	7/8/2008
ammer Fall	(IN):		30	N			NA		Other:	NX core barrel - rock c	ore		<u></u>
ther:			NA	N.	A		NA					Driller: GeoQuest Rep	R. Brown S. DeMeo
Depth	Sam		Sampler Bl		ad Space		Number	Strata					
(FT)	Depth	(FT)	Per 6 Incl	hs	(PPM)	and Re	ecovery	Change	(FT)		Visual Cla	ssification and Remark	S
34										Augers without samplin	ng from ground :	surface to 34.0 ft. see MW-	102 for soil descriptions
	34	L	50,47,43	49						Very Dense light brow	n GRAVEL. som	e silt. little clav. wet.	
	-		, ,							, , , , , , , , , , , , , , , , , , , ,	. ,	, , ,	
36	36	36											
			54,47,50,43								- 0	GLACIAL TILL-	
		20											
30		38											
38	38	,	100/0.3							Same.			
	38.	3											
40	40)											
		40.4	100/0.4										
	42									Vory Donso light brow	n coarso to fino	SAND, some gravel, little s	ilt trace clay, wot
42	42									very Dense light brown		SAND, Some graver, inde s	ni, itace clay, wei.
		42.3	100/0.3										
	42	2	45,44,53,48									-GLACIAL T	ILL-
44	44												
										TOP OF BEDROC	K AT APPROXI	MATELY 44.0 ft.	
	44	Ļ											
46			R1										
										Medium hard g	gray, shalely mu	dstone ROCHESTER SHA	LE with calcarenite
			59"/60)"						lenses, occasional	horizontal parti	nas.	
			53"/60"							,			
48													
	49		REC. 98.3%										
			RQD. 88.3%										
50	49)								Medium hard g	gray, shalely mu	dstone ROCHESTER SHA	LE with calcerenite
										lenses, occasional	horizontal parti	ngs, and high angle joints.	
			R2										
52			57"/60'										
			52"/60"										
<u> </u>			REC.95%										
54	54	ŀ	RQD.86.6%										
										Bottom of boring a	t 54.0 ft. Installe	d monitoring well MWR-10	2 in completed borehol
			Grou	Ind Water D	ata					Summary			
· · · · ·	· · · · · ·				[Depth			Overbu	rden (Lin FT) 4	4.0	😭 GeoQu	iest
Date	Time			om Of sing	Bottom Of	Hole	Ground Encour		Rock C	ored (Lin FT)	10		nental, Inc.
					<u>.</u>				Sampl	es:	S6		
7/7/2008	NA		NA N	A	54.0		Ye	es					

	GeoQu Environn	iest nental	, Inc.			Te	est E	Bori	ng Repo	ort		MW - 10
Proj	ect:	Volunt	teers of Americ	a, 214 Lake Avenue	BCA Index	#B 8-0688-05	5-04, Site C8	828126			File No:	110204
Clie	nt:	Volunt	teers of Americ	a of Western New Y	ork						Sheet No:	1 of 2
Con	tractor	SJB S	ervices, Inc.								Location:	See Plan
Iten	0		Casing	Drive Sampler		Core Barrel			Drilling Equipment a	and Procedures	Elevation:	483.8
pe:	1		Auger	SS		NX		Rig Type			Datum:	NGVD
side Diamet	er (IN):		NA	1.8		NA		Bit Type			Start:	7/1/2008
emmer Weig	ght (LB):		140	NA		NA		Drill Mue	d: water		Finish	7/2/2008
ammer Fall ((IN):		30	NA		NA		Other:				<u></u>
ther:			NA	NA		NA					Driller:	R. Brown
Depth	Samp	ole	Sampler Bl	ows Head Space	e Sample	e Number	Strat	а			GeoQuest Rep	•
(FT)	Depth	(FT)	Per 6 Inc	hs (PPM)	and F	Recovery	Change	(FT)		Visual Cla	assification and Remark	s
0	0)						1	Medium dense gray G	RAVEL, some o	coarse to fine sand with coal	, damp.
			6,12,20,15	ND		S1						
			0,12,20,10	ND		01						
2	2				24"/24"				Medium dense bla	ack COAL and G	GRAVEL, with brick fragment	s, dampUPPER FIL
2	2			11.2 ppm		S2						
			6 9 10 15		23	8"/24"						
			6,8,12,15									
4	4	•										
	4				S3				Medium dense b	lack to grav CIN	DERS and WOOD FIBERS,	little fine sand. damp
6	5.9	1	23,11,17,100/	0.4 ND)"/23"						
	6	;				S4			Medium dense black t	o gray GRAVEL	, some coarse to fine sand,	trace slag,damp.
8	8		34,12,8,12	ND	22	2"/24"						
								:	Same, except with coa	al fragments.		
						S5					- UPPER FILL -	
10	10			ND	24	! "/24"						
			5,15,12,8			S6		:	Same.			
	10)				00						
10	10		7 0 0 4 0						0			
12	12 12		7,6,8,10	ND		8"/24"			Same.		- UPPER FILL -	
						S7			Ma dia ana da a sa bita		with high for some to show a	
	14		4,7,6,8		23	3"/24"			Medium dense bia	ick to gray SIL I	, with brick fragments, damp	
14			1,1,0,0	ND		S8						
	14	Ļ			20)"/24"		1	Loose black to gray S	ILT, with brick fr	agments, damp.	
16	40		1111								- UPPER FILL -	
10	16 16		4,4,4,4	ND	S	٩			Medium dense bla	ack to gray CINE	DERS and SLAG, damp.	
				UN	5							
					24"	'/24"						
18	18 18		11,4,6,10	ND								
						S10		I	Medium dense CINDE	RS, SLAG, with	ash and coal, damp.	
					24"/	(24"			_oose black to gray C	INDERS and SI	.AG, dampUPPER FIL	1-
20	20)			24 /	-7		ľ	LOUGE DIALK IU YIAY U		, uampUFFER FIL	. _
			4,3,2,8	ND								
	<u> </u>		Grou	Ind Water Data	<u> </u>		l		Summary	<u> </u>		
		• • •		שמע אימוכו שמומ	Depth			Overbur		34.0		
Date	Time			om Of Bottom	Of Hole	Ground				NA	GeoQu	est ental, inc.
		(1	HR) Ca	sing		Encou	ntered	-			Environm	
6/27/2008	NA	1	NA N	IA 46.0) Ft.	Ye	es	Sample	s: 8	S22		

	est nental, Inc.	Test Bo
Project:	Volunteers of America, 2	214 Lake Avenue, BCA Index #B 8-0688-05-04, Site C828126

Boring Report

110204

MW - 103

2 of 2

File No:

Sheet No:

Client: Volunteers of America of Western New York Contractor SJB Sevices, Inc.

Depth	Sample	Sampler Blows	Head Space	Sample Number	Strata	
(FT)	Depth (FT)	Per 6 Inchs	Head Space (PPM)	and Recovery	Change (FT)	Visual Classification and Remarks
20	20					Medium dense black to gray CINDERS and SLAG, trace ash, dampUPPER FILL-
22	22	11,14,3,4	ND	S11 19"/24"	22	
			ND	S12 23"/24"		Loose gray to white CINDERS and ASH, with shell and glass fragments, dampLOWER FILL-
24	24 24	3,3,3,4	-	S13		Same, except medium dense.
26	26	4,6,5,3	ND	22"/24"		
	26 28	4,7,1,3	ND	S14 21"/24"		Same, except Loose.
28	28			S15		Same, except mendum dense.
30	30	4,9,13,14	ND	22"/24"		-LOWER FILL-
	30		ND	S16 22"/24"		Same, except loose.
32	32 32	3,3,4,4	-	S17		Same, except medium dense.
34	34	6,7,5,5	ND	24"/24"		-LOWER FILL-
	34		ND	S18		Same.
36	<u>36</u> 36	4,5,7,8	ND	23"/24" S19		Same.
38	38 38	7,6,8,9	_	24"/24"		
40	40	4,3,4,3	ND	S20 24"/24"		Loose gray to white CINDERS and ASH, with glass, shell fragments, moist LOWER FILL-
	42	2,3,3,4	ND	S21 22"/24"		Same.
42	42 44	3,3,3,3	ND	S22 21"/24"		Same, except with leather fragments, moist to wet.
44 46	44 46	1,4,3,2	ND	S23 24"/24"		Same, except wetLOWER FILL-
		ι, ₁ , ₄ ,3,2		<u></u> 24 /24		Notes: Monitoring well MW-103 installed in completed test boring.
		Ground Wat	er Data		<u> </u>	See Monitroing well log MW-103 Summary
· . · . · . · .	· . · . · . · . · .			epth	Over	
Date 6/27/2008	(ed Time Bottom Of HR) Casing	Bottom O 46.0 F	f Hole Encou	untered	Accored (Lin FT) 46.0 Accored (Lin FT) NA Imples: S23
5,2172000			40.01			

	GeoQu Environm	est iental,	Inc.					est E	Borin		MW - 10		
Proj	ect:	Volunte	eers of Americ	ca, 214 I	Lake Avenue, E	3CA Index	#B 8-0688-05	5-04, Site C8	828126			File No:	110204
Clier	nt:	Volunte	eers of Americ	ca of We	estern New Yor	k					_	Sheet No:	1 of 2
Con	tractor	SJB Se	ervices, Inc.								_	Location:	See Plan
Item	1		Casing	Dri	ve Sampler		Core Barrel		г	rilling Equipme	ent and Procedures	Elevation:	481.9
pe:			Auger		SS		NX		Rig Type:	CME 85 Truc		Datum:	NGVD
side Diamete	er (IN):		NA		1.8		NA		Bit Type:	Rorary Auge	ers	Start:	6/27/2008
emmer Weig	ht (LB):		140		NA		NA		Drill Mud:	water		Finish	6/27/2008
ammer Fall (IN):		30		NA		NA		Other:				· · · · · · · · · · · · · · · ·
her:			NA		NA		NA					Driller: GeoQuest Rep	R. Brown C: S. DeMeo
Depth	Samp		Sampler B		Head Space		e Number	Strat					
(FT)	Depth (FT)	Per 6 Inc	:hs	(PPM)	and F	lecovery	Change	(FT)		Visual Cl	assification and Remar	<s< td=""></s<>
0	0								Me	dium dense Br	own GRAVEL and	COAL, damp.	-
			16,10,12,4				S1		Me	dium dense bla	ack COAL, damp.		
			., .,,.										
2	2					22"/24"				Loose black C	OAL, damp.	-UPPER FILL-	
2	2				ND		S2						
			2422			22	"/24"						
			3,4,3,8										
4	4												
	4					S3				Medium den	se black to grav CII	NDERS and SLAG, little coa	ires to fine sand, damn
	-					00					show to gray Of		
6	6		3,15,17,16		ND	24	"/24"						
	6						S4		Ve	ry dense black	CINDERS and SLA	AG, with brick fragments, da	mpUPPER FILL-
												J	. –
8	8		13,10,15,19		ND	22	"/24"						
-	5								Me	dium dense Cl	NDERS and SLAG	, with ash, damp.	
							S5						
10	10				ND	21	"/24"					- UPPER FILL -	
ĨŬ			10,11,7,8				86						
	10						S6						
12	12 12		11,4,5,7		ND		"/24"			Coarse to fine	SAND, little grave	l, with wood fragments, dam - UPPER FILL -	р.
							S7						
			E 7 14 0			23	"/24"			Medium dense	e CINDERS and SL	AG with COAL, damp FII	_L-
14	14		5,7,11,9		ND		S8						
	14								Lo	ose CINDERS a	and SLAG, with as	n, moist to wet.	
						24	"/24"						
												- UPPER FILL -	
16	16 16		7,4,5,8							Same except	medium dense.		
	10				ND	S	9						
							/0.4"						
						24"	/24"						
18	18		10,8,6,8		ND			18	Me	dium dense Cl	NDERS, SLAG, wit	h ash and coal, dampL	IPPER FILL-
	18						S10						
20	20					23"/	24"		Lo	ose brown GRA	VEL, with glass an	d shell fragments, dampL	OWER FILL-
	20		1,3,5,4		ND								
				und Wa	ter Data					Summary			
	<u>. · . · . · .</u>	• •		om Of		Depth	Groups	dwater	Overburde	. ,	34.0	😭 GeoQi	vest
Date	Time			om Of asing	Bottom O	f Hole	Ground Encour		Rock Core	d (Lin FT)	NA		nental, Inc.
									1				

	GeoQuest Environmenta	l, Inc.		Те	est Bori	ng Report	MW - 104
Proj Clie Con	ent: Volun	nteers of America, 214 L nteers of America of We Sevices, Inc.		Index #B 8-0688-05-04,	Site C828126	File No: Sheet No:	110204 2 of 2
Depth	Sample	Sampler Blows	Head Space	Sample Number	Strata		
(FT)	Depth (FT)	Per 6 Inchs	(PPM)	and Recovery	Change (FT)	Visual Classification and R	emarks
20	20					Loose brown GRAVEL, with glass fragments, damp LOWE	R FILL-
	22	1,1,2,3	ND	S11			
22	22		_	19"/24"		Medium dense gray SILT and COAL, trace fine sand, with shell fra	agments, damp.
			ND	S12			
				24"/24"			
24	24	8,15,16,10	_				
	24			S13			·····
26	26	5,10,7,4	ND	22"/24"		Medium dense gray to white CINDERS and ASH with shell, and le	ather tragments, damp.
	26	5,10,7,4	ND	S14		Medium dense gray SILT and COAL, dampLOWER FIL	1-
	28	10,9,7,9		21"/24"			-
28	28			S15		Loose brown to gray coarse to fine SAND, little gravel, moist.	
I			ND	24"/24"			
30	30	WOH,2,3,5					
	30			S16		Loose CINDERS and ASH, with wood fragments, moist.	
I			ND	22"/24"			
32	32	2,2,3,5					
	32			S17		Loose CINDERS and ASH, with leather and shell fragments, wet.	
			ND				
34	34	6,4,5,7		24"/24"		-LOWER	FILL-
36						Notes: Monitoring well MW-104 installed in completed test bo	-in z
30						See Well Completion Log MW-104	ing.
38							
40							
40							

			Ground Wate	r Data			Sum	nmary	
• • • • • • • •	Depth							34.0	Cao Quast
Date	Time	Elapsed Time (HR)	Bottom Of Casing	Bottom C	f Holo	undwater ountered	Rock Cored (Lin FT)	NA	GeoQuest Environmental, Inc.
6/27/2008	NA	NA	NA	34.0	Ft.	Yes	Samples:	S17	

	GeoQı Environn	iest nental, Inc.	_			Τe	est B	Sori	ing Report		MW - 10
Proj	ect:	Volunteers of	of America, 214	1 Lake Avenue,	BCA Index #	#B 8-0688-05	-04, Site C8	28126		File No:	110204
Clie	nt:	Volunteers of	of America of W	Vestern New Yo	ŕk					Sheet No:	1 of 2
Con	tractor	SJB Service	s, Inc.							Location:	See Plan
Iten	n	Casi	og D	rive Sampler		Core Barrel			Drilling Equipment and Procedures	Elevation:	481.5
/pe:		Auge	0	SS		NX		Rig Typ		Datum:	NGVD
iside Diamet	er (IN):	NA		1.8		NA		Bit Typ		Start:	6/30/2008
emmer Weig	ght (LB):	1-	40	NA		NA		Drill Mu	id: water	Finish	6/30/2008
lammer Fall ((IN):	;	30	NA		NA		Other:			
Other:		NA		NA		NA				Driller:	R. Brown
Depth	Samp	ole Sa	ampler Blows	Head Space	Sample	Number	Strata	1		GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and R	ecovery	Change	(FT)	Visual Class	ification and Remark	s
0	0								Medium dense Black and gray BRICK ar	d COAL, some coarse to	o fine sand, damp.
		2,4,5	, 6		5	51					
	2				24"/24"				Same	JPPER FILL-	
2	2			ND	5	32					
					23'	'/24"					
		5,6,1	6,10								
4	4								Loose gray CINDERS and SILT, with brid	ck and ash damn	
				1						and don, dump.	
	4				S3						
6	6	1,1,4	,6	ND	24'	'/24"					
]		54					
	6								Loose black and gray WOOD FIBERS, n	noist.	
	8	2,1,1	,1	ND	19'	/24"					
8	8									(- 6	
						25			Loose black to gray WOOD FIBERS, littl	e coarse to fine sand, da	imp.
						35			- 1	JPPER FILL -	
10	10	4,4,4	4	ND	20'	'/24"					
		4,4,4		1	5	S6					
	10										
12	12	16,4,	5,4	ND	23'	//24"			No recovery.		
	12					57					
						//24"	14		Loose CINDERS and SLAG with trac	e ash, moist UPPER	FILL-
	14	5,4,3	,2								·
14				ND	5	58			Medium dense liebt besus Of T		
	14				24'	'/24"			Medium dense light brown SILT, some g	raver, little coarse to fine	sano, moist.
16	16	4,8,8	.13		S9				- G	LACIAL TILL -	
	16			ND		"/10"			Very dense light brown GRAVEL, so	me coarse to fine sand, I	ittle silt, damp.
		16.8 22, 5	0/0.3			-					
	Augered										
	-										
18	18			ND							
		18.3 50/0.	3	_	s	10			SameGLAC	CIAL TILL-	
	Augorad				4"/4"						
20	Augered				4"/4"						
				4							
				<u> </u>			<u> </u>		0		
			Ground W	ater Data	Dorth			Overt	Summary		
D-+-	T	Elapsed Tin	ne Bottom Of	D-// 2	Depth	Ground	water		rden (Lin FT) 26.3	🕞 GeoQı	
Date	Time	(HR)	Casing	Bottom C	n Holê	Encour		коск С	ored (Lin FT) NA	Environn	nental, Inc.
	NA	1	NA	26.3				Sampl	es: S11		

		t tal, Inc.		Те	est Bori	ng Report	MW - 105	
Pro	oject: Vol	unteers of America,	214 Lake Avenue, BC	A Index #B 8-0688-05-04	, Site C828126		File No:	110204
			of Western New York				Sheet No:	2 of 2
Co	ntractor SJE	3 Sevices, Inc.						
Depth (FT)	Sample Depth (FT)	Sampler Bl Per 6 Incl		e Sample Number and Recovery	Strata Change (FT)	Vi	isual Classification and R	emarks
()	Bopur(i i i	1010110	(11 m/					onano
20	Augered							
22	Augered					-GLACIAL TIL	LL	
24						Same.		
26	Augered							
	26-26.3	50/0.3	ND	S11		Very dense light brown GRAVEL, so	ome coarse to fine sand, little s	ilt, moistGLACIAL TILL-
28								
30								
32								
34								
36						Notes: Monitoring well MW-105 i See Well Completion Lo		ng.
38								
40								
	<u> </u>		Ind Water Data	•	<u> </u>	Summary		
Date	Time Ela	psed Time Botto	om Of Bottom		dwater Book	urden (Lin FT) 26.3 Cored (Lin FT) NA		est
6/30/2008	NA		sing	Elicot	intered Samp		Environm	erral, me.
		i	20.	· · · · ·	1			

	GeoQu Environr	iest nental,	Inc.				Te	est E	Bori	ng Rep	oort		MW - 10
Pro	ject:	Volunte	eers of Ameri	ica, 214	Lake Avenue, E	BCA Index	#B 8-0688-05	5-04, Site C	828126		_	File No:	110204
Clie	nt:	Volunte	eers of Ameri	ica of We	estern New Yor	k					_	Sheet No:	1 of 2
Cor	tractor	SJB Se	ervices, Inc.								_	Location:	See Plan
Iter	n		Casing	Dri	ve Sampler		Core Barrel			Drilling Equipme	nt and Procedure	es Elevation:	480.9
pe:			Auger		SS		NX		Rig Type			Datum:	NGVD
side Diamet	er (IN):		NA		1.8		NA		Bit Type			Start:	6/26/2008
emmer Weig	ght (LB):		140		NA		NA		Drill Mue	d: water		Finish	6/27/2008
ammer Fall	(IN):		30		NA		NA		Other:				<u></u>
her:			NA		NA		NA					Driller: GeoQuest Rep:	R. Brown S. DeMeo
Depth	Sam		Sampler E		Head Space		e Number	Strat					
(FT)	Depth	(FT)	Per 6 In	chs	(PPM)	and R	ecovery	Change	(FT)		Visual (Classification and Remarks	S
0	C)							1	Medium dense Bro	own GRAVEL and	d COAL, damp.	
			10,12,12,16				S1						
			10,12,12,10										
2	2					20"/24"				Same, except	with brick fragme	ntsUPPER FILL-	
-					ND		S2						
			14 10 9 40			22	"/24"						
Α			14,10,8,16										
4	4	,											
	4					S3				Dense li	ight brown to bro	wn SAND, little silt, with brick fi	ragments, damp.
6	6	;	9,18,22,35		ND		"/24"						
	6	;					S4		,	/ery dense black (CINDERSand SL	AG, with brick fragments, damp	oFILL-
	6.8	,	50, 50/.3		ND	22	"/24"						
8	8		50, 50/.5		ND	22	/24						
									:	Same.			
							S5					- UPPER FILL -	
10	10				ND	24	"/24"						
			10,12,8,17				S6						
	10)											
12	12		2,2,3,1		ND	0	'/24"			No rocovoru			
12	12		2,2,3,1		ND		57			No recovery.			
											PS and SLAC wit	h COAL, damp FILL-	
	14		2,3,3,2			20	"/24"			LOOSE CINDER	to and SLAG wit	n COAL, damp FILL-	
14					ND		S8						
	14					20	"/24"		:	Same.			
16	16		3,3,2,5									- UPPER FILL -	
10	16		0,0,2,0		ND	S	à			Same, except	medium dense.		
					ND	0.							
						24"	/24"						
40			0.44.0.0		ND								
18	18		9,11,8,6		ND	S	510						
						23	"/24"		I	Medium dense CIN	NDERS, SLAG, a	nd ASH, damp.	
20	20												
			4,10,11,15		ND							- UPPER FILL -	
	I		Gro	ound Wa	ter Data			I		Summary			
		• • •				Depth			Overbur	den (Lin FT)	34.0		1
Date	Time			ttom Of	Bottom O		Ground			red (Lin FT)	NA		est ental, inc.
		(H	IR) C	asing		-	Encou	ntered				Environm	
6/27/2008	NA	N	A	NA	34.0 F	Ft.	Ye	es	Sample	5.	S16		

	GeoQuest Environmenta	l, Inc.		Те	est Bori	ng Report	MW - 106
Proj Clie Con	nt: Volur	ateers of America, 214 La ateers of America of Wes Sevices, Inc.		Index #B 8-0688-05-04,	Site C828126	File No: Sheet No:	110204 2 of 2
Depth (FT)	Sample Depth (FT)	Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Number and Recovery	Strata Change (FT)	Visual Classification and Re	emarks
20	20 22	6,6,5,4	ND	S11		Medium dense CINDERS and SLAG with ash, moist.	
22	22		_	24"/24"		Same.	
24	24	4,6,7,7,	ND	S12 24"/24"	24.0	-UPPER FILL-	
27	24	······································		S13	24.0		
26	26	4,6,7,7	ND	21"/24"		Medium dense gray to white CINDERS and ASH with glass, shell, a	and leather fragments, damp.
	26 28	1,2,1,4	ND	S14 23"/24"		Loose gray to white CINDERS and ASH, dampLOWER f	ILL-
28	28			S15		Same, except with shell fragments	
30	30	1,3,6,3	ND	24"/24"			
	30		ND	S16 20"/24"		Same.	
32	32 32	4,7,1,2	_	S17		Loose CINDERS and ASH, with leather and shell fragments, damp	
			ND				
34	34	1,2,1,2		24"/24"		-LOWER I	ILL-
36						Notes: Monitoring well MW-106 installed in completed test bori See Well Completion Log MW-106	ng.
38							

		•	Ground Water	Data					Summa	ary	
		• • • • • • • • •		D	epth			Overburde	n (Lin FT)	34.0	Cas Quart
Date	Time	Elapsed Time (HR)	Bottom Of Casing	Bottom O	f Hole	Groupdwater		Rock Core	d (Lin FT)	NA	GeoQuest Environmental, Inc.
6/27/2008	NA	NA	NA	34.0 I	-t.	Ye	es	Samples:		S16	

,	Bet architects // eng	gineers //	ann ociates planners				Test	Bo	ring Report		MW - 107
Proj	ect:	Volunt	teers of Ame	rica, 214	Lake Avenue,	BCA Index #B 8-0	688-05-04, Sit	e C82812	26	File No:	110204
Clie	nt:	Volunt	teers of Ame	rica of We	estern New Yo	rk				Sheet No:	1 of 2
Con	tractor	SJB S	ervices, Inc.							Location:	See Plan
Iten	2		Casing	Dr	ive Sampler	Core	Barrel		Drilling Equipment and Procedures	Elevation:	482
ype:			Auger		SS	N>		Rig	Type: CME 65 Track mounted	Datum:	NGVD
nside Diamet	er (IN):		NA		1.8	N	A	Bit T		Start:	10/27/2010
lemmer Weig	ht (LB):		140		NA	N	A	Drill	Mud: None	Finish	10/27/2010
ammer Fall (IN):		30		NA	N		Othe	er:		······
ther:			NA		NA	N	A			Driller: Bergmann Rep	R. Steiner S. DeMeo
Depth	Samp		Sampler		Head Space	Sample Numb		Strata			
(FT)	Depth (FT)	Per 6 I	nchs	(PPM)	and Recover	ry Cha	nge (FT)	Visual Cla	assification and Remark	S
0	0							1	Medium dense Brown GRAVEL, some	e coarse to fine sand, with c	oal fragmants, damp.
			7,14,13,10			S1			Medium dense black COAL, damp.		
			7,14,13,10			51			Medium dense black COAL, damp.		
2	2					23"/24"			Loose black COAL, damp.	- UPPER FILL-	
2	2				ND	S2					
						20"/24"					
			4,7,9,11								
4	4								Medium dense black COAL, damp.		
	4					S 3					
	4										
6	6		9,9,6,7		ND	22"/24"					
	6					S4			No recovery.		
	Ū										
8	8		4,4,3,3		ND	0"/24"		8			
0	0								Dense coarse to fine SAND, little grav	vel, with brick fragments, da	mp.
						S5					
	10				ND	21"/24"				- UPPER FILL -	
10			6,16,31,16						Medium dense fine SAND, little silt, w	ith coal fragments, cinders,	and slag.
	10					S6					
	10										
12	12		5,5,3,16		ND	24"/24"					
	12					S7				- UPPER FILL -	
						22"/24" 107 (12-	14 ft.)		Soil sample 107 (12-14 ft.) collect	ed for laboratory analysis	
14	14		11,7,5,7		ND	S8					
	14								Loose coarse to fine SAND, cinders a	and slag SILT, with cinders a	and slag, moist.
						24"/24"					
16	16		3,3,5,5						Madhura I. Oli T. Maria I.	- UPPER FILL -	
	16				ND	S9			Medium dense SILT, with cinders	and slag.	
						24"/24"					
18	18		3,5,4,3		ND						
	18										
						S10			Loose brown SILTwith cinders, damp.	UPPER FILL-	
<i>c</i> -	_					24"/24"					
20	20		2,4,2,3		ND						
			£,7,2,0								
			Gi	round Wa	iter Data	·	I		Summary		
		<u> </u>				Depth		Ove	rburden (Lin FT) 45.0	Rer	gmann
Date	Time			ottom Of Casing	Bottom C		Groundwater Encountered	Rocl	Cored (Lin FT) NA		associates neers // planners
					1			San	nples: S21		
10/27/2010	NA	1	NA	NA	45.0	Ft.	Yes	Juli			

		est ental, Inc.				Te	est B	Borii	ng Rep	ort		B - 108
Pro	ject:	/olunteers of	America, 214	Lake Avenue, E	BCA Index #	≠B 8-0688-05	5-04, Site C8	328126		-	File No:	110204
Clie	ent: <u>v</u>	Volunteers of	America of W	estern New Yor	k					_	Sheet No:	1 of 1
Co	ntractor	SJB Services	, Inc.							-	Location:	See Plan
lte	m	Casing		rive Sampler		Core Barrel			Drilling Equipmer	t and Procedures	s Elevation:	NA
pe:		Auger	0	SS		NX		Rig Type			Datum:	NA
side Diame	eter (IN):	NA		1.8		NA		Bit Type:			Start:	7/11/2008
emmer Wei	ight (LB):	140	D	NA		NA	I	Drill Mud	:		Finish	7/11/2008
ammer Fall	(IN):	30	C	NA		NA	(Other:				
ther:		NA		NA		NA					Driller: GeoQuest Rep:	R. Brown S. DeMeo
Depth	Sample		npler Blows	Head Space	-	Number	Strata					
(FT)	Depth (F	T) Pe	er 6 Inchs	(PPM)	and Re	ecovery	Change ((FT)		Visual C	lassification and Remark	8
0	Augered						0.5	P	avement			No.
	0.5	33,14,	17.20		ç	61		N	ledium dense arav	GRAVEL. some	coal, little coarse to fine sand	. damp UPPER FIL
		,-,	,							,		.,
2	2			-	22"/24"							
-	2			ND		62		N	ledium dense brov	wn GRAVEL, trac	e brick and coal fragments, da	ampUPPER FILL-
		15,12,	12 12		24"	/24"						
A	A	15,12,	12,12									
4	4			4								
	4				S3				Loose brown co	barse to fine SAN	D, little gravel, with brick and	l coal fragments, dam
											,	
6	6	6,4,3,2	2	ND		/24"						
	6				5	64		s	ame.		-UPPER FILL-	
					0	0.4						
8	8	3,4,8,8	5	ND	22"	/24"						
								N	ledium dense blac	k GRAVEL and 0	CINDERS with some slag, dan	np.
					5	S5					- UPPER FILL -	
10	10			ND	21"	/24"					0.1 2.11.122	
		5,6,5,1	1		ç	6						
	10											
40	10					10.41						
12	12 12	9,4,5,4		ND		//24"			Medium dense	CINDERS and SI	LAG with coal, damp. - UPPER FILL -	
						67						
	14	2,2,3,2	,		24"	/24"			Loose CINDER	S and COAL, sor	me slag and ash, damp.	
14	17	2,2,0,2		ND	s	58						
	14				21"	//24"		S	ame.			
					21	,						
											- UPPER FILL -	
16	16 16	2,2,2,2	2		-				same, except m	nedium dense.		
				ND	S9				-			
					19"/2	24"						
18	18 18	5,8,5,3	3	ND	S	10						
	10				20"	/24"		s	ame.			
20	20											
		7,9,7,6	6	ND							- UPPER FILL -	
								R	ackfilled borehole	with cement / he	ntonite grout to ground surfac	e.
												-
			0	eter D-t-			<u> </u>	В	ottom of test borin	ig at 20.0 ft.		
			Ground W	aler Data	Depth			Overburg	Summary len (Lin FT)	20.0	A A	
		Elapsed Time	Bottom Of	Bottom O		Ground	lwater		, ,	20.0 NA	GeoQu	est
Date	rime	(HR)	Casing	Bottom O		Encour		KUCK COI	ed (Lin FT)		Environm	ental, Inc.
7/11/2008	NA	NA	NA	20.0	=t	No		Samples	6:	S10		

	GeoQu Environn	iest nental	, Inc.			T	est E	Borir	ng Report			B - 109
Proj	ect:	Volun	teers of America	a, 214 Lake Ave	nue, BCA Ind	ex #B 8-0688-0	5-04, Site C	828126			File No:	110204
Clier	nt:	Volun	teers of America	a of Western Ne	w York						Sheet No:	1 of 1
Con	tractor	SJB S	ervices, Inc.								Location:	See Plan
Item	1		Casing	Drive Samp	ler	Core Barre			Drilling Equipment and Pro	cedures	Elevation:	481
/pe:			Auger	SS	-	NX		Rig Type			Datum:	NA
side Diamete	er (IN):		NA	1.8		NA		Bit Type:	Rorary Augers		Start:	7/3/2008
emmer Weig			140	NA		NA		Drill Mud			Finish	7/3/2008
ammer Fall (IN):		30	NA		NA		Other:	Boring drilled at location	of test pit TP-27	Driller:	D. Drawn
ther:			NA	NA		NA					GeoQuest Rep	R. Brown S. DeMeo
Depth	Samp		Sampler Blo			nple Number	Strat		Vie	aud Classificat	ion and Remark	
(FT)	Depth		Per 6 Inch	ns (PPI	/i) an	d Recovery	Change	9 (F1)	VIS		ION and Remark	5
0	0							V	ery dense brown to gray GF	RAVEL, with coal	and wood fragment	s, damp.
			11,13,38,17			S1						
	_				0.41/0	4"			Donno klask to serve Other		with och and and the	roamonte desse
2	2				24"/24	4" S2			Dense black to gray CINI	JERS and SLAG,	with ash and coal f	ragments, damp.
				NE		52 22"/24"						
			12,18,25,27			22/24						
4	4											
				—								
	4				:	S3			Medium dense black	to gray COAL and	d GRAVEL, with brid	ck fragments damp.
6	6		19,13,8,8	NE		21"/24"						
						S4		_				
	6							S	ame.	-UPPE	R FILL-	
o	8		7,5,4,2	ND		23"/24"						
8	8							L	oose black to gray CINDER	S and SLAG, dan	np.	
						S5			<u> </u>			
10	10			NE		20"/24"				- UPPE	R FILL -	
10			3,3,3,2					L	oose black to gray CINDER	S and SLAG, with	ash, damp.	
	10	1				S6						
12	12 12		2,2,2,2	ND		0"/24"						
						S7						
	14		2,1,1,2			20"/24"			Same.			
14	14		£, I, I,£	NE		S8						
	14					24"/24"		S	ame.			
10	40		1252							- UPPE	R FILL -	
16	16 16		1,2,5,3	NE		S9			Loose black to gray CINE	ERS and SLAG,	damp.	
				INL								
					:	24"/24"						
10	40		2222			\$10						
18	18 18		2,3,3,3	ND		S10						
						24"/24"		s	ame.			
20	20											
			3,2,2,3	ND						- UPPE	R FILL -	
									Notes: Test boring B-109	installed at the I	ocation for test pit	ГР-27.
									Bottom of boring 20 ft., te	st boring backfille	ed with cement grou	unt to ground surface.
				nd Water Data	•				Summary			
• • • • •	· · · · · .			a. 1	Depth	-		Overburd	en (Lin FT) 20.0) GeoQu	est
Date	Time			m Of Bot	tom Of Hole		idwater intered	Rock Cor	ed (Lin FT) NA			iest iental, inc.
		Ì		Casing Edition Of Hole Encountered				٦				

	GeoQı Environn	iest nental, in	c .		Envi	ronm	ental Tes	st Pit Log		TP- 101
Proj	ect:	Remedial	Investigation	214 Lake Avenue Ea	astern Portion Parce	el A and Parce	I B - Site #C828126		File No:	110204
Clier	nt:	Vol	unteers of Am	nerica of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest	t Environment	al, Inc.					Location:	See Plan
Item	า		ising	Drive Sampler	Core Ba	arrel		uipment and Procedures	Elevation:	481
pe:			NA	NA	NA		Excavator: CAT 280	DL	Datum:	NGVD
side Diamet			NA	NA	NA		Reach: 22 feet		Start:	10/31/2007
emmer Weig			NA	NA	NA		Bucket: 36 inch.		Finish	10/31/2007
ammer Fall (IN):		NA	NA	NA			e test pits to approximately		
ther:		r r	A	NA	NA		20 ft. and	backfill to ground surface	Operator:	D. Connell
Depth	Samp	ole	Sampler Blow	s Head Space	Sample Number	Stra	ta		GeoQuest Rep	: S. DeMeo
(FT)	Depth	(FT)	Per 6 Inchs	(PPM)	and Recovery	Change	e (FT)	Visual Class	ification and Remark	S
0						0.5	5 Brown SILT, w	ith root fibers, damp	UPPER FILL-	
				ND				RAVEL, some coarse to fin	e sand, damp. PER FILL-	
						1.	c L	- UF	FER FILL-	
2										
							Black COAL			
				ND						
4						4.0	Black COAL		- UPPER FILL-	
6							Orange GRA	VEL and SLAG, with cinde	ers and ash, damp UPI	PER FILL-
-										-
						7.)			
				ND						
8				שא						
							Gray to gr	een CINDERS and ASH w	th fused black and brow	n materials, damp.
10										
							SAME			
				ND						
12				ND						
14										
							SAME.			
16										
				ND						
18							SAME			
-										
				ND				-UF	PER FILL-	
20										
							Bottom of test	pit at approximately 20 ft.		
							Backfilled test	pit to ground surface.		
	•	I	Ground	dwater Data			Summa	ry		
• • • • • •		• • • •			Depth		Overburden (Lin FT)	20.0		
Date	Time	Elapsed T	Time Bottom	Of Bottom Of		Water	Rock Cored (Lin FT)	NA	😭 GeoQu	est
Duio		(HR)	Casin	ig Bottom Of					Environn	iental, Inc.
					. NO					

	GeoQi Environn	iest nental, inc.			Enviro	onme	ental	Test Pit Log	9	TP- 102
Proj	ect:	Remedial In	vestigation 21	4 Lake Avenue E	astern Portion Parcel A	and Parcel	B - Site #C	828126	File No:	110204
Clie	nt:	Volur	teers of Amer	rica of Western N	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest E	nvironmental,	Inc.					Location:	See Plan
lton	_	Cooir		Drive Sampler	Coro Porrol		Eve		es Elevation:	482.5
Iten vpe:	1	Casir NA	0	NA	Core Barrel NA			cavation Equipment and Procedure CAT 280 DL	Datum:	482.5 NGVD
side Diamet	er (IN):	NA		NA	NA		Reach:	22 feet	Start:	10/31/2007
emmer Weig		NA		NA	NA		Bucket:	36 inch.	Finish	10/31/2007
ammer Fall ((IN):	NA		NA	NA		Other:	Excavate test pits to approxima	tely	<u></u>
ther:		NA		NA	NA			18 ft. and backfill to ground surf		D. Connell
Depth	Samp	le Sa	ampler Blows	Head Space	Sample Number	Strat	ta		GeoQuest Rep	
(FT)	Depth	FT) F	Per 6 Inchs	(PPM)	and Recovery	Change	e (FT)	Visual Cl	assification and Remark	S
0						0.5	Bro	own SILT, with root fibers, damp.	- UPPER FILL-	
							["	
				ND		1.5	0	ht brown GRAVEL, some coarse to	o fine sand, damp. - UPPER FILL-	
2							Dia	ack COAL		
							ыа			
				ND						
4						4.0) Bla	ick COAL	- UPPER FILL-	
						6				
6								Drange GRAVEL and SLAG, with c	inders and ash, damp UPF	PER FILL-
				0.8 ppm						
							pur	rched water seep at 8.0 ft.		
8								Gray to green CINDERS and AS	H with fused black and brow	n materials damn
								Gray to green childen's and AS	TT WITH TUSED DIACK AND DIOWI	n materiais, damp.
				2.7 ppm						
10				11.0 ppm	TP-102(10.0-10.5 ft.)	10.0	0 Slid	ght petroleum odor		
					. ,					
							Bro	own to Green CINDERS and ASH	with fused black and brown n	naterals, damp -UPPEF
				ND						
12										
14										
							Sar	me.		
16										
				ND						
18							0		allaspad at 19.0 t	
10							Sai	me - UPPER FILL - test pit walls c	unaspeu al 10.011.	
20										
							Bot	ttom of test pit at approximately 18	s ft.	
							Bad	ckfilled test pit to ground surface.		
								-		
	I	<u> </u>	Groundu	vater Data		<u> </u>		Summary		
	• • •			Jala	Depth		Overburde			
Date	Time	Elapsed Tim	ne Bottom O	f Bottom O		ter	Rock Core		GeoQu 🎧	est
Duio	THE	(HR)	Casing	Dottoint					Environm	ental, Inc.
	1		1	1						

	GeoQı Environn	iest nental, Ind				E	inviro	onme	enta	l Test Pit	Log		TP- 103
Proj	ect:	Remedial I	nvestigatio	n 214 Lake	Avenue E	astern Port	tion Parcel A	and Parcel I	B - Site #	C828126		File No:	110204
Clie	nt:	Volu	unteers of A	America of V	Vestern N	ew York						Sheet No:	1 of 1
Con	tractor	GeoQuest	Environme	ntal, Inc.								Location:	See Plan
Iten	_	Cor	sing	Drive Sa	ampler		Core Barrel		E	xcavation Equipment and P	recodures	Elevation:	484
/pe:	1		IA	NA			NA			r: CAT 280 DL	locedules	Datum:	NGVD
side Diamet	er (IN):		IA	NA			NA		Reach:	22 feet		Start:	10/31/2007
emmer Weig			IA	NA			NA		Bucket:	36 inch.		Finish	10/31/2007
ammer Fall (IA	NA			NA		Other:	Excavate test pits to ap	proximately		· · · · · · · · · · · · · · · ·
ther:		N	IA	NA	A		NA			20 ft. and backfill to gro	und surface	Operator:	D. Connell
Denth	0		Dense les Dis		10	0	Ni wale e e	Oterat				GeoQuest Rep	S. DeMeo
Depth (FT)	Samp Depth		Sampler Blo Per 6 Inch		d Space PPM)	-	e Number ecovery	Strata Change		Vi	sual Classific	ation and Remark	S
0								0.5	Р		to find cond d		
0								0.5	<u>P</u>	rown GRAVEL, little coarse	e to line sand, d	amp OPPER FI	
2					ND				В	rown to gray GRAVELand (rete, wood,and meta R FILL-	fragments, dampFl
6					ND			7.0		ame.		- UPPER FILL-	
8					ND				,	Gray to green CINDERS			
10								10.0	-	rown to Green CINDERS a			
12					ND								iaiciais, damp
14													
16								16.5		ame.		-UPPER FILL-	
10					ND	TP-103(1	6.0-16.5 ft.)	10.0	,	Gray to white CINDERS	and ASH with o	ld bottles, metal, and	shoe soles, dampFIL
18									s	ame		- LOWER FILL -	
20					ND				s	ame.			
									В	ottom of test pit at approxin	nately 20 ft.		
									В	ackfilled test pit to ground s	surface.		
				undwater Da	ta					Summary			
		Elapsed Ti		m Of		Depth				en (Lin FT) 20.0		😭 GeoQu	est
Date	Time	Elapsed I (HR)	Cas		Bottom O	f Hole	Wat	ter	Rock Cor	ed (Lin FT) NA		Environm	ental, Inc.
	1	1		1			1						

	GeoQu Environn	est iental, ir	nc.			Ε	invirc	onme	enta	l Test	Pit Log		TP- 104
Proj	ect:	Remedial	Investigatio	n 214 La	ake Avenue E	astern Por	tion Parcel A	and Parcel	B - Site #	C828126	-	File No:	110204
Clie	nt:	Vo	olunteers of A	America	of Western Ne	ew York					_	Sheet No:	1 of 1
Con	tractor	GeoQues	at Environme	ntal, Inc							_	Location:	See Plan
lton		C.	noing	Drive	e Sampler		Coro Porrol		_		opt and Broaduras	Elevation:	492.2
Iten pe:	n		asing NA	DIIV	NA		Core Barrel NA		Excavato		ent and Procedures	Datum:	482.2 NGVD
pe. side Diamet	or (INI):		NA		NA		NA		Reach:	22 feet		Start:	10/31/2007
emmer Weig	. ,		NA		NA		NA		Bucket:	36 inch.		Finish	10/31/2007
ammer Fall (NA		NA		NA		Other:		pits to approximately		10/01/2001
her:	().		NA		NA		NA		00		kfill to ground surface	Operator:	D. Connell
												GeoQuest Rep	
Depth	Samp Depth (Sampler Blo		Head Space		e Number	Strata Change			Vieual Classi	fication and Remark	
(FT)	Depth	F1)	Per 6 Inch	15	(PPM)	and R	ecovery	Change	(F1)		VISUAI CIASSI	incation and Remark	5
0 2 4 6					ND ND			1.0 4.0 5		Black COAL Black COAL Orange to Yello	ow Coarse to fine SAN	- UPPER FILL - - UPPER FILL - - UPPER FILL - D, damp -UPPER FILL-	
8					ND						-	nsulators, and carbon ro	
10 12					ND				s	ame.		-UPPER FILL-	
14								14		Gray to white C	INDERS and ASH with	old bottles, metal, and	shoe soles, damp.
16					ND	TP-104(1	7.0-17.5 ft.)						
18										ame.		- LOWER FILL -	
20									В	ame. ottom of test pit a ackfilled test pit to	t approximately 20 ft.		
			Gree	Indwater	r Data					Summary			
Groundwater [Daid	Depth			Overburd	en (Lin FT)	20.0			
Date	Time	Elapsed (HR)	Time Botto		Bottom Of		Wa			ed (Lin FT)	20.0 NA	GeoQu Environm	est ental, inc.
			1	1			1		1				

	GeoQu Environn	iest nental, inc.	_		E	nviro	onme	ente	al Test Pit Log		TP- 105
Pro	ject:	Remedial Ir	vestigation 2	14 Lake Avenue E	astern Porti	on Parcel A	and Parcel	B - Site #	C828126	File No:	110204
Clie	nt:	Volu	nteers of Ame	erica of Western N	ew York				<u> </u>	Sheet No:	1 of 1
Cor	tractor	GeoQuest E	Environmental	, Inc.						Location:	See Plan
Iter	n	Casi	ina	Drive Sampler		Core Barrel		F	excavation Equipment and Procedures	Elevation:	481.9
/pe:		N/	Ŭ	NA	,	NA		Excavato		Datum:	NGVD
side Diamet	er (IN):	N		NA		NA		Reach:	22 feet	Start:	10/31/2007
emmer Weig	ght (LB):	N	A	NA		NA		Bucket:	36 inch.	Finish	10/31/2007
ammer Fall	(IN):	N	A	NA		NA		Other:	Excavate test pits to approximate	ly	
ther:		N/	A	NA		NA			20 ft. and backfill to ground surface	-	D. Connell
Depth	Samp	le Si	ampler Blows	Head Space	Sample	Number	Strata	a		GeoQuest Rep:	S. DeMeo
(FT)	Depth (FT)	Per 6 Inchs	(PPM)	and Re	ecovery	Change	(FT)	Visual Clas	ssification and Remarks	5
0 2 4 6 8				ND ND ND			1.0 2 3.5		Brown GRAVEL, some coarse to fine s Black COAL fellow to orange coarse to fine SAND, Black CINDERS and SLAG, with black	- UPPER FILL - dampUPPER FILL- and brown fused materals, -UPPER FILL-	brick/glass fragments
10				ND				s	Gray to black CINDERS and SLAG t	-UPPER FILL-	own materiais, damp.
14							14	5	Same.	-UPPER FILL-	
16				ND	TP-105(15	i.0-15.5 ft.)			Gray to white CINDERS and ASH	with old bottles, metal, and s	shoe soles, damp.
18									Dyster and Clam shells from 14 to 11	- LOWER FILL -	
20				ND					Same.		
20									Bottom of test pit at approximately 20 fi Backfilled test pit to ground surface.	t.	
			Ground	water Data					Summary		
· · · · · ·					Depth			Overburg	den (Lin FT) 20.0	C O	aat
Date	Time	Elapsed Tir (HR)	me Bottom C Casing			Wat			red (Lin FT) NA	GeoQue Environm	est ental, Inc
10/31/2007	NA	NA	NA	20.0	"	NC					

	Environn	iest nental, l	inc.					onme	ente	al Test Pit Log		TP- 106
Proje	ect:	Remedia	al Investigati	on 214	Lake Avenue E	astern Port	ion Parcel A	and Parcel I	B - Site	#C828126	File No:	110204
Clier	nt:	V	olunteers of	Americ	a of Western N	ew York					Sheet No:	1 of 1
Cont	tractor	GeoQue	est Environm	ental, Ir	IC.						Location:	See Plan
Item	1		Casing	Dri	ve Sampler		Core Barrel			Excavation Equipment and Procedures	Elevation:	482.3
pe:			NA		NA		NA		Excavat		Datum:	NGVD
side Diamete	er (IN):		NA		NA		NA		Reach:	22 feet	Start:	11/1/2007
emmer Weigl	ht (LB):		NA		NA		NA		Bucket:	36 inch.	Finish	11/1/2007
ammer Fall (I	IN):		NA		NA		NA		Other:	Excavate test pits to approximately	y	····
ther:			NA		NA		NA			20 ft. and backfill to ground surface		D. Connell
Depth	Samp	ole	Sampler B	ows	Head Space	Sample	Number	Strata	a		GeoQuest Rep	S. DeMeo
(FT)	Depth	(FT)	Per 6 Inc	hs	(PPM)	and Re	ecovery	Change	(FT)	Visual Clas	sification and Remark	S
0												
					ND					Brown GRAVEL, some coarse to fine sa	and down LIDDED EILL	
					ND			1.0	F	BIOWIT GRAVEL, SOME COALSE TO TIME SA		
2								^	ļ	Black COAL	- UPPER FILL -	
2								2		Yellow to orange coarse to fine SAND, o	dampUPPER FILL-	
										J		
					ND			3.5	ŀ			
4										Black CINDERS and SLAG, with black a		
											-UPPER FILL	-
6												
					ND							
8								8	-			
-												
					ND					Gray to black CINDERS and SLAG w	ith ash, fused black and t	orown materials, damp.
10												
										Same.	-UPPER FILL-	
										Same.	-OFFERTILE-	
12					ND							
12												
14						TP-106 (1-	4.0-14.5 ft.)	14.5				
										Grav to white CINDERS and ACU	ith old bottles motel and	shop solos domo
										Gray to white CINDERS and ASH w	ini olu dollies, metal, and	snue sules, uampFI
16												
10					ND							
										Oyster and Clam shells from 14 to 1		
18										Same.	- LOWER FILL -	
					ND							
20										Same.		
20										Bottom of test pit at approximately 20 ft.		
										Backfilled test pit to ground surface.		
				undwat	er Data					Summary		
·.·.·	<u></u>					Depth			Overbur	rden (Lin FT) 20.0	😭 GeoQu	iest
Date	Time	Elapsec (HF		om Of sing	Bottom O	f Hole	Wat	ter	Rock Co	ored (Lin FT) NA	Environn	nental, Inc.
Bato		1	1									

GeoQuest Environmental, Inc.					g	TP- 107						
Proj	ect:	Remedial	Investigatio	on 214 Lak	ke Avenue E	astern Portior	n Parcel A a	and Parcel	B - Site #C8	328126	File No:	110204
Client: Volunteers of			America o	f Western N	ew York	Sheet No:	1 of 1					
Con	tractor	GeoQues	t Environme	ental, Inc.							Location:	See Plan
Item Casing			Drive Sampler Core Barrel					Evo	avation Equipment and Procedure	es Elevation:	489.8	
pe:	1		NA		NA		NA			CAT 280 DL	Datum:	NGVD
side Diamet	er (IN):		NA		NA	NA			Reach:	22 feet	Start:	11/1/2007
mmer Weig			NA		NA		NA			36 inch.	Finish	11/1/2007
mmer Fall (NA		NA		NA		Other:	Excavate test pits to approxima	ately	
her:		1	NA		NA		NA			20 ft. and backfill to ground surf	face Operator:	D. Connell
Danth	Carro		Complex Di		and Cross	Cample N	ursh o r	Chrote			GeoQuest Rep:	S. DeMeo
Depth (FT)	Samp Depth		Sampler Blo Per 6 Inch		ead Space (PPM)	Sample N and Rec		Strata Change		Visual Cl	assification and Remark	5
0									Gra	ay Gravel, some coarse to fine sar	nd damp -FILL-	
Ū												
					ND				Bla	ck COAL	- UPPER FILL -	
2												
					ND			4	Bla	ck COAL	-UPPER FILL-	
4								4.5				
									Yel	low to Orange coarse to fine SAN Blue to gray CINDERS, damp.	-UPPER FILL-	
								5				
6									Die		and freed motorials, down	F U 1
6									ыа	ck CINDERS and SLAG, with ash	and fused materials, damp	FILL-
					ND							
								8				
8						TP-107(8.0)-85ft)	0				
						11-107(0.0	-0.5 n.)		Blu	e to gray CINDERS, dampUPP	ER FILL-	
					ND			8.5	0	Gray to black CINDERS and SLAC	G with ash fused black and b	rown materials damp
												,,
10												
									Sar	ne.	-UPPER FILL-	
12					ND							
14									Sar	ne	-UPPER FILL-	
16												
10					ND							
18								18	Sar	ne.	-UPPER FILL-	
					ND				Gra	ay to white CINDERS and ASH with	tn old bottles,oyster/clam she	iis,shoe soles,dai
										- LOWE		
20									Pet	tom of test pit at 20.0 ft.		
									BOT	וטהו טו ופגו צוו מו 20.0 וו.		
									Bac	ckfilled test pit to ground surface		
		1	Grou	undwater	Data		I			Summary		
• • • • •	<u></u> .					Depth			Overburder	n (Lin FT) 20.0	😭 GeoQu	ost
Date	Time	Elapsed T (HR)		om Of sing	Bottom O	Hole	Wat	ier	Rock Cored	d (Lin FT) NA	Environm	est ental, inc.
				5.119					1			
1/1/2007	NA	NA	N	IA	20.0	t.	NC)	1			

GeoQuest Environmental, Inc.					9	TP- 108				
Proj	ect:	Remedial Ir	vestigation 21	14 Lake Avenue Ea	astern Portion Parcel	A and Parce	el B - Site #C828	126	File No:	110204
Clie	nt:	Volu	nteers of Ame	erica of Western Ne	ew York	Sheet No:	1 of 1			
Con	tractor	GeoQuest I	Environmental	, Inc.				Location:	See Plan	
Iten	2	0	ing	Drive Sampler	Core Bar	rol	Fuer	ation Equipment and Procedure	es Elevation:	481.9
rpe:	1	Cas N	Ŭ	NA	NA	rei	Excav		Datum:	481.9 NGVD
side Diamet	er (IN):	N		NA	NA			22 feet	Start:	11/1/2007
emmer Weig		N		NA	NA			36 inch.	Finish	11/1/2007
ammer Fall (IN):	N	4	NA	NA		Other:	Excavate test pits to approxima	tely	· · · · · · · · · · · · · · · · · · ·
ther:		N	4	NA	NA		2	0 ft. and backfill to ground surf	ace Operator:	D. Connell
Depth	Sam		ampler Blows	Head Space	Sample Number	Stra	nto l		GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and Recovery	Change		Visual Cl	assification and Remark	s
0							Gray	Gravel, some coarse to fine sar	nd, dampUPPER FILL-	
						1		,		
				ND		2.0	0			
						2.0		COAL - UPPER FILL-		
2										
				ND		4	4 <u>Yellov</u>	v to Orange coarse to fine SAN	D, dampUPPER FILL-	
4							Rlack	CINDERS and SLAG, with ash	wood brick fragmente fues	d black/brown matoric
							DIACK	CINDENCIAIN CEAC, WITH ASI	, wood, brick nayinents, iuse	a biacivbrown matella
6							Black	CINDERS and SLAG, with ash	and fused materials, damp.	UPPER FILL-
								-,	····, ····	
				ND						
						8			-UPPER FILL-	
8										
				ND			Gra	y to black CINDERS and SLAG	with ash, fused black and b	rown materials, damp
10							Black	carbon rods from 8.0 to 10.0 ft.		
							Same		-UPPER FILL-	
				ND						
12										
14							Same		-UPPER FILL-	
							Ganle		OF LIVE LE	
16										
				ND						
18							Same		-UPPER FILL-	
10							Sante		OFF ENTILE"	
				ND						
				שא			Same			
20										
							Bottor	n of test pit at 20.0 fr.		
							Backfi	lled test pit to ground surface.		
		<u> </u>	Groundv	water Data		<u> </u>	<u>I</u>	Summary		
· · · · · · ·		• . • . • . • .			Depth		Overburden (I			a a l
Date	Time	Elapsed Tir		Of Bottom Of		Water	Rock Cored (I		GeoQu	est ental, Inc.
		(HR)	Casing				-			
11/1/2007	NA	NA	NA	20.0 f	. 1	NO	1			

	GeoQi Environr	iest nental, in	c.			TP- 109				
Proj	ect:	Remedial	Investigation	214 Lake Avenue E	File No:	110204				
Clier	nt:	Vol	unteers of Am	nerica of Western Ne	ew York	Sheet No:	1 of 1			
Con	tractor	GeoQuest	Environment	al, Inc.				Location:	See Plan	
Item	0	Ca	sing	Drive Sampler	Coro	Barrel		Excavation Equipment and Procedures	Elevation:	482.9
/pe:	1		IA	NA	N			or: CAT 280 DL	Datum:	NGVD
side Diamete	er (IN):		A	NA	N		Reach:	22 feet	Start:	11/1/2007
emmer Weig		٢	A	NA	Ν	A	Bucket:	36 inch.	Finish	11/1/2007
ammer Fall (IN):		NA		NA	Ν	A	Other:	Excavate test pits to approximately	/	<u></u>
ther:		٩	A	NA	Ν	A		20 ft. and backfill to ground surface	e Operator:	D. Connell
Depth	Sam		Sampler Blow	s Head Space	Sample Numl	oer St	rata		GeoQuest Rep	: S. DeMeo
(FT)	Depth		Per 6 Inchs		and Recove		ge (FT)	Visual Class	sification and Remark	S
0								Gray Gravel, some coarse to fine sand,	dampUPPER FILL-	
0							1			
				ND			-			
								Brown GRAVEL, with bricks and wood,	dampUPPER FILL-	
2								, 2	,	
				ND			4			
4							-			
								Black CINDERS and SLAG, with ash, w	ood, brick fragments, fuse	d black/brown materia
6								Black CINDERS and SLAG, with ash an	d fused materials, damp.	-UPPER FILL-
				ND						
8							8		-UPPER FILL-	
								Gray to white CINDERS and ASH, with	clam and oyster shells, ol	d bottles, dampLOW
				ND						
				ND						
10										
								Same.	-LOWER FILL-	
								Same.	-LOWER FILL-	
10				ND						
12										
14							:	Same.	-LOWER FILL-	
16										
				ND						
18								Samo		
10								Same	-LOWER FILL-	
				ND				Same.		
20										
							1	Bottom of test pit at 20.0 ft.		
								Backfilled test pit to ground surface.		
							ľ			
								Quimmar :		
				dwater Data	Donth		0	Summary		
	<u></u>	Elapsed T	• •	Of	Depth	144. 1		den (Lin FT) 20.0	🕞 GeoQu	est
Date	Time	(HR)	Casin		HOIE	Water	Rock Co	ored (Lin FT) NA	Environn	iental, Inc.

GeoQuest Environmental, Inc.						TP- 110				
Proj	ect:	Remedial I	nvestigation 2	214 Lake Avenue Ea	astern Portion Pa	rcel A and Pare	cel B - Site	#C828126	File No:	110204
Clier	nt:	Volu	unteers of Ame	erica of Western Ne	ew York	Sheet No:	1 of 1			
Con	tractor	GeoQuest	Environmenta	al, Inc.				Location:	See Plan	
Item		0.00	sing	Drive Sampler	Corr	Barrel		Excavation Equipment and Procedures	Elevation:	482.1
pe:	1		IA	NA	N		Excava	tor: CAT 280 DL	Datum:	NGVD
side Diamete	er (IN):		IA	NA		NA F			Start:	11/1/2007
emmer Weight (LB): ammer Fall (IN):			IA	NA	Ν		Bucket		Finish	11/1/2007
		N	IA	NA	Ν	A	Other:	Excavate test pits to approximately	y	<u></u>
ther:		N	IA	NA	N	A		20 ft. and backfill to ground surface	-	D. Connell
Depth	Sam		Sampler Blows	s Head Space	Sample Numl	per St	rata		GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and Recove		ge (FT)	Visual Clas	sification and Remark	s
0								Gray Gravel, some coarse to fine sand,	dampUPPER FILL-	
-							1	· · , · · · , · · · · · · · · · · · · ,		
				ND						
								Brown GRAVEL, with bricks and wood,	dampUPPER FILL-	
2										
				ND			4			
4									and brick for our find	
								Black CINDERS and SLAG, with ash, w	ood, brick fragments, fuse	u plack/brown materia
6								Plack CINDERS and SLAC, with each an	d fuend meterials, domn	
0								Black CINDERS and SLAG, with ash an	d lused materials, damp.	-OPPER FILL-
				ND						
							8		-UPPER FILL-	
8							0		-OFFERTILE-	
								Gray to white CINDERS and ASH, with	clam and oyster shells, ol	d bottles, dampFILL-
				ND						
10										
								Same	-LOWER FILL-	
12				ND						
14								Same.	-LOWER FILL-	
40										
16				ND						
18								Same	-LOWER FILL-	
				ND						
								Same.		
20								Dettern afteret, it i con o ti		
								Bottom of test pit at 20.0 ft.		
								Backfilled test pit to ground surface.		
			Ground	lwater Data				Summary		
• • • • •		• • • • •			Depth		Overbu	Irden (Lin FT) 20.0		1
Date	Time	Elapsed Ti		Of Bottom Of		Water		Cored (Lin FT) NA		est ental, inc.
		(HR)	Casing	g			-	· · ·	Environin	crital, file.
		1	1	1						

	GeoQı Environn	iest nental, I	nc.	Environmental Test Pit Log										
Pro	ect:	Remedia	al Investigatio	on 214 L	ake Avenue Ea	astern Portio	n Parcel A a	and Parcel	B - Site #	#C828126	File No:	110204		
Clie	nt:	V	olunteers of	America	of Western Ne	w York	Sheet No:	1 of 1						
Cor	tractor	GeoQue	st Environme	ental, Ind	c.						Location:	See Plan		
Iter	n	ſ	Casing	Driv	ve Sampler	ſ	Core Barrel			Excavation Equipment and Procedures	Elevation:	492.2		
pe:										or: CAT 280 DL	Datum:	NGVD		
side Diamet	er (IN):		NA		NA		NA		Reach:	22 feet	Start:	11/1/2007		
emmer Weig	ght (LB):		NA		NA		NA		Bucket:	36 inch.	Finish	11/1/2007		
ammer Fall	(IN):		NA		NA		NA		Other:	Excavate test pits to approximately				
her:			NA		NA		NA			20 ft. and backfill to ground surface	Operator: GeoQuest Rep:	D. Connell		
Depth	Sam	ble	Sampler Bl	ows	Head Space	Sample N	Number	Strata	а					
(FT)	Depth	(FT)	Per 6 Inc	hs	(PPM)	and Red	covery	Change	(FT)	Visual Class	ification and Remark	S		
0														
					ND					Brown GRAVEL, some coarse to fine sar	d damp _LIPPER FILL			
					ND			1.0		BIOWIT GIVEVEL, Some coarse to mile sa				
2								2	ŀ	Black COAL	- UPPER FILL -			
2								2		Yellow to orange coarse to fine SAND, d	ampUPPER FILL-			
										- //				
					ND			3.5	ŀ					
4									I	Black CINDERS and SLAG, with black a		brick/glass fragments		
											-UPPER FILL-			
6														
					ND									
8								8	-	Same.	-UPPER FILL-			
-														
					ND					Gray to black CINDERS and SLAG with	h ash, fused black and b	rown materials, damp		
10														
										Same.	-UPPER FILL-			
									ľ	Same.	-OFFERTILE-			
12					ND									
12														
14								14	:	Same	-UPPER FILL-			
										Gray to white CINDERS and ASH with	h old bottlos motol and	shae salas dame LO		
										Gray to write CINDERS and ASH Wi	an old dollles, metal, and	silve soles, damp.LO		
16														
16					ND									
									•	Oyster and Clam shells from 14 to 1				
18									:	Same.	- LOWER FILL -			
					ND									
20										Same.				
20										Bottom of test pit at approximately 20 ft.				
									I	Backfilled test pit to ground surface.				
			Gro	undwate	er Data					Summary				
• • • • •		. <u></u>				Depth			Overbur	den (Lin FT) 20.0	😭 GeoQu	est		
Date	Time	Elapsed (HR		om Of sing	Bottom Of	Hole	Wat	er	Rock Co	ored (Lin FT) NA	Environm	ental, Inc.		
							-							
11/1/2007	NA	NA		NA	20.0 ft	i. –	NC	,						

GeoQuest Environmental, Inc.			_		9	TP- 112				
Proj	ect:	Remedial In	vestigation 2 ⁻	14 Lake Avenue Ea	astern Portion Parcel	A and Parcel	I B - Site #C8	28126	File No:	110204
Clie	nt:	Volur	nteers of Ame	erica of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest E	Environmental	l, Inc.				Location:	See Plan	
Iten	n	Casi	ng	Drive Sampler	Core Barr	rel	Eve	avation Equipment and Procedure	es Elevation:	481.2
pe:	1	NA	Ŭ	NA	NA		Excavator:	CAT 280 DL	Datum:	NGVD
side Diameter (IN): emmer Weight (LB): ammer Fall (IN):		NA		1.8	NA		Reach:	22 feet	Start:	11/1/2007
		NA		NA	NA		Bucket:	36 inch.	Finish	11/1/2007
		NA	A	NA	NA		Other:	Excavate test pits to approxima	itely	<u> </u>
her:		NA	A	NA	NA			20 ft. and backfill to ground surf		D. Connell
Depth	Sam	ole S:	ampler Blows	Head Space	Sample Number	Strat	ta		GeoQuest Rep:	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and Recovery	Change		Visual Cl	assification and Remarks	6
0						0.5	5 Brov	vn GRAVEL, some coarse to fine	sand, dampUPPER FILL-	
							1			
				ND		1.5	5			
						1.0		ick COAL	- UPPER FILL -	
2										
							Brov	wn GRAVEL, some coarse to fine	sand, with bricks, dampUF	'PER FILL-
				ND						
4										
									-UPPER FILL-	
6										
-										
				ND			Sam	ne.		
8										
				ND						
10						10.	0 Sam		-UPPER FILL-	
10						10.	0 San	le.	-OFPER FILL-	
							Gra	y to white CINDERS and ASH, wi	th very old bottles, dampLe	OWER FILL-
				ND						
12										
							Com			
14							Sam	IE.		
16										
				ND						
							Sam	eLOWER FILL-		
18										
				ND						
20										
							Bott	om of test pit at approximately 20) ft.	
							Bac	kfilled test pit to ground surface.		
							240	se ter preto ground bundbb.		
			<u> </u>				<u> </u>	Summon		
				water Data	Denth		Overburden	Summary		
<u></u>	<u></u>	Elapsed Tir	•)f	Depth	Votor	Overburden		🚯 GeoQu	est
Date	Time	(HR)	Casing		Hole V	Vater	Rock Cored	(Lin FT) NA	Environm	ental, Inc.
	1	NA	NA	20.0 f		NO				

	GeoQi Environn	iest nental, Inc.	_		Envi	ronm	enta	al Test Pit Log		TP- 113
Proj	ect:	Remedial Inv	estigation 214	4 Lake Avenue Ea	astern Portion Parce	el A and Parce	el B - Site	#C828126	File No:	110204
Clie	nt:	Volun	teers of Ameri	ca of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest Er	nvironmental,	Inc.					Location:	See Plan
lton	_	Casia	a [Prive Sampler	Coro Po	rrol		Evenuation Equipment and Dracedures	Elevation:	491.2
Iten pe:	n	Casin NA	Ŭ	NA	Core Ba NA	rrei	Excava	Excavation Equipment and Procedures tor: CAT 280 DL	Datum:	481.2 NGVD
side Diamet	er (IN):	NA		NA	NA		Reach:		Start:	11/1/2007
emmer Weig		NA		NA	NA		Bucket:		Finish	11/1/2007
mmer Fall ((IN):	NA		NA	NA		Other:	Excavate test pits to approximately		. <u>.</u>
her:		NA		NA	NA			20 ft. and backfill to ground surface	Operator:	D. Connell
Depth	Sam	ole Sa	mpler Blows	Head Space	Sample Number	Stra	ata		GeoQuest Rep:	S. DeMeo
(FT)	Depth		er 6 Inchs	(PPM)	and Recovery	Chang		Visual Classif	cation and Remarks	8
0						0.	5	Brown GRAVEL, some coarse to fine sand	, dampFILL-	
				ND		1.	.5			
								Black COAL	- FILL -	
2										
								Brown GRAVEL, some coarse to fine sand	, with bricks, tampFil	- - -
				ND						
4										
									-FILL-	
6										
				ND				SAME		
				ND				SAME		
8										
				ND						
10						10	0.0	Same.	-UPPER FILL-	
								Gray to white CINDERS and ASH, with ver	y old bottles, dampLi	JWER FILL-
40				ND						
12										
14								Same.		
40										
16				ND						
								SameLOWER F		
18										
				ND						
20						_				
20								Bottom of test pit at approximately 20 ft.		
								Backfilled test pit to ground surface.		
			Groundwa					Summary		
	<u></u>	Elapsed Tim	•		Depth			rden (Lin FT) 20.0	😭 GeoQu	est
Date	Time	Elapsed Tim (HR)	Casing	Bottom Of	Hole	Water	Rock C	ored (Lin FT) NA	Environm	ental, Inc.
	1	1	1	1	1		1			

	GeoQi Environn	iest nental, ind	c		En	viro	nme	ntal Test Pit	Log		TP- 114
Proj	ect:	Remedial I	nvestigation 2	214 Lake Avenue Ea	astern Portion	Parcel A a	and Parcel B	- Site #C828126		File No:	110204
Clier	nt:	Volu	unteers of Ame	erica of Western Ne	ew York					Sheet No:	1 of 1
Con	tractor	GeoQuest	Environmenta	al, Inc.						Location:	See Plan
		_									
Item	า		sing	Drive Sampler	Co	ore Barrel		Excavation Equipment and F	rocedures	Elevation:	481.2
pe:	or (INI).		IA IA	NA NA		NA NA		each: 22 feet		Datum: Start:	NGVD 11/1/2007
side Diamete emmer Weig			IA IA	NA		NA		leach: 22 feet lucket: 36 inch.		Finish	11/1/2007
mmer Fall (IA	NA		NA		other: Excavate test pits to a	oproximately		
her:			IA	NA		NA		20 ft. and backfill to gro		Operator:	D. Connell
										GeoQuest Rep:	S. DeMeo
Depth (FT)	Samp Depth		Sampler Blows Per 6 Inchs	s Head Space (PPM)	Sample Nu and Reco		Strata Change (F	-T) Vi	sual Classifica	tion and Remarks	3
	Doput			(1.1.10)		very					,
0							0.5	Gray Gravel, some coarse to	fine sand, damp	UPPER FILL-	
				ND				Black COAL		- UPPER FILL -	
2											
2											
				ND			4	Black COAL			
4							4.5	Yellow to Orange coarse to f Blue to gray CINDERS,	ine SAND, damp		
								Blue to gray CINDERS,	dampU	PPER FILL-	
							5				
6								Black CINDERS and SLAG,	with ash and fuse	ed materials, damp	UPPER FILL-
				ND							
							8				
8											
								Blue to gray CINDERS, dam	pUPPER FILL	·	
				ND			8.5	Gray to black CINDERS a	nd SLAG with as	h, fused black and br	own materials, damp.
10											
10											
								Same.		-UPPER FILL-	
12				ND							
14								Same.		-UPPER FILL-	
10											
16				ND							
18							18	Same.		-UPPER FILL-	
							10				
				ND				Gray to white CINDERS and	ASH with old bot	tles,oyster/clam shel	ls,shoe soles,da
				טא				-I OW	'ER FILI		
20	-							2011			
								Bottom of test pit at 20.0 ft.			
								Backfilled test pit to ground s	surface.		
								Buokimou tost pit to ground s	sandoo.		
									<u> </u>		
				lwater Data				Summary			
· . · . · . ·		Elapsed Ti		Of	Depth			Overburden (Lin FT) 20.0		🗃 GeoQu	est
Date	Time	Elapsed I (HR)	Casing		Hole	Wat	ter R	cock Cored (Lin FT) NA		Environm	ental, Inc.
		· · /									

	GeoQu Environn	iest nental, In	IC.		E	nvirc	onme	enta	al Test Pit Log	1	TP- 115
Pro	ject:	Remedial	Investigation	1 214 Lake Avenue	Eastern Portic	on Parcel A	and Parcel	B - Site	#C828126	File No:	110204
Clie	nt:	Vo	lunteers of A	merica of Western I	lew York					Sheet No:	1 of 1
Cor	tractor	GeoQues	t Environmer	ntal, Inc.						Location:	See Plan
Iter	n	C	asing	Drive Sampler		Core Barrel			Excavation Equipment and Procedures	Elevation:	482.5
rpe:			NA	NA		NA NA			or: CAT 280 DL	Datum:	NGVD
side Diame	er (IN):		NA	NA		NA		Reach:	22 feet	Start:	11/2/2007
emmer Wei	ght (LB):	1	NA	NA		NA		Bucket:	36 inch.	Finish	11/2/2007
ammer Fall	(IN):	1	NA	NA		NA		Other:	Excavate test pits to approximate	ely	
her:		1	NA	NA		NA			20 ft. and backfill to ground surface		D. Connell
Depth	Sam	ole	Sampler Blo	ws Head Space	Sample I	Number	Strata	а		GeoQuest Rep:	S. DeMeo
(FT)	Depth	(FT)	Per 6 Inchs	s (PPM)	and Re	covery	Change	(FT)	Visual Cla	ssification and Remarks	3
0								1	Gray Gravel, some coarse to fine sand	l, dampUPPER FILL-	
				ND			1.0	-			
									Black COAL		
2											
				ND					Black COAL	-UPPER FILL-	
4											
6									Black COAL		
				ND							
				ND							
0							8	-	Black COAL	-UPPER FILL-	
8									Black to gray COKE	-UPPER FILL-	
										011 211122	
				ND							
10							10.0)	Black to gray COKE	-UPPER FILL-	
								Ī			
									Black CINDERS and SLAG, with ash a	and black and brown fused n	naterials, dampFILL
				ND							
12											
14				ND				:	Same.	-UPPER FILL-	
16				ND							
				ND							
18							18		Same.	-UPPER FILL-	
-								-			
				ND					Gray to white CINDERS and ASH with	old bottles,oyster/clam shel	ls,shoe soles,da
									-LOWER FILL-		
20											
									Bottom of test pit at approxametely 20.	.υ π.	
									Test pit backfilled to ground surface.		
	<u>. </u>	<u> </u>	Grou	ndwater Data	•				Summary		
<u></u>		<u></u>			Depth			Overbur	rden (Lin FT) 20.0	Carlos	act
Date	Time	Elapsed			Of Hole	Wa	ter	Rock Co	pred (Lin FT) NA		est ental, Inc.
		(HR)	Casi								
11/2/2007	NA	NA	NA	A 20.0	ft	N	2	1			

	GeoQi Environn	iest iental, inc			Env	ironn	nent	al Test Pit Log		TP- 116
Proj	ect:	Remedial Ir	vestigation 21	14 Lake Avenue Ea	astern Portion Pa	rcel A and Par	cel B - Site	#C828126	File No:	110204
Clier	nt:	Volu	nteers of Ame	rica of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest I	Environmental	, Inc.					Location:	See Plan
Item		Cas	ing	Drive Sampler	Core	Barrol		Excavation Equipment and Procedures	Elevation:	484.3
pe:	1	N	Ŭ	NA	N/		Excava		Datum:	NGVD
ide Diamete	er (IN):	N		1.8	N		Reach		Start:	11/2/2007
emmer Weig	ht (LB):	N	4	NA	N	Ą	Bucket	:: 36 inch.	Finish	11/2/2007
ammer Fall (IN):	N	4	NA	N	4	Other:	Excavate test pits to approximatel	у	<u></u>
her:		N	4	NA	N	A Contraction of the second se		20 ft. and backfill to ground surface		D. Connell
Depth	Samp	le S	ampler Blows	Head Space	Sample Numb	er S	trata		GeoQuest Rep	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and Recover		nge (FT)	Visual Clas	sification and Remark	s
0								Gray Gravel, some coarse to fine sand,	dampUPPER FILL-	
				ND						
							1.0			
2							2	Yellow orange coarse to fine SAND, da	mpUPPER FILL-	
2							2			
				ND				Black to gray CINDERS and SLAC with	ash black and brown fire	ad matorials, doma
4				ND				Black to gray CINDERS and SLAG, with	T ASTI DIACK AND DIOWN TUS	eu materiais, damp.
4										
6								Same.	-UPPER FILL-	
				ND						
8										
				ND						
				ND						
10								Same	-UPPER FILL-	
12				ND						
14								Same.	-UPPER FILL-	
16										
10				ND						
18							18	Same.	-UPPER FILL-	
								Gray to white CINDERS and ASH with o	ald hottles overer/clam abo	lls shoe soles da
				ND					Sie Source, oyster/Claim Sile	
20										
20								Bottom of test pit at approxametely 20.0) ft.	
								Test pit backfilled to ground surface.		
Groundwater Data								Summary		
· · · · ·	<u></u>	Elapsed Tir	•)f	Depth			urden (Lin FT) 20.0	😭 GeoQu	est
Date	Time	Elapsed TII (HR)	Casing		Hole	Water	Rock C	Cored (Lin FT) NA	Environm	ental, Inc.
		1			1		1			

	GeoQu Environn	iest nental, l	Inc.		E	nvirc	onme	enta	l Test Pit Log		TP- 117
Proj	ect:	Remedia	al Investigatio	on 214 Lake Avenue	Eastern Por	tion Parcel A	and Parcel	B - Site #	C828126	File No:	110204
Clie	nt:	V	olunteers of	America of Western	New York					Sheet No:	1 of 1
Con	tractor	GeoQue	est Environme	ental, Inc.						Location:	See Plan
				Drive Oceanies				_		Eleverite e	
Iten	1	(Casing	Drive Sampler		Core Barrel		1	xcavation Equipment and Procedures	Elevation:	482.7
pe: side Diamet	or (INI):		NA	NA NA		NA NA		Excavato	r: CAT 280 DL 22 feet	Datum: Start:	NGVD
emmer Weig	. ,		NA NA	NA		NA		Reach: Bucket:	36 inch.	Finish	11/2/2007 11/2/2007
ammer Fall (NA	NA		NA		Other:	Excavate test pits to approximate		11/2/2007
ther:			NA	NA		NA		other.	20 ft. and backfill to ground surfac		D. Connell
nor.									20 H. and Baokin to ground bando	GeoQuest Rep:	
Depth	Samp		Sampler Bl			e Number	Strata		Vieual Clas		
(FT)	Depth (FI)	Per 6 Inc	hs (PPM)	and R	lecovery	Change	(FT)	Visual Clas	sification and Remarks	5
0								G	ray Gravel, some coarse to fine sand,	dampUPPER FILL-	
				ND							
				ind.			1.0				
2								В	lack to gray CONCRETE and BRICK,	with metal glass and wood	, dampUPPER FIL
2											
				ND							
4								1.4	loodon I litility polos and cable at any	rovimatoly 6.0 to 9.0 ft	
								V	/ooden Utitlity poles and cable at app	UNITIALETY U.U IU O.U II.	
							-				
e							8	·	SAMEUPPER FILL		
6								S		-UPPER FILL-	
				ND				в	lack to gray CINDERS and SLAG, with	n ash and black to brown fu	used materials, damp.
8											
				ND							
10								s	AME	-UPPER FILL-	
				ND							
12											
14								S	AME.	-UPPER FILL-	
16											
10				ND							
18							18	s	AME	-UPPER FILL-	
				ND				G	ray to white CINDERS and ASH with	old bottles,oyster/clam she	lls,shoe soles,da
									- LOWE		
20				1							
								В	ottom of test pit at approxametely 20.0) ft.	
								т	est pit backfilled to ground surface.		
			-						<u>Cummer:</u>		
				undwater Data	Denti			0	Summary		
	<u></u>	Elapsed	• •	om Of Detter	Depth			1	len (Lin FT) 20.0	💮 GeoQu	est
Date	Time	ETapsec (HF		ising Bottom	Of Hole	Wa	iter	Rock Cor	red (Lin FT) NA	Environm	ental, Inc.
11/2/2007	NA	NA	, I .	NA 20	0.#	N	0				
1/2/2007	INA	IN/	~ ľ	20	0 ft.	I N	~	I			

	GeoQu Environn	iest nental,	Inc.			Enviro	onme	enta	al Test Pit Log		TP- 118
Proj	ect:	Remed	ial Investiga	ation 214	Lake Avenue Ea	astern Portion Parcel A	and Parcel	B - Site	#C828126	File No:	110204
Clie	nt:	,	Volunteers of	of Americ	a of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQu	est Environi	mental, li	nc.					Location:	See Plan
Iten	0		Casing	Dr	ive Sampler	Core Barre			Excavation Equipment and Procedures	Elevation:	482.8
pe:	1		NA		NA	NA	1	Excavat		Datum:	NGVD
side Diamet	er (IN)		NA		NA	NA		Reach:	22 feet	Start:	11/2/2007
emmer Weig			NA		NA	NA		Bucket:		Finish	11/2/2007
mmer Fall (,		NA		NA	NA		Other:	Excavate test pits to approximately		· · · · · · · · · · · · · · · · · · ·
her:			NA		NA	NA			20 ft. and backfill to ground surface	Operator:	D. Connell
										GeoQuest Rep:	S. DeMeo
Depth (FT)	Samp Depth (Sampler Per 6 Ir		Head Space (PPM)	Sample Number and Recovery	Strat Change		Visual Class	ification and Remarks	5
						<i>i</i>					
0									Gray Gravel, some coarse to fine sand, o	IampUPPER FILL-	
					ND						
							1.0		Mallana		
2							2	ŀ	Yellow orange coarse to fine SAND, dam	PUPPER FILL-	
					ND				Black to gray CINDERS and SLAG, with	ash black and brown fries	d materiale, domo
A					UN				DIAGK TO GIAY CHINDERS AND SLAG, WITH	ash black and brown IUSe	u materiais, damp.
4											
6									SAME.	-UPPER FILL-	
					ND						
					ND						
8						TP-118(8.0-8.5 ft.)					
10					40				SAME	-UPPER FILL-	
10					40				SAME	-OFFERTILE-	
					ND						
12					ND						
14									SAME.	-UPPER FILL-	
16											
16					ND						
18							18		SAME	-UPPER FILL-	
								Ī			
									Gray to white CINDERS and ASH with ol	d bottles,oyster/clam shel	ls,shoe soles,da
									- LOWE		
20											
									Bottom of test pit at approxametely 20.0 f	τ.	
								,	Test pit backfilled to ground surface.		
	I			iroundwa	ter Data		1		Summary		
				nounuwa		Depth		Overhui			
	<u></u>	Elapse	d Time Bo	ottom Of	Bottom Of		ater			GeoQu GeoQu	est
Date	Time	(H		Casing	BULTOM OF	Wie Wi	alei	RUCK CO	ored (Lin FT) NA	Environm	ental, Inc.
11/2/2007	NA	N	A	NA	20.0 f	t. N	Ю				
								•			

	GeoQu Environn	iest nental, inc			Env	vironm	enta	al Test Pit Log		TP- 119
Proj	ect:	Remedial I	nvestigation 2	14 Lake Avenue Ea	astern Portion Pa	arcel A and Pare	el B - Site	#C828126	File No:	110204
Clie	nt:	Volu	inteers of Ame	erica of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQuest	Environmenta	l, Inc.					Location:	See Plan
ltor	~	Con	ling	Drive Sampler	Coro	Barrel		Evenuation Equipment and Procedures	Elevation:	485.1
/pe:	11	Cas	Ŭ	NA	N		Excava	Excavation Equipment and Procedures tor: CAT 280 DL	Datum:	NGVD
side Diamet	er (IN):	N		NA	N		Reach:		Start:	11/2/2007
emmer Weig		N		NA	N		Bucket:		Finish	11/2/2007
ammer Fall		N		NA	Ν		Other:	Excavate test pits to approximate		
ther:		N	A	NA	N	A		20 ft. and backfill to ground surfac	e Operator:	D. Connell
Denth	0		Daniel an Diana		O a sera la Nicera			1	GeoQuest Rep:	S. DeMeo
Depth (FT)	Samp Depth		Sampler Blows Per 6 Inchs	Head Space (PPM)	Sample Numl and Recove		rata ge (FT)	Visual Clas	sification and Remarks	6
							<u> </u>			-
0										
				ND				Brown GRAVEL, some coarse to fine s	and, dampUPPER FILL-	
							1.0			
2							2	Black COAL	- UPPER FILL -	
2							-	Yellow to orange coarse to fine SAND,	dampUPPER FILL-	
				ND		3	.5			
4								Black CINDERS and SLAG, with black	and brown fused materals,	brick/glass fragments
									-UPPER FILL-	0 0
6										
-										
				ND						
							8			
8							0			
				ND				Gray to black CINDERS and SLAG v	vith ash, fused black and b	rown materials damn
								Gray to black GINDENG and GEAG V		own materials, damp.
10										
								SAME	-UPPER FILL-	
								SAME	-OFFERTILE-	
				ND						
12										
14							14	SAME.	-UPPER FILL-	
14										
								Gray to white CINDERS and ASH v	vith old bottles, metal, and	shoe soles, damp.
16										
				ND					- LOWER FILL -	
								Oyster and Clam shells from 14 to 1		
								Cyster and Oldri Shelis 110m 14 to 11		
18								SAME	- LOWER FILL -	
				ND						
								SAME		
20								Bottom of test pit at approximately 20 ft		
								2010 or test pit at approximately 2011	•	
								Backfilled test pit to ground surface.		
	I	I	Ground	water Data				Summary		
		• • • • •			Depth		Overbu	Irden (Lin FT) 20.0		
Date	Time	Elapsed Ti	me Bottom 0	Of Bottom Of		Water		Cored (Lin FT) NA	🕞 GeoQu	est
Date		(HR)	Casing						Environm	ental, Inc.
		1	1	1			1			

	GeoQi Environn	iest nental, in	c.		En	/ironr	nen	tal Test Pit Log		TP- 120
Proj	ect:	Remedial	Investigatior	n 214 Lake Avenue E	Eastern Portion F	arcel A and P	arcel B - Sit	e #C828126	File No:	110204
Clie	nt:	Vol	unteers of A	merica of Western N	lew York				Sheet No:	1 of 1
Con	tractor	GeoQuest	Environmer	ntal, Inc.					Location:	See Plan
Iter	n		sing	Drive Sampler	Cor	e Barrel		Excavation Equipment and Procedures	Elevation:	482
pe:			NA	NA		NA	Excav	vator: CAT 280 DL	Datum:	NGVD
side Diamet	er (IN):		A	1.8		NA	Read		Start:	11/2/2007
emmer Weig	ght (LB):	Ν	A	NA	1	NA	Bucke	et: 36 inch.	Finish	11/2/2007
ammer Fall	(IN):	٢	A	NA	1	NA	Other	: Excavate test pits to approximately	/	<u></u>
her:		٢	NA .	NA	I	NA		20 ft. and backfill to ground surface	-	D. Connell
Depth	Samp	ple S	Sampler Blo	ws Head Space	Sample Nun	nber	Strata		GeoQuest Rep	: S. DeMeo
(FT)	Depth	(FT)	Per 6 Inch	s (PPM)	and Recov	ery Ch	ange (FT)	Visual Class	sification and Remark	S
0								Gray Gravel, some coarse to fine sand,	dampUPPER FILL-	
				ND						
				ND			1.0			
								Black to gray CONCRETE and BRICK, v	with metal glass and wood	l, dampUPPER FILL
2										
				ND						
4								Wooden Utitlity poles and cable at appre	oximately 6.0 to 8.0 ft.	
							8			
6								SAME	-UPPER FILL-	
				ND				Black to gray CINDERS and SLAG, with	ash and black to brown f	used materials, damp,
										used materials, damp.
8										
0										
				ND						
10								SAME	-UPPER FILL-	
40				ND						
12										
14								SAME.	-UPPER FILL-	
16				ND						
				ND						
18							18	SAME	-UPPER FILL-	
								Gray to white CINDERS and ASH with o	ld bottles,oyster/clam she	lls,shoe soles,da
								- LOWE		
20								Rottom of tost sit at approximately 20.0	f+	
								Bottom of test pit at approxametely 20.0	п.	
								Test pit backfilled to ground surface.		
	ı	1	Grou	ndwater Data		<u> </u>		Summary		
• • • • •	<u></u>	• • • • •	· .		Depth		Overt	purden (Lin FT) 20.0	GarO	act
Date	Time	Elapsed T	ime Bottor Cas		of Hole	Water	Rock	Cored (Lin FT) NA		est iental, inc.
		(HR)	Cas	ing .						
11/2/2007	NA	NA	N	A 20.0	ft	NO	1			

	GeoQu Environn	est iental, in	ic.		Envir	onm	enta	al Test Pit Log		TP- 121
Proj		Remedial	Investigation 2	14 Lake Avenue Ea	astern Portion Parcel	A and Parce	IB - Site #	C828126	File No:	110204
Clie	nt:	Vo	lunteers of Ame	erica of Western Ne	ew York				Sheet No:	1 of 1
Con	tractor	GeoQues	t Environmenta	I, Inc.					Location:	See Plan
Iten	n	Ca	asing	Drive Sampler	Core Bar	rel	E	excavation Equipment and Procedures	Elevation:	486.5
be:			NA	NA	NA			or: CAT 280 DL	Datum:	NGVD
ide Diamet	er (IN):	I	NA	NA	NA		Reach:	22 feet	Start:	11/2/2007
emmer Weig			NA	NA	NA		Bucket:	36 inch.	Finish	11/2/2007
mmer Fall ((IN):		NA	NA	NA		Other:	Excavate test pits through soil pile		· · · · · · · · · · · · · · · · · · ·
her:			NA	NA	NA			to ground surface	Operator: GeoQuest Rep:	D. Connell S. DeMeo
Depth	Samp		Sampler Blows		Sample Number	Stra				
(FT)	Depth (FT)	Per 6 Inchs	(PPM)	and Recovery	Change	e (⊢I)	Visual Class	fication and Remarks	
0							B	Brown GRAVEL, some coarse to fine san	d, damp UPPER FILL	- (Top of soil pile)
				ND						
2							B	Brown CONCRETE and BOULDERS, sor	ne gravel, little coarse to	fine sand, damp
					-					
				ND	TP-121 soil pile					
4										
							S	SAME, except with topsoil, damp.	-UPPER FILL-	
e										
6										
				ND			S	SAME.	-UPPER FILL-	
							ſ	Top of ground surface)		
8							Ì	. ,		
							te	est pit excavated from top of soil pile to g	round surface.	
10							т	est pit backfilled.		
12										
14										
10										
16										
18										
20										
20										
				water Data				Summary		
·.·.·		Elapsed 1		Ъf	Depth			den (Lin FT) NA	😭 GeoQu	est
Date	Time	Elapsed (HR)			Hole V	Vater	Rock Cor	red (Lin FT) NA	Environm	ental, Inc.
			1		1		4			

	Environ	nest nental,	Inc.			Er	nviro	onme	enta	al Test Pit Log		TP- 122
Proje	ect:	Remedi	al Investigat	tion 214	Lake Avenue Ea	stern Portio	n Parcel A	and Parcel E	B - Site #	¢C828126	File No:	110204
Clier	nt:		olunteers of	f Americ	a of Western Ne	w York					Sheet No:	1 of 1
Cont	tractor	GeoQue	est Environm	nental, Ir	IC.						Location:	See Plan
Item	า		Casing	Dri	ve Sampler	ſ	Core Barrel		ſ	Excavation Equipment and Procedures	Elevation:	488.8
pe:	1		NA		NA		NA	1		pr: CAT 280 DL	Datum:	NGVD
side Diamete	er (IN):		NA		NA		NA		Reach:	22 feet	Start:	11/2/2007
emmer Weig	ht (LB):		NA		NA		NA	I	Bucket:	36 inch.	Finish	11/2/2007
ammer Fall (IN):		NA		NA		NA	•	Other:	Excavate test pits through soil pil	e	·····
ther:			NA		NA		NA			to ground surface	Operator:	D. Connell
Depth	Sam	ple	Sampler E	Blows	Head Space	Sample N	Number	Strata	à		GeoQuest Rep:	
(FT)	Depth	(FT)	Per 6 In	chs	(PPM)	and Red	covery	Change	(FT)	Visual Clas	ssification and Remark	S
0									E	Brown GRAVEL, some coarse to fine s	and, damp UPPER FILL	- (Top of soil pile)
					ND							
					ND							
									E	Brown CONCRETE and BOULDERS, s	some gravel, little coarse to	fine sand, damp
2												
_					ND	TP-122 s	oil pile					
4									5	SAME, except with topsoil, damp.	-UPPER FILL-	
6												
					ND					SAME.	-UPPER FILL-	
											G. LENTILL'	
8					I				(Top of ground surface)		
Ŭ												
									t	est pit excavated from top of soil pile to	o ground surface.	
10									-	Test pit backfilled.		
10												
12												
14												
10												
16												
18												
20												
20												
				oundwat	er Data					Summary		
• • • • • •						Depth			Overbur	den (Lin FT) NA	😭 GeoQu	ost
Date	Time	Elapsed (HF		ttom Of asing	Bottom Of	Hole	Wat	ter	Rock Co	ored (Lin FT) NA	Environm	ental, Inc.
			, , , , ,									

	GeoQu Environn	iest nental, l	nc.			En	viro	nme	enta	l Test Pi	t Log		TP- 123
Proj	ect:	Remedia	al Investigatio	on 214 l	Lake Avenue Ea	stern Portion I	Parcel A a	and Parcel I	B - Site #0	828126		File No:	110204
Clie	nt:	V	olunteers of	America	a of Western Ne	w York						Sheet No:	1 of 1
Con	tractor	GeoQue	st Environme	ental, In	C.							Location:	See Plan
Iter	n	C	Casing	Dri	ve Sampler	Co	re Barrel		E	cavation Equipment an	d Procedures	Elevation:	492.5
pe:	-		NA		NA		NA			: CAT 280 DL		Datum:	NGVD
ide Diamet	er (IN):		NA		NA		NA		Reach:	22 feet		Start:	11/2/2007
mmer Weig			NA		NA		NA		Bucket:	36 inch.		Finish	11/2/2007
mmer Fall her:	(IN):		NA		NA		NA		Other:	Excavate test pits th	rough soil pile	Operator:	D. Connell
iei.			NA		NA		NA			to ground surface		GeoQuest Rep:	S. DeMeo
Depth (FT)	Samp Depth (Sampler Bl Per 6 Incl		Head Space (PPM)	Sample Nur and Recov		Strata Change				ation and Remarks	
	Deptin	(FI)	Fel 6 Ilici	115	(FFIVI)	and Recov	/ery	Change					
0									B	rown GRAVEL, some co	arse to fine sand,	damp UPPER FILL	 (Top of soil pile)
					ND								
									B	own CONCRETE and E	OULDERS some	gravel, little coarse to	fine sand damp
2												3. 3. 61, haire obarse to	ound, dump
						TP-123 soi	l pile						
					ND								
4									S	AME, except with topsoi	l, damp	UPPER FILL-	
										,	· · · · 1/2		
6													
					ND				s	AME.		-UPPER FILL-	
												S LIVI ILL	
8									T)	op of ground surface)			
									te	st pit excavated from to	o of soil pile to aro	und surface	
									10		of soil pile to gro	und sunace.	
10									T	est pit backfilled.			
12													
14													
14													
16													
18													
20													
20													
											<u> </u>		
·.·.·				undwate	er Data	Conth			Over	Summary			
Date	Time	Elapsed	Time Botto	om Of	Bottom Of	Depth Hole	Wat			en (Lin FT) NA ed (Lin FT) NA		😭 GeoQu	est
Dale	, iiiie	(HR		sing	BOLLOTI UT		vvat	101	NUCK COP			Environm	ental, Inc.
1/2/2007	NA	NA			NA						1		

	GeoQu Environn	uest nental,	inc.			Ε	nvirc	onme	ent	al Test Pit Log		TP- 124
Proje	ect:	Remed	ial Investigatio	on 214	Lake Avenue E	astern Port	ion Parcel A	and Parcel	B - Site	#C828126	File No:	110204
Clier	nt:	,	Volunteers of	Americ	a of Western N	ew York					Sheet No:	1 of 1
Cont	tractor	GeoQu	est Environme	ental, Ir	nc.						Location:	See Plan
Item	า		Casing	Dr	ive Sampler		Core Barrel			Excavation Equipment and Procedures	Elevation:	483.1
Туре:			NA		NA		NA		Excava	tor: CAT 280 DL	Datum:	NGVD
Inside Diamete			NA		NA		NA		Reach:		Start:	11/2/2007
Hemmer Weig			NA		NA		NA		Bucket		Finish	11/2/2007
Hammer Fall (IN):		NA		NA		NA		Other:	Excavate test pits through soil pile		
Other:			NA		NA		NA			to ground surface	Operator: GeoQuest Rep:	D. Connell
Depth	Sam	ole	Sampler Bl	ows	Head Space	Sample	Number	Strat	a		GeoQuest Rep.	S. DeMeo
(FT)	Depth	(FT)	Per 6 Incl	ns	(PPM)	and R	ecovery	Change	(FT)	Visual Classif	ication and Remarks	
0					ND					Brown GRAVEL, some coarse to fine sand		
2					ND	TP-124	soil pile			Brown Boulders and GRAVEL, some grave	ei, little coarse to fine san	a, damp
4										SAME.	-UPPER FILL-	
6					ND					SAME.	-UPPER FILL-	
										(Top of ground surface)		
8												
										test pit excavated from top of soil pile to gr	ound surface.	
10										Test pit backfilled.		
12												
14												
16												
10												
18												
10												
20												
									1			
				undwat	ter Data					Summary		
· . · . · . · . ·	<u>····</u>		17: Dotte			Depth			Overbu	rden (Lin FT) NA	GeoQue	est
Date	Time	Elapse (H		om Of sing	Bottom O	f Hole	Wa	iter	Rock C	ored (Lin FT) NA	Environme	
								_	1			
11/2/2007	NA	N	A N	IA	NA		N	U				

Proje										al Test Pit Log		TP- 125
i ioje	ect:	Remedia	al Investigatio	n 214 L	_ake Avenue Ea	astern Portio	n Parcel A	and Parcel	B - Site #	C828126	File No:	110204
Clier	nt:	V	olunteers of A	America	a of Western Ne	w York					Sheet No:	1 of 1
Cont	tractor	GeoQue	st Environme	ntal, In	с.						Location:	See Plan
Item	1	C	Casing	Driv	ve Sampler	(Core Barrel		E	xcavation Equipment and Procedures	Elevation:	492.5
pe:			NA		NA		NA			r: CAT 280 DL	Datum:	NGVD
side Diamete	er (IN):		NA		NA		NA		Reach:	22 feet	Start:	11/2/2007
emmer Weigl	ht (LB):		NA		NA		NA		Bucket:	36 inch.	Finish	11/2/2007
ammer Fall (I	IN):		NA		NA		NA		Other:	Excavate test pits through soil pile		<u> </u>
her:			NA		NA		NA			to ground surface	Operator:	D. Connell
Depth	Samp	le	Sampler Blo	ows	Head Space	Sample N	Number	Strata	a		GeoQuest Rep:	S. DeMeo
(FT)	Depth (Per 6 Incl		(PPM)	and Red		Change		Visual Class	sification and Remarks	5
0									В	rown GRAVEL, some coarse to fine sa	nd, damp UPPER FILL	- (Top of soil pile)
					ND							
_									В	rown CONCRETE and BOULDERS, so	ome gravel, little coarse to	fine sand, damp
2												
					ND							
4									s	AME, except with occasional pavemen	t fragments, damp.	-UPPER FILL-
6												
					ND	TP-125 s	oil pile			rown POLIL DEBS, some grouped little a	cores to fine cond with or	anaional concrete fra
					ND					rown BOULDERS, some gravel, little c	barse to fine sand, with oc	casional concrete fraç
0												
8											-UPPER F	FILL-
10					ND				(Top of ground surface)		
									-	ant nit even when the set of soil sile to	a second confere	
									1	est pit excavated from top of soil pile to	ground surface.	
10												
12												
14										Test pit Backfilled.		
16												
18												
-												
20												
I		I	Grou	undwate	er Data					Summary		
• • • • •	<u></u>	<u></u>				Depth			Overburg	len (Lin FT) NA	😭 GeoQu	act
Date	Time	Elapsed	Time Botto	om Of	Bottom Of	Hole	Wat	ter	Rock Cor	red (Lin FT) NA	Environm	est ental, Inc.
		(HR		sing					4			

	GeoQu Environn	iest nental, Inc.			Envir	onm	enta	al Test Pit Log	1	TP- 126
Proj	ect:	Remedial In	vestigation 21	14 Lake Avenue Ea	stern Portion Parcel	A and Parce	I B - Site	#C828126	File No:	110204
Clie	nt:	Volur	nteers of Ame	rica of Western Ne	w York				Sheet No:	1 of 1
Con	tractor	GeoQuest E	Invironmental	, Inc.					Location:	See Plan
Iter	n	Casi	ng	Drive Sampler	Core Bar	rol		Excavation Equipment and Procedures	s Elevation:	481.1
be:		NA	Ŭ	NA	NA		Excava	tor: CAT 280 DL	Datum:	NGVD
ide Diamet	er (IN):	NA		NA	NA		Reach:		Start:	11/2/2007
mmer Weig	ght (LB):	NA	A	NA	NA		Bucket:	36 inch.	Finish	11/2/2007
mmer Fall	(IN):	NA	A	NA	NA		Other:	Excavate test pits through soil pi	ile	<u></u>
ner:		NA	A	NA	NA			to ground surface	Operator:	D. Connell
Depth	Samp	le Sa	ampler Blows	Head Space	Sample Number	Stra	ta		GeoQuest Rep:	S. DeMeo
(FT)	Depth		Per 6 Inchs	(PPM)	and Recovery	Chang		Visual Cla	ssification and Remark	S
0				ND				Brown GRAVEL, some coarse to fine s	sand, damp UPPER FILL	- (Top of soil pile)
2								Brown CONCRETE and BOULDERS,	some gravel, little coarse to	fine sand, damp
2										
4				ND				SAME, except with topsoil, damp.	-UPPER FILL-	
6				ND				Brown BOULDERS, some gravel, little	coarse to fine sand, with or	ccasional concrete frag
8									-UPPER F	FILL-
10				ND				(Top of ground surface)		
								Test pit excavated from top of soil pile	to ground surface.	
12										
14										
16										
18										
20										
	I		Groundy	vater Data				Summary		
•••••					Depth		Overbu	rden (Lin FT) NA		1
Date	Time	Elapsed Tin (HR)				Vater		ored (Lin FT) NA	GeoQu Environm	est ental, inc.
1/2/2007	NA	NA	NA	NA		NO	1			

	architects // er	rgman ngineers // plan	ntes iners			Er	iviro	nme	enta	al Test Pit Log		TP- 127
Proj	ect:	Suppleme	ental Investig	gation 214 L	_ake Avenu	ue Eastern Po	ortion Parce	el A and Pa	rcel B -	Site #C828126	File No:	8726.02
Clier	nt:	Vo	olunteers of A	America of V	Nestern Ne	ew York					Sheet No:	1 of 1
Con	tractor	SJB Serv	rices, Inc.								Location:	See Plan
ltom	•	0	oping	Drive Sa	ampler	0	ore Barrel			Excavation Equipment and Procedures	Elevation:	482.2
Item ype:	1		asing NA	N/			NA			cor: CAT 280 DL	Datum:	NGVD
iside Diamete	er (IN):		NA	N			NA		Reach:	22 feet	Start:	10/25/2010
emmer Weig			NA	N			NA		Bucket:		Finish	10/25/2010
ammer Fall ((IN):		NA	N	A		NA		Other:	Excavate test pits to approximately	y	
ther:			NA	N	A		NA			20 ft. and backfill to ground surface	e Operator:	A. Koske
Denth	Com		Camples Di			Comple N	umb e r	Chrot			Bergmann Rep	: M. Carpenter / SJ
Depth (FT)	Samp Depth		Sampler Blo Per 6 Inch		ad Space (PPM)	Sample N and Rec		Strata Change		Visual Clas	sification and Remark	S
0										Gray Gravel, some coarse to fine sand,		
0										Gray Graver, some coarse to mile sand,	dampOFFER FILL-	
					ND					Black to gray CINDERS and SLAG, with	ash black and brown fus	ed materials, damp.
2								2				
										Black COAL		
					ND						- UPPER FILL -	
4											- UFFLA FILL -	
4										Concrete railroad bridge foundation end	ountered in test pit.	
6										Black COAL		
					ND						- UPPER FILL -	
					ne -						OTTERTIE	
8								8.0				
0						TP-127(8.0	-10.0 ft.)	0.0		Yellow orange coarse to fine SAND, dar	np.	
										· · · · · · · · · · · · · · · · · · ·	· F ·	
											- UPPER FILL -	
10					ND					Gray COKE		
										·		
									·		- UPPER FIL	<u>.L </u>
					ND					Black CINDERS and SLAG, with ash		
12												
										SAME.	- UPPER FILL	
14										SAME.	- UPPER FILL	-
16												
					ND							
18										SAME	- UPPER FILL-	
20												
20												
										Black COAL at northern end of the test	pit orange slag and cinder	s UPPER FILL-
										Bottom of test pit at approximately 22 fe	et. Backfilled to around su	ırface.
	ı		Grou	undwater Da	ata					Summary		
• • • • • •		• • • • •				Depth			Overbu	rden (Lin FT) 22.0	Dan	monn
Date	Time	Elapsed	Time Botto	om Of	Bottom Of		Wat	ter		pred (Lin FT) NA		Smann
		(HR)) Cas	sing			~				architects // engin	
0/25/2010	NA	NA	N		22.0 f		NC		1			

	Ben architects // eng	gineers // planr	n tes hers		En	viro	nme	ental Te	st Pit Log	1	TP- 128
Proje	ect:	Suppleme	ental Investiga	tion 214 Lake Aver	ue Eastern Po	rtion Parce	el A and Par	cel B - Site #C82812	6	File No:	8726.02
Clier	nt:	Vo	lunteers of An	nerica of Western N	lew York					Sheet No:	1 of 1
Cont	tractor	SJB Servi	ces, Inc.							Location:	See Plan
liam		0.	in a	Drive Sampler	0	are Derrel		Everyation E	winnert and Drasaduras	Floyation	400.5
/pe:	1		asing NA	NA		ore Barrel NA		Excavation E	quipment and Procedures וס נו	Elevation: Datum:	482.5 NGVD
iside Diamete	er (IN):		NA	NA		NA		Reach: 22 feet		Start:	10/25/2010
lemmer Weig			NA	NA		NA		Bucket: 36 inch		Finish	10/25/2010
ammer Fall (NA	NA		NA			te test pits to approximate		
ther:		1	NA	NA		NA		20 ft. an	d backfill to ground surfac	e Operator:	A. Koske
	-									Bergmann Rep:	M. Carpenter / SJE
Depth (FT)	Samp Depth (Sampler Blow Per 6 Inchs		Sample No and Reco		Strata Change (Visual Clas	ssification and Remarks	6
0								Croy Croyel			
0								Gray Gravel,	some coarse to fine sand	, dampUPPER FILL-	
				ND							
							2.0				
2											
-								Black COAL			
				ND						- UPPER FILL -	
4											
							6				
6											
				ND				Yellow orange	e coarse to fine SAND, da	amp.	
8											
					TP-128 (8.0-	-10.0 ft)		Black CINDE	RS and SLAG, with ash a	nd black, orange and browr	n fused materials, damp
					11 120 (0.0	10.0 10.7				- UPPER FILL-	
10				ND							
12				ND							
12											
14								SAME.		- UPPER FILL-	
								0, 1112.		011 2111 122	
								Refusal Conc	rete Railroad bridge at		
16											
				ND							
								Bottom of tes	t Pit at approx. 15 feet.		
								Dottom of tes	· · · · · · · · · · · · · · · · · · ·		
18											
20											
		<u> </u>	Group	dwater Data	I			Summ	arv		
					Depth			Overburden (Lin FT)	15.0		
Date	Time	Elapsed 7				Wate		Rock Cored (Lin FT)	NA	Berg	mann associates
Dale	Time	(HR)	Casir	ig Buttoffi C		vvale			11/1	architects // engine	
			1	1	0 ft. NO						

	architects // e	rgman ngineers // pla	nners			E	nvirc	onme	enta	al Test Pit Log		TP- 129
Proje	ect:	Supplem	nental Investi	gation 2	214 Lake Avenu	e Eastern	Portion Parc	el A and Pa	arcel B - S	ite #C828126	File No:	8726.02
Clier	nt:	V	olunteers of	America	a of Western Ne	w York					Sheet No:	1 of 1
Cont	tractor	SJB Ser	vices, Inc.								Location:	See Plan
Item			Casing	Driv	ve Sampler		Core Barrel			Excavation Equipment and Procedures	Elevation:	481.5
/pe:	1	C	NA	DI	NA		NA			pr: CAT 280 DL	Datum:	481.5 NGVD
iside Diamete	er (IN):		NA		NA		NA		Reach:	22 feet	Start:	10/25/2010
lemmer Weig	ht (LB):		NA		NA		NA		Bucket:	36 inch.	Finish	10/25/2010
ammer Fall (IN):		NA		NA		NA		Other:	Excavate test pits to approximately		•.•.•.•.•.•
ther:			NA		NA		NA			20 ft. and backfill to ground surface	Operator:	A. Koske
Depth	Sam	ole	Sampler Bl	ows	Head Space	Sample	Number	Strat	ta		Bergmann Rep:	M. Carpenter / S.
(FT)	Depth	(FT)	Per 6 Incl	hs	(PPM)	and Re	ecovery	Change	e (FT)	Visual Classi	fication and Remarks	
0									C	Gray Gravel, some coarse to fine sand, d	ampFILL-	
					ND						- UPPER FILL -	
					ND						- UPPER FILL -	
0									-			
2								2		Black COAL	- UPPER FILL -	
									Γ			
					ND				E	Black COAL and gray COKE	- UPPER FILL -	
4												
6												
					ND				E	Black COAL and gray COKE	- UPPER FILL-	
8												
-												
						No s	ample					
10					ND							
									E	Black COAL and gray COKE	- UPPER FILL-	
12					ND							
14									5	SAME.		
16												
-					ND							
18									S	SAME	- UPPER FILL -	
20												
										SAME		
										SAME.		
									E	Bottom of test pit at approximately 22 feet	. Backfilled to ground sur	face.
				undwate						Summary		
<u> </u>		Elapsed	• •	om Of		Depth				den (Lin FT) 22.0	Berg	mann
Date	Time	Elapsed (HR		sing	Bottom Of	Hole	Wa	ter	Rock Co	red (Lin FT) NA	architects // engine	associates
		1							1			CONTRACTOR CONTRACTOR

	architects // er	rgma igineers // pla	nn iates anners			En	viro	nme	enta	al Test Pit	Log		TP- 130
Proj	ect:	Supplem	nental Investi	gation 2	214 Lake Avenu	ue Eastern Po	rtion Parce	el A and Pa	arcel B - S	ite #C828126		File No:	8726.02
Clie	nt:	V	olunteers of	America	a of Western Ne	ew York						Sheet No:	1 of 1
Con	tractor	SJB Ser	vices, Inc.									Location:	See Plan
lton	_		Cooling	Driv	ve Sampler	Cr.	ore Barrel			voluction Equipment and	Procedures	Elevation:	491 5
Iten vpe:	1		Casing NA	Dir	NA		NA			xcavation Equipment and or: CAT 280 DL	Flocedules	Datum:	481.5 NGVD
side Diamet	er (IN):		NA		NA		NA		Reach:	22 feet		Start:	10/25/2010
emmer Weig			NA		NA		NA		Bucket:	36 inch.		Finish	10/25/2010
ammer Fall ((IN):		NA		NA		NA		Other:	Excavate test pits to a	pproximately		
ther:			NA		NA		NA			20 ft. and backfill to gr	ound surface	Operator:	A. Koske
Depth	Samp	ole	Sampler Bl	ows	Head Space	Sample Nu	umber	Strata	a			Bergmann Rep:	M. Carpenter
(FT)	Depth		Per 6 Inc		(PPM)	and Reco		Change		V	isual Classific	ation and Remarks	3
0									G	Gray Gravel, some coarse t	o fine sand, dam	o UPPER FILL-	
								1					
					ND								
									E	Black COAL			
2													
					ND			4	L.			- UPPER FILL -	
4										(-II			
									ĭ	ellow orange coarse to fin	e SAND, damp.		
6													
0													
					ND								
												- UPPER FILL -	
8								8.0					
						TP-130 (8.0-	10.0.#.)						
						11-130 (0.0-	10.0 11.)		E	Black CINDERS and SLAG	with black and b	rown fused materals.	brick/alass fragments
10					ND								
												- UPPER FILL -	
											54 L		
12					ND				E	Black CINDERS and SLAG	with asr		
14									S	SAME.		- UPPER FILL-	
16									S	SAME, except with fused m	aterials.		
					ND								
18									s	SAME		- UPPER FILL-	
00													
20									F	Refusal at approximately 20	0.0 feet		
									E	Bottom of test pit at approxi	mately 20 feet. B	ackfilled to ground sur	rface.
	•		Gro	undwate	er Data					Summary			
· . · <u>.</u> ·		· · · · ·	•••			Depth			Overburg	den (Lin FT) 20.0		Raro	mann
Date	Time	Elapsed (HF	Time Botto	om Of sing	Bottom Of	Hole	Wat	ter	Rock Co	red (Lin FT) NA		Derg	mann
				Jing					1			architects // engine	eers // planners
0/25/2010	NA	NA	A N	A	20.0 f	t.	NC	C					

	Be architects // er	rgmaso ngineers // p	ciates blanners		E	nvirc	onme	enta	al Test Pit Log		TP- 131
Proj	ect:	Supple	mental Investig	gation 214 Lake Aver	ue Eastern	Portion Parc	el A and Pa	arcel B -	Site #C828126	File No:	8726.02
Clier	nt:		Volunteers of A	America of Western N	lew York					Sheet No:	1 of 1
	tractor		ervices, Inc.							Location:	See Plan
	indette:				1			1		2000.01	
Item	n		Casing	Drive Sampler		Core Barrel			Excavation Equipment and Procedures	Elevation:	482
Туре:			NA	NA		NA		Excava	tor: CAT 280 DL	Datum:	NGVD
Inside Diamete	er (IN):		NA	NA		NA		Reach:	22 feet	Start:	10/25/2010
Hemmer Weig			NA	NA		NA		Bucket	36 inch.	Finish	10/25/2010
Hammer Fall (NA	NA		NA		Other:	Excavate test pits to approximately		
Other:			NA	NA		NA			20 ft. and backfill to ground surface	Operator:	A. Koske
									C C	Bergmann Rep:	M. Carpenter / SJD
Depth	Sam		Sampler Blo			Number	Strat				·
(FT)	Depth	(FT)	Per 6 Inch	ns (PPM)	and R	ecovery	Change	(FT)	Visual Classifica	tion and Remarks	
0				ND			1		Gray Gravel, some coarse to fine sand, damp	UPPER FILL-	
2									Black COAL - UPPEF	R FILL -	
4				ND			5		Yellow orange coarse to fine SAND, damp.	- UPPER FILL -	
6				19.8 ppm			5		Odors from test pit soils noticed beginning at a Black to gray CINDERS and SLAG, with ash t		
8					TP-131 (8	3.0-10.0 ft.)				- UPPER FILL -	
10						·			Black Stained SAND and SILT, with slag and	cinders, mosit.	
12				19.8 ppm					SAME.		
14				84 ppm					SAME.	- UPPER FILL-	
16									SAME.		
18				84 ppm					SAME	- UPPER FILL-	
20									Odors from approximately 6 feet to 20 feet be Bottom of test pit at approximately 20 feet. Ba	-	ace.
	I		000	undwater Data	<u>I</u>		<u>I</u>		Summary		
			Grou		Denth			Overbu			
Date	Time	Elapse	ed Time Botto IR) Cas		Depth Of Hole	Wa	ater		rden (Lin FT) 20.0 ored (Lin FT) NA	architects // enginee	mann associates ers // planners
10/25/2010	NA	N	IA N	A 20.0	ft.	N	0				

	architects // er	rgmai ngineers // plar	ates Iners			E	nvirc	onme	enta	al Test Pit Log	1	TP- 132
Proj	ect:	Supplem	ental Investi	gation 21	4 Lake Avenu	le Eastern	Portion Parc	el A and Pa	arcel B - S	lite #C828126	File No:	8726.02
Clier	nt:	Ve	olunteers of A	America	of Western Ne	ew York					Sheet No:	1 of 1
Con	tractor	SJB Serv	vices, Inc.								Location:	See Plan
Item	1		asing	Drive	e Sampler		Core Barrel			Excavation Equipment and Procedures		481.5
ype: wide Diemetr	or (INI):		NA NA		NA NA		NA NA			pr: CAT 280 DL 22 feet	Datum: Start:	NGVD
nside Diamete Iemmer Weig			NA		NA		NA		Reach: Bucket:	36 inch.	Finish	10/26/2010 10/26/2010
ammer Fall (NA		NA		NA		Other:	Excavate test pits to approximate		10/20/2010
ther:	, ,		NA		NA		NA			20 ft. and backfill to ground surface		R. Steiner
	-										Bergmann Rep	M. Carpenter / SJI
Depth (FT)	Samp Depth		Sampler Blo Per 6 Inch		Head Space (PPM)		Number ecovery	Strata Change		Visual Clas	ssification and Remark	s
		()			()							-
0								1	G	Gray Gravel, some coarse to fine sand	, damp UPPER FILL-	
					ND							
2									l	Black COAL	UPPER FILL -	
					ND			4				
4					ND			4	ŀ			
4									ì	fellow orange coarse to fine SAND, da	amp UPPER FILI	-
								6				
6					19.8 ppm				<u>(</u>	Odors from test pit soils noticed beginr	ning at approximately 6 fee	below the ground surfa
									6	Black stained SAND and SILT with stro	ong odor.	
											-	
8											- UPPER FILL	-
0												
									ľ	Black stained SAND and SILT with stro	ong odor.	
10						TP-132 (8	3.0-10.0 ft.)					
					50					Plack stained CAND and CILT and mai	et.	
					59 ppm				ľ	Black stained SAND and SILT and moi	SI.	
12												
14									5	SAME.	- UPPER FILL	
											0.1.2.1.1.22	
									5	SAME.		
16												
					440 ppm							
10					200					SAME		
18					300 ppm				8	SAME	- UPPER FILL-	
									E	Black stained SAND and SILT with woo	oden sticks - UPPER FILL	
20												
										Bottom of test pit at approximately 20 f	eet. Backfilled to around s	irface.
									ľ		Dasamod to ground St	
										0		
				undwater		Denth			Oversi	Summary		
<u></u>	<u></u>	Elapsed	• •	om Of		Depth				den (Lin FT) 20.0	Berg	Smann associates
Date	Time	(HR		sing	Bottom Of	Hole	Wa	ter	Rock Co	red (Lin FT) NA	architects // engin	eers // planners
		1	1	1				1				

TP- 132I		est Pit Log	al Test	nment	nviro	E			gineers // planners	architects // engi	
8726.02	File No:	26	- Site #C828126	I A and Parcel B	Portion Parce	nue Eastern	214 Lake Aven	Investigation	Supplemental	ect:	Proj
1 of 1	Sheet No:					lew York	ca of Western N	ers of Americ	Volunte	nt: _	Clie
See Plan	Location:							Inc.	SJB Services,	tractor s	Con
481.5	Elevation:	Equipment and Procedures	Excavation Equipm		Core Barrel		rive Sampler	Di	Casing	n	Iten
NGVD	Datum:			Excava	NA		NA		NA		ype:
9/22/2011	Start:	t	1: 22 feet	Reach	NA		NA		NA	er (IN):	nside Diamet
9/22/2011	Finish			Bucke	NA		NA		NA		lemmer Weig
D. Otoiner		ate test pits to approximately		Other:	NA		NA		NA	(IN):	lammer Fall (
R. Steiner M. Carpenter	Operator: Bergmann Rep:	nd backfill to ground surface	20 ft. and bac		NA		NA		NA		other:
	ation and Remarks			Strata Change (FT)	Number ecovery		Head Space (PPM)	pler Blows r 6 Inchs		Sample Depth (F	Depth (FT)
				Change (FT)	ecovery	anu K	(FFIM)		FI) Fe	Deptil (F	
	b UPPER FILL-	, some coarse to fine sand, dam	Gray Gravel, some	1							0
							ND				
			Black COAL								
	R FILL -		BIACK COAL								2
				3.5			ND				
	- UPPER FILL	ge coarse to fine SAND, damp.	Yellow orango coo								4
	- UFFER FILL	go obarse to fine onind, uainp.	renew orange coal								
				5							
							ND				6
up fuend motorials	block orongo and br	y CINDERS and SLAG, with ash	Block to grov CIND								
whitused materials, c	black, orange and bro	y CINDERS and SLAG, with ash	Black to gray CIND								
	- UPPER FILL -										8
											0
				10.0	.0-10.0 ft.0	TP132 (8					10
	- UPPER FILL -		SAME.				ND				
											12
l materials, damp.	black and brown fuse	y CINDERS and SLAG, with ash	Black to gray CIND								14
											16
							ND				
	- UPPER FILL-		SAME.				ND				18
	oted.	staining on soils with no odors r	Some black stainin								
							ļ				
											20
ace.	ackfilled to ground su	st pit at approximately 20 feet. B	Bottom of test pit a								
			Summary				ater Data	Groundwa			
mann	Berg		urden (Lin FT)			Depth		Bottom Of	Elapsed Time		
associates	architects // engine) NA	Cored (Lin FT)	er Rock (Wat	Jt Hole	Bottom O	Casing	(HR)	Time	Date
					NO		20.0	NA	NA	NA	9/22/2011

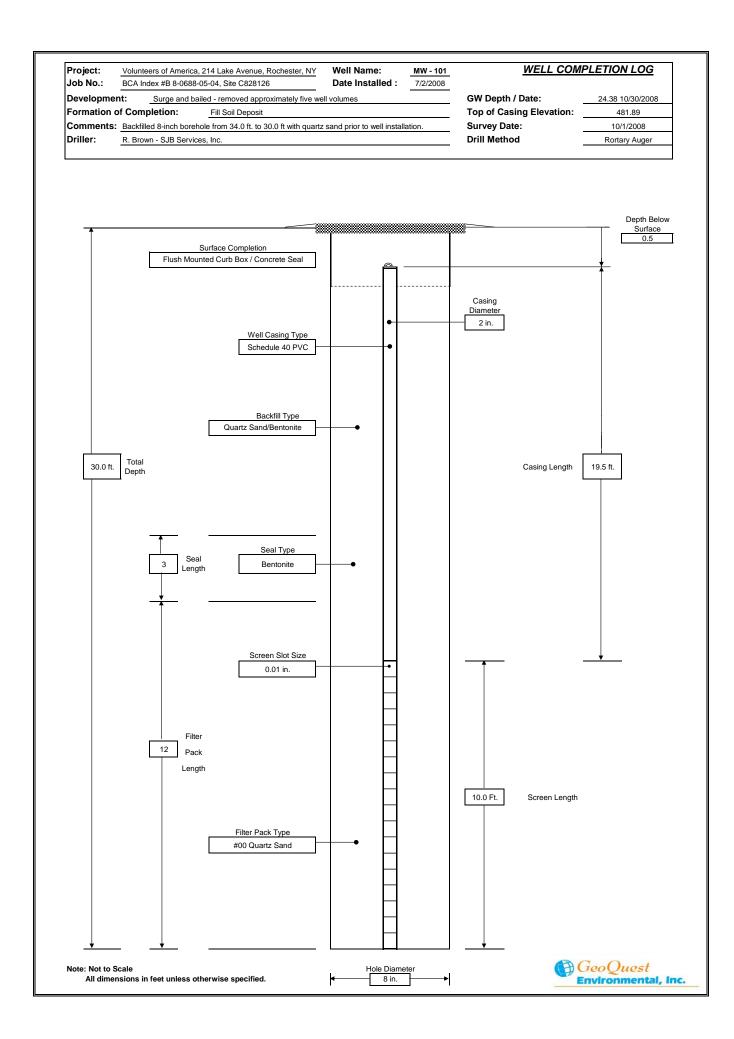
	architects // en	gineers // pla	ates nners			E	nviro	nme	enta	l Test Pit	Log		TP- 133
Proj	ect:	Supplem	ental Investig	ation 214 L	ake Aven	ue Eastern F	Portion Parce	el A and Pa	arcel B - Sit	e #C828126		File No:	8726.02
Clier	nt:	V	olunteers of A	America of V	Vestern N	ew York						Sheet No:	1 of 1
Con	tractor	SJB Serv	vices, Inc.									Location:	See Plan
				Drive O					_			Electric c	
Item	1	C	asing	Drive S		(Core Barrel NA			cavation Equipment and CAT 280 DL	Procedures	Elevation: Datum:	481.5 NGVD
/pe: side Diamete	or (INI):		NA NA	N. N			NA		Reach:	22 feet		Start:	10/26/2010
emmer Weig			NA	N			NA		Bucket:	36 inch.		Finish	10/26/2010
ammer Fall (NA	N			NA		Other:	Excavate test pits to	approximately		10/20/2010
ther:			NA	N			NA		e anon	20 ft. and backfill to g		Operator:	R. Steiner
												Bergmann Rep	
Depth (FT)	Samp Depth (Sampler Blo Per 6 Inch		ad Space (PPM)	Sample and Re		Strata Change		,		ation and Remark	c
	Deptill)	Fer o Inch	15	(FFIVI)	and ite	covery	Unange					.5
0								1	Gi	ay Gravel, some coarse	to fine sand, dan	np UPPER FILL-	
					ND								
									[]				
2									BI	ack Coal		ER FILL -	
2											- 0FF		
					ND			4					
4									Ye	ellow orange coarse to fir	ne SAND, damp.	- UPPER FILI	-
													-
6					ND								
0					ND								
									BI	ack to gray CINDERS an	d SLAG, with ash	h black and brown fus	ed materials, damp.
8												- UPPER FILL	-
10						TP- 133 (8	.0-10.0 ft.)						
-							,						
					ND				Sa	ame, except with white ce	eramic insulaters.	- UPPER FILL -	
12													
14									BI	ack to gray CINDERS an	d SLAG, with ash	black and brown fus	ed materials, damp.
									SA	ME.			
16													
					ND								
18					ND				SA	ME		- UPPER FILL-	
20													
									Bo	ottom of test pit at approx	imately 20 feet. E	Backfilled to ground su	urface.
		I	Grou	Indwater Da	ata	<u> </u>				Summary	l		
						Depth			Overburde	en (Lin FT) 20.0			
Date	Time	Elapsed	Time Botto		Bottom O		Wat		1	ed (Lin FT) NA		Berg	Smann associates
Date	TITLE	(HR		ing	Dottom		vval		NUCK CUIE			architects // engir	associates

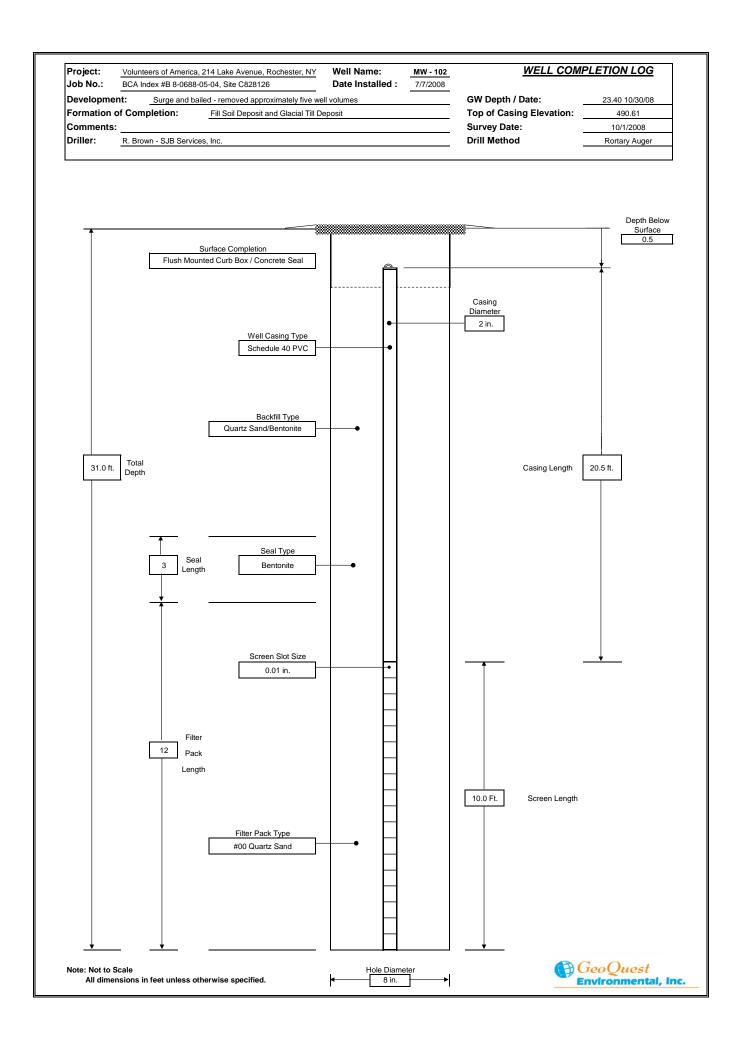
	architects // er	rgmani ngineers // planne	n es ers		Env	ironm	nenta	al Test Pit Log	1	TP- 134
Proj	ect:	Supplemer	ntal Investiga	tion 214 Lake Aver	ue Eastern Portior	Parcel A and	Parcel B -	Site #C828126	File No:	8726.02
Clier	nt:	Volu	unteers of An	nerica of Western N	lew York				Sheet No:	1 of 1
Con	tractor	SJB Servic	es, Inc.						Location:	See Plan
11		0		Drive Sempler	0	Damal		Francisco Francisco da Decembra d	Floyetion	400
Item	1		sing	Drive Sampler	Core I			Excavation Equipment and Procedures tor: CAT 280 DL	Elevation:	482 NGVD
/pe: side Diamete	or (INI):		IA IA	NA NA	N/ N/		Reach:		Start:	10/26/2010
emmer Weig			IA	NA	N/		Bucket:		Finish	10/26/2010
ammer Fall (IA	NA	NA		Other:	Excavate test pits to approximate		10,20,2010
ther:	,		IA	NA	NA			20 ft. and backfill to ground surface		R. Steiner
									Bergmann Rep	M. Carpenter
Depth (FT)	Samp Depth		Sampler Blow Per 6 Inchs		Sample Numb and Recover		rata ge (FT)	Visual Clas	ssification and Remark	s
0 2				ND			1	Gray Gravel, some coarse to fine sand	, damp UPPER FILL-	
4				ND			6	Yellow orange coarse to fine SAND, da	amp UPPER FILI	
6 8				ND			U	Black to gray CINDERS and SLAG, wit	h ash black and brown fus - UPPER FILL	
10				ND	TP-134 (8.0-10	9.0)		Same, except with white ceramic insula	aters UPPER FILL -	
14								Black to gray CINDERS and SLAG, wit	h ash black and brown fus	ed materials, damp.
16				ND				SAME.		
18				9 ppm				Black to green CINDERS and SLAG, w noted odor from approximately 18 feet		
20								Bottom of test pit at approximately 20 f	eet. Backfilled to ground su	Irface.
			Groun	dwater Data	<u>I</u>	<u> </u>		Summary		
					Depth		Overbu	rden (Lin FT) 20.0	D	
Date	Time	Elapsed Ti (HR)				Water		ored (Lin FT) NA	architects // engin	eers // planners

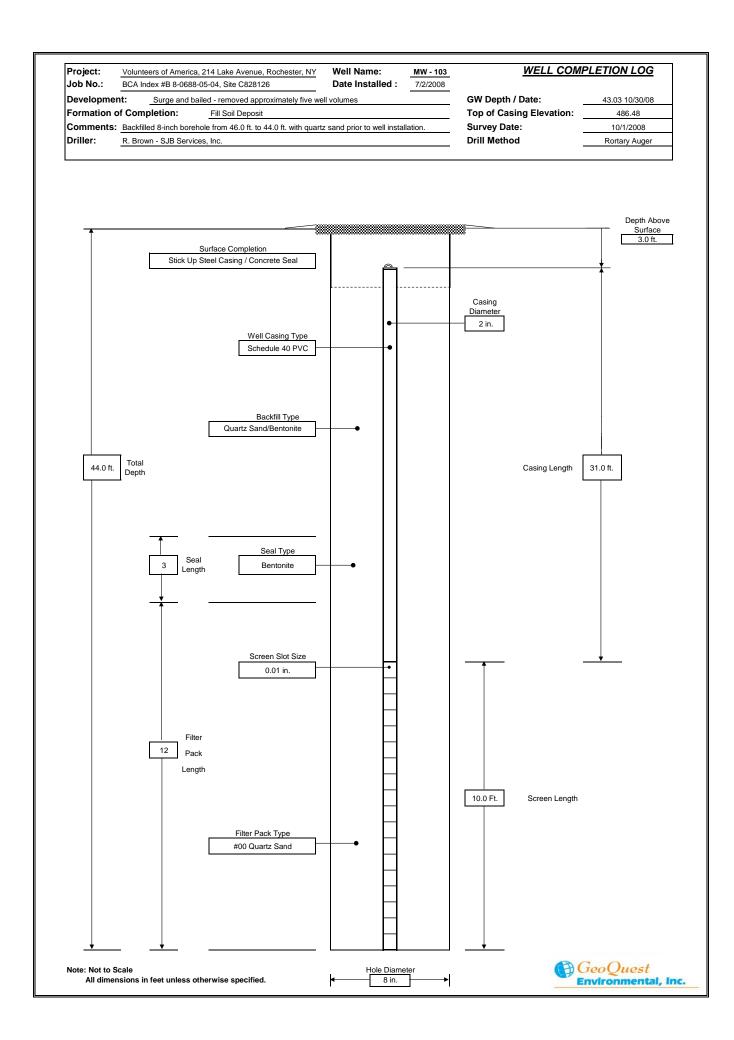
	Be architects // er	rgineers // pla	iates anners			E	nviro	nme	enta	I I est	Pit Log		TP- 135
Proj	ect:	Suppler	nental Inve	estigation 2	214 Lake Avenu	ie Eastern F	Portion Parce	el A and Pa	arcel B - Si	e #C828126	_	File No:	8726.02
Clie	nt:	V	/olunteers	of Americ	a of Western Ne	ew York					_	Sheet No:	1 of 1
Con	tractor	SJB Ser	vices, Inc								_	Location:	See Plan
lt.			D = = 1 = =	Dri	ive Sempler		O D				ant and Drass dama	Flavation	400.5
lten /pe:	1	(Casing NA	Di	ve Sampler NA		Core Barrel NA		Excavator		ent and Procedures	Elevation: Datum:	482.5 NGVD
side Diamet	⊃r (IN)·		NA		NA		NA		Reach:	22 feet		Start:	10/26/2010
emmer Weig			NA		NA		NA		Bucket:	36 inch.		Finish	10/26/2010
ammer Fall (NA		NA		NA		Other:		t pits to approximately		· · · · · · · · · · · · · · · · · · ·
ther:			NA		NA		NA			20 ft. and bac	kfill to ground surface	Operator:	R. Steiner
D (1		<u> </u>	<u> </u>			0						Bergmann Rep:	M. Carpenter
Depth (FT)	Samp Depth		Sample Per 6		Head Space (PPM)	Sample and Re		Strata Change			Visual Class	sification and Remarks	;
0								1	G	ray Gravel, some	coarse to fine sand, o	damp UPPER FILL-	
					ND								
2									B	ack COAL	- U	IPPER FILL -	
4					ND			4					
								5	Y	ellow orange coa	rse to fine SAND, dam	np UPPER FILL	
6					ND				В	ack to gray CIND	ERS and SLAG, with	ash black and brown fuse	d materials, damp.
8												- UPPER FILL -	
10					ND	No sa	Imple		S	AME.		- UPPER FILL -	
12													
14									В	ack to gray CIND	ERS and SLAG, with	ash black and brown fuse	d materials, damp.
16					ND				S	AME, with some b	olack stain colored		
18					ND							wooden board damp U approximately 20 feet.	PPER FILL-
20													
									B	ottom of test pit a	t approximately 20 fee	et. Backfilled to ground sur	face.
				Groundwat	er Data					Summary			
Date	Time	Elapseo (HF	d Time B	ottom Of Casing	Bottom Of	Depth Hole	Wat		1	en (Lin FT) ed (Lin FT)	20.0 NA	Berg	associates eers // planners
10/26/2010	NA	NA		NA	20.0 f			C					

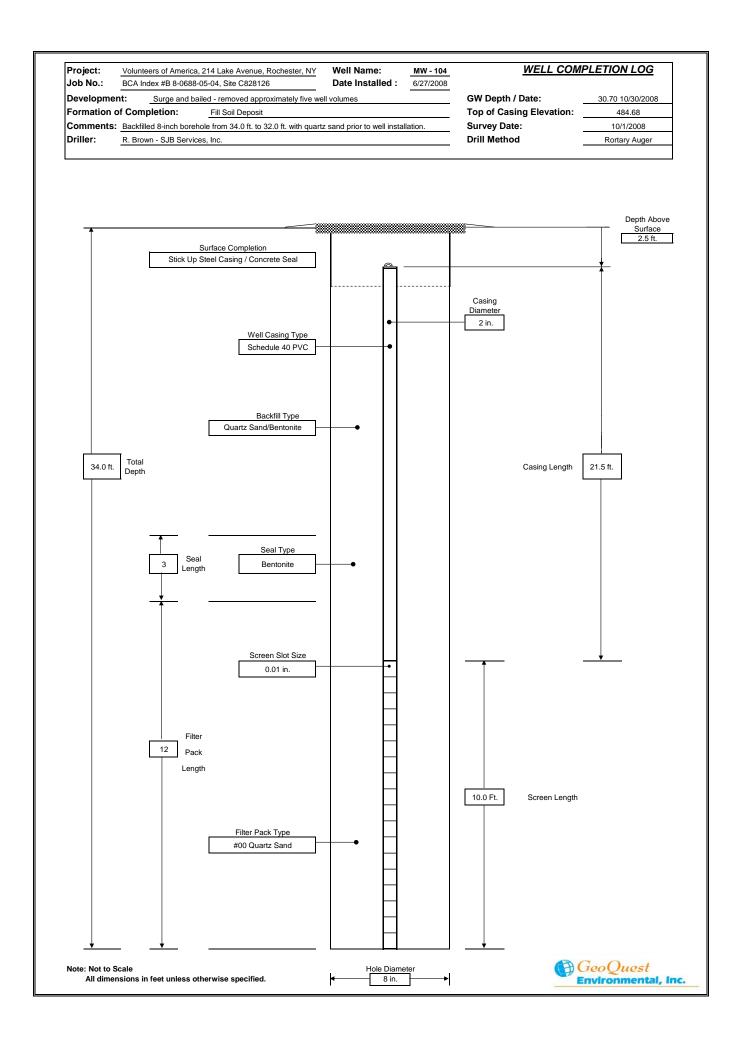
architects // engineers // planners					Environmental Test Pit Log						
Project: Client:		Supplemental Investigation 214 Lake Avenue Eastern Portion Parcel A and Parcel B - Site #C828126									8726.02
		Volunteers of America of Western New York								Sheet No:	1 of 1
Con	tractor	SJB Se	rvices, Inc.							Location:	See Plan
Item		Casing Drive Samp		ive Sampler	bler Core Barrel			Excavation Equipment and Procedures	Elevation:	481.5	
ype:			NA	NA		NA		Excava		Datum:	NGVD
nside Diameter (IN):			NA		NA	NA		Reach	: 22 feet	Start:	10/26/2010
emmer Weight (LB):			NA		NA	NA		Bucket	:: 36 inch.	Finish	10/26/2010
ammer Fall ((IN):		NA		NA	NA	<u>L</u>	Other:	Excavate test pits to approximate	ely	<u></u>
ther:			NA		NA	NA	L .		20 ft. and backfill to ground surfa		R. Steiner
Depth	Samp	ole	Sampler	Blows	Head Space	Sample Numb	er Str	ata		Bergmann Rep	
(FT)	Depth	(FT)	Per 6 Ir	nchs	(PPM)	and Recovery	/ Chang	ge (FT)	Visual Cla	ssification and Remark	S
0									Gray Gravel, some coarse to fine sand	l, damp UPPER FILL-	
					ND			1			
					ND						
									Black coal.		
2									-	UPPER FILL -	
					ND		3	.5	<u> </u>		
4									Yellow orange coarse to fine SAND, da	amp UPPER FILL	
								5			
								0			
6					ND						
									Black to gray CINDERS and SLAG, wi	th ash black, orange and br	rown fused materials, d
									Black to gray on the Erto and OE to, wi	an don black, ordinge and br	own hood matchaid, a
8										- UPPER FILL	-
10						No sample	10	0.0			
					ND				SAME.		
					ND				SAME.	- UPPER FILL -	
10											
12											
14									Black to gray CINDERS and SLAG, wi	th ash black and brown fuse	ed materials, damp.
16					ND						
					ND						
18					ND				SAME.	- UPPER FILL-	
									Some black staining on soils with no o	dors noted.	
20											
									Bottom of test pit at approximately 20 t	ieet. Backfilled to ground su	irface.
	<u>. </u>	1	G	iroundwat	er Data		1		Summary		
		· · · · · · · · · · · · · · · · · · ·			l	Overbu		urden (Lin FT) 20.0	D Barr	R Bergmann	
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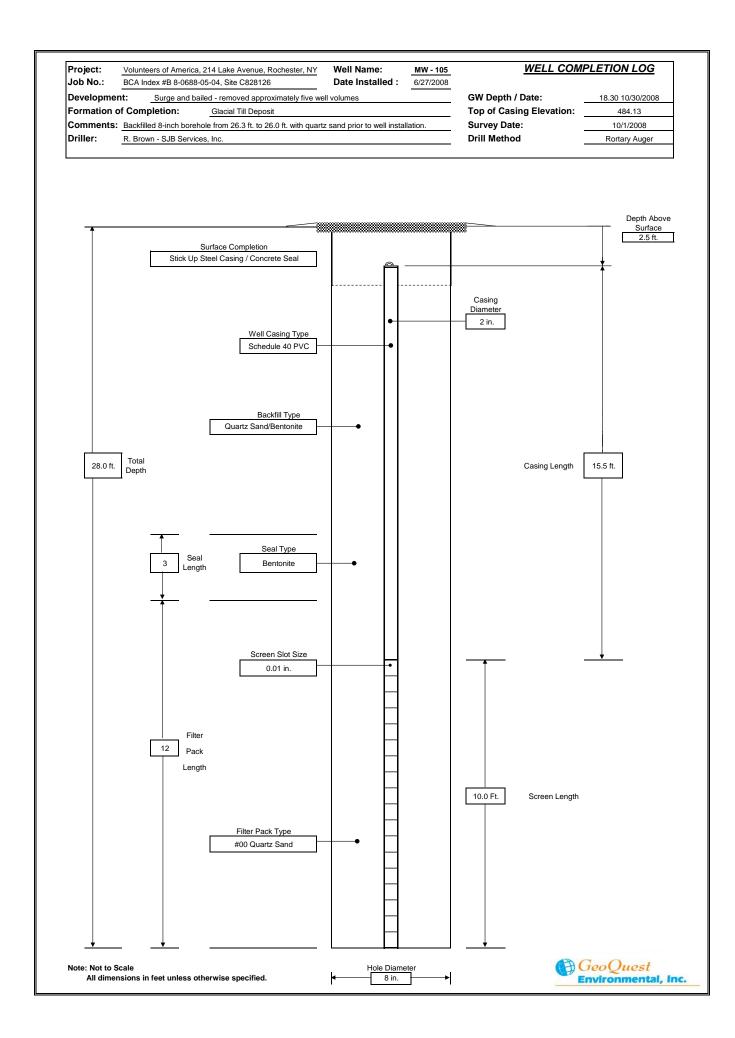
Appendix C

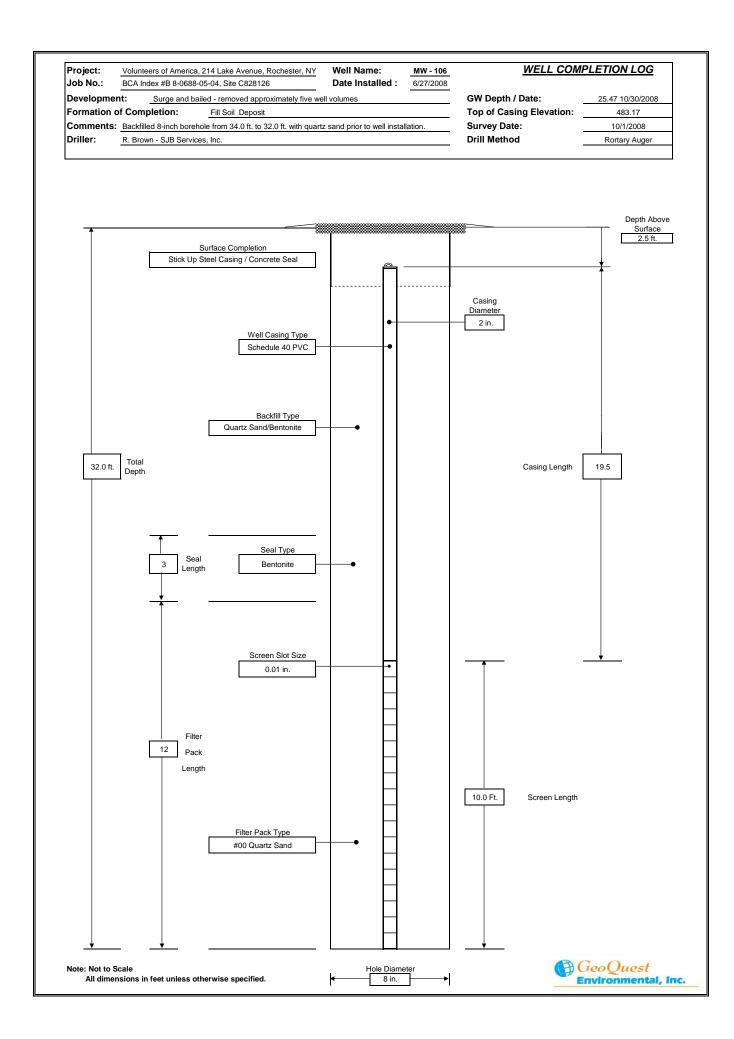


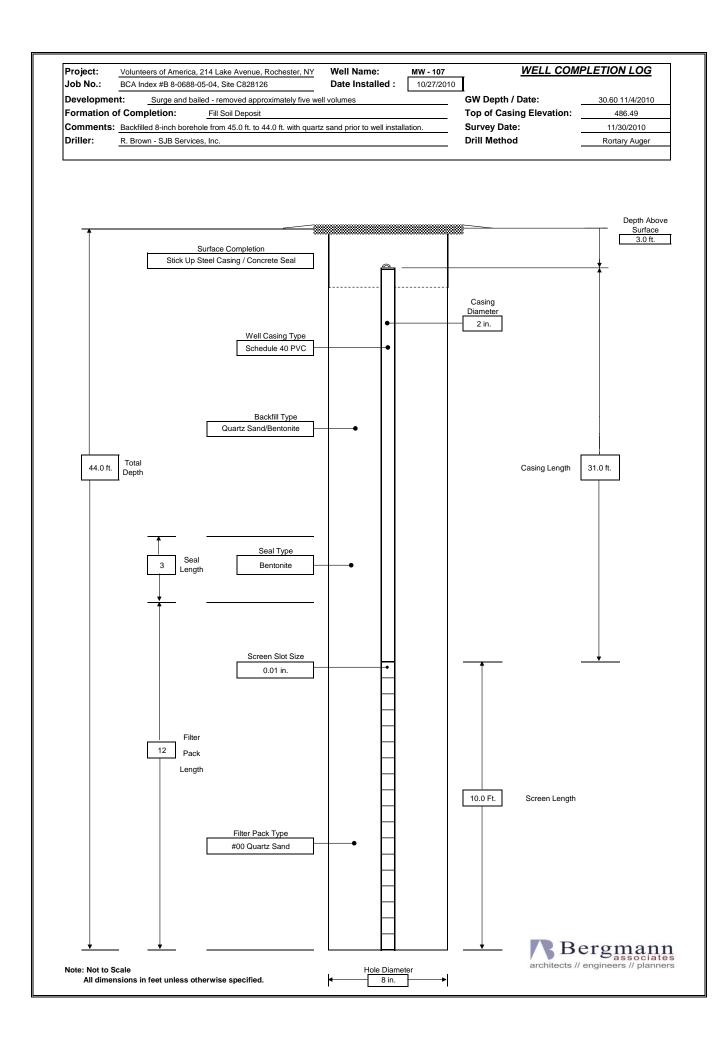


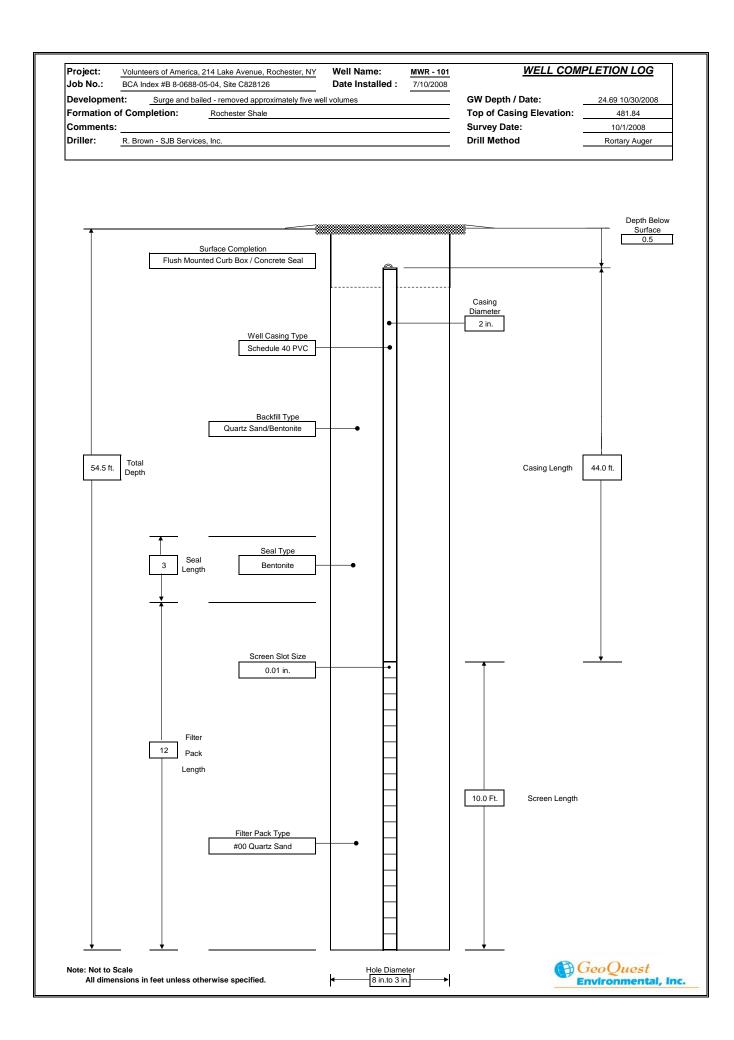


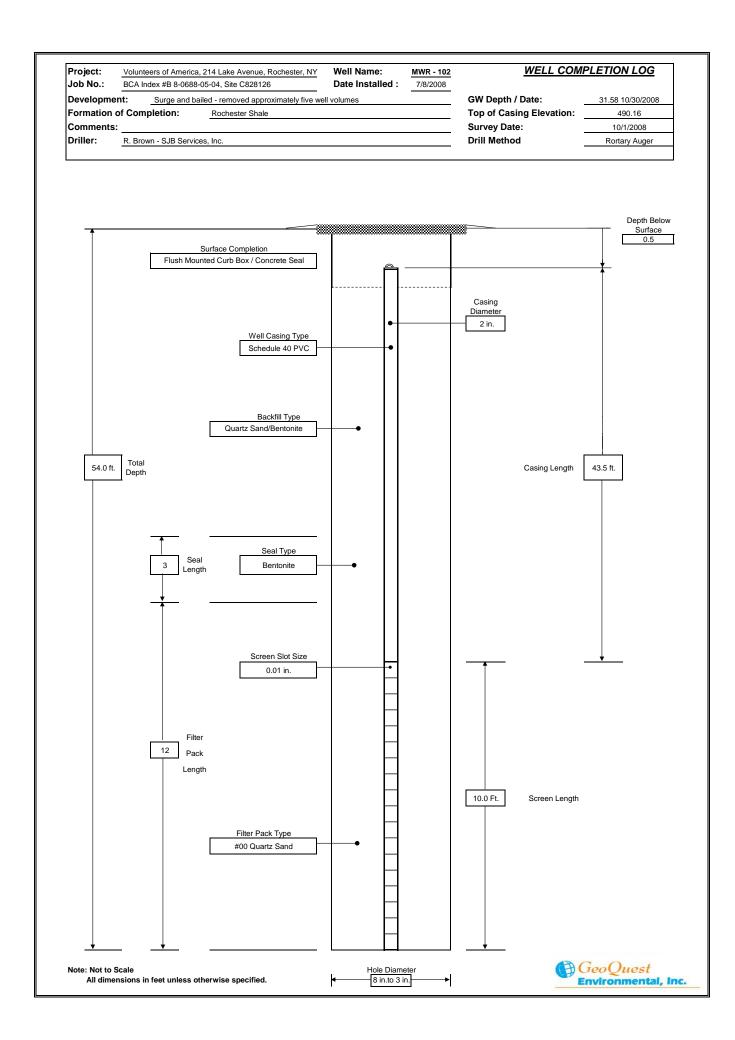












Appendix D



July 31, 2007

Steve DeMeo GeoQuest Environmental Inc 43 Legionnaire Dr Rochester, NY 14617-2411

Transmitted via email to sjd@geoquestenvironmental.com

Dear Mr. DeMeo:

Subject: Geophysical Survey Results, 214 Lake Ave, Rochester, NY

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for GeoQuest Environmental, Inc. in support of their environmental investigation of a property located at 214 Lake Avenue in Rochester, NY (the Site).

The geophysical investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation. The information provided herein is intended to assist GeoQuest with their assessment of potential environmental concerns at the Site. The specific objective of the investigation was to provide a general geophysical characterization of the site. Geomatrix Consultants, Inc. (Geomatrix) performed data acquisition on July 24, 2007. Geomatrix used both time and frequency domain geophysical tools (EM61 and EM31) to characterize the property.

The survey area is located behind the Volunteers of America building on Lake Ave. The area consists of an asphalt paved lot and a grassy field. Portions of the field were overgrown with tall weeds. Also included was a fenced in area to the south of the main survey area, that was previously used to store boats.

METHODOLOGY

The following sections present the geophysical methodology utilized for this investigation.

2.1 Reference Grid

The EM31 survey utilized a differential GPS system and the line spacing was approximately 10 ft. The paved portion of the survey area was also investigated with the EM61. A reference grid

was installed by Geomatrix personnel to facilitate data acquisition along lines spaced 3 feet apart for the EM61. The EM61 survey was performed using a local coordinate system established for the site. Coordinates for the EM61 survey were spray painted on the ground.

2.2 Electromagnetic EM31 Survey Methodology

A Geonics EM31 Terrain Conductivity meter was used to measure and record the quadrature component (ground conductivity) and the inphase component of the EM field along the survey lines. The quadrature component of the EM field is a measurement of the apparent ground conductivity. The inphase component of the EM field is sensitive to metallic objects. Comparison of the quadrature component of the EM field data (expressed in units of milliSiemens per meter (mS/m)) and the inphase component data (expressed in units of parts per

thousand (ppt)results in increased anomaly definition. The character of the EM response, low or high, is partially dependent on the orientation of the buried target relative to the orientation of the EM31 device during data acquisition, and the survey direction. A buried metal pipe, for example, will exhibit a high valued response when the trend of the pipe is parallel to the survey direction. Alternatively, when a survey line crosses a

buried metal pipe whose trend is perpendicular to the survey direction, it is characterized by a



EM31 with GPS in use (photo not from this site)

low response. Similarly, other complex buried metal anomalies are indicated by a coupling of a high and low response.

All readings were taken with the instrument oriented parallel to the direction of travel, in the vertical dipole mode and with the instrument at waist height. The depth of penetration with the instrument in this configuration is approximately 12 to 15 feet below ground surface. Data were collected and stored in a solid state memory data logger during the survey. The data logger was

interfaced to a portable computer and the data were transferred to a floppy disk for subsequent processing and interpretation. A survey base station was established on-site and was revisited throughout the survey to check for instrument drift and malfunction. No significant drift or malfunction was observed.

The terrain conductivity and inphase data were initially edited and then plotted as profile lines for interpretation. Contour maps of the data were then constructed and utilized for final interpretation. The geophysical data are presented in final form as a series of color contour maps. The color maps allow for an illustration of detected anomalies that are associated with conductive materials such as buried metals, wastes, fill, utilities, and changes in soil texture and/or moisture content.

2.3 Electromagnetic EM61 Survey Methodology

The paved portion of the property was also geophysically surveyed using the Geonics EM61. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the

operator which is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse,



EM equipment in use (photo not from this site)

the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at each station location. The instrument responses are recorded in units of milliVolts (mV). Data were recorded digitally by a data logger at a rate of approximately 2 measurements per foot along the survey lines which were spaced 3 feet apart.

3.0 RESULTS

The following sections present the results from the geophysical investigation.

The geophysical data from the EM31 and EM61 surveys are presented as color contour maps in Figures 1, 2 and 4. During the collection of the EM31 data a differential GPS was used for positioning. This unit also recorded elevation. Although the accuracy of the elevation determined from DGPS is less accurate than location, the data was plotted in order to spatially represent the soil mounds present in the field. It is important to note that this elevation data is approximate but nevertheless useful for locating the soil piles. The elevation data is shown in Figure 3. A contour line chosen at elevation 482 feet is shown on Figures 1 and 2 to represent the approximate location of the soil piles.

3.1 EM31 Results

EM31 data for the site is shown in Figures 1 and 2. Conductivity values at the site were observed to range from 0 mS/m to over 100 mS/m. This variation in conductivity may be related to any one or combination of the following conditions:

- A change in soil/fill type. For example, an increase in relative clay content may increase the measured conductivity and variations in fill type will cause associated anomalies;
- A change in soil moisture. Moisture content would be expected to increase in areas of low topographic elevation as more saturated sediments lie within the depth of investigation of the EM instrument;

- A change in pore fluid specific conductance. For example, the presence of salt-impacted water within the pore space of the shallow soil will increase the measured conductivity primarily due to the presence of chloride ions; or
- Interference from surface metallic anthropogenic features such as powerlines, fences, pipes, reinforced concrete and other metallic structures.

Seven anomalous areas are identified from the EM31 data and are labeled A through G on the figures. **Anomalies A, B and E** are large conductivity and inphase highs shown in shades of dark red on Figures 1 and 2. These anomalies likely are related to conductive fill material. Anomaly A is partially located beneath the paved parking area. **Anomalies F and G** are likely related to buried railroad lines (F) and utilities (G). **Anomaly C** is a located largely within the fenced in former boat yard and may be related to surface debris and/or subsurface material. **Anomaly D** is a zone of buried metals on the east slope of the mounded areas. The character of the response at Anomaly D is suggestive of buried metals.

3.2 EM61 Results

The EM61 data for the site are shown in Figure 4. The color bar to the right of the map indicates the colors associated with the respective measured values. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 40 mVolts) likely contain buried metals. These areas are depicted in shades of dark blue through yellow on the figure.

Most of the anomalies identified with the EM61 correspond with known surface and subsurface features. There were no anomalies identified on the EM61 data set that are interpreted to be significant relative to the objectives of this investigation.

4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for nondestructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (electrical wires, scrap metal, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies

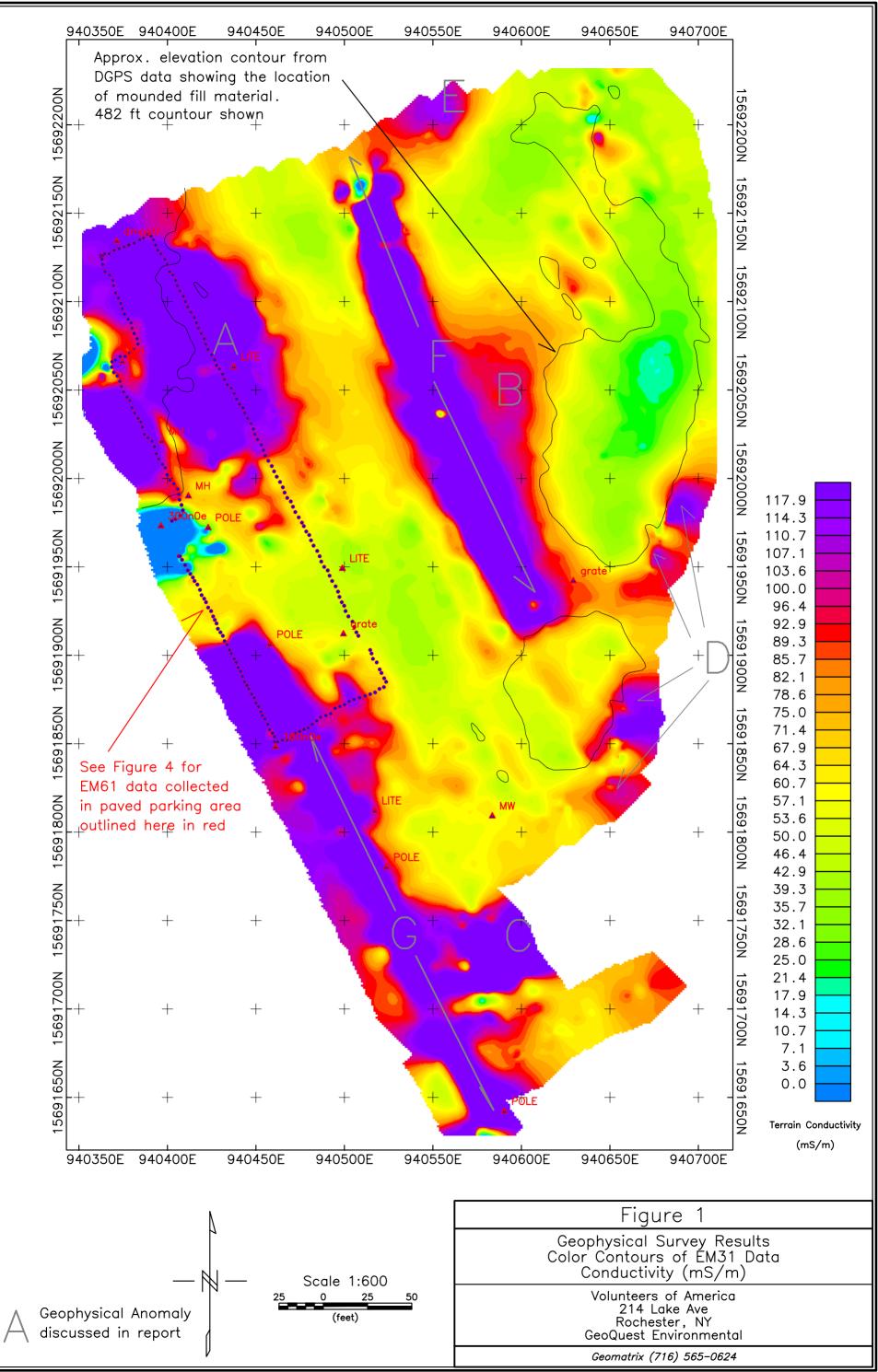
identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

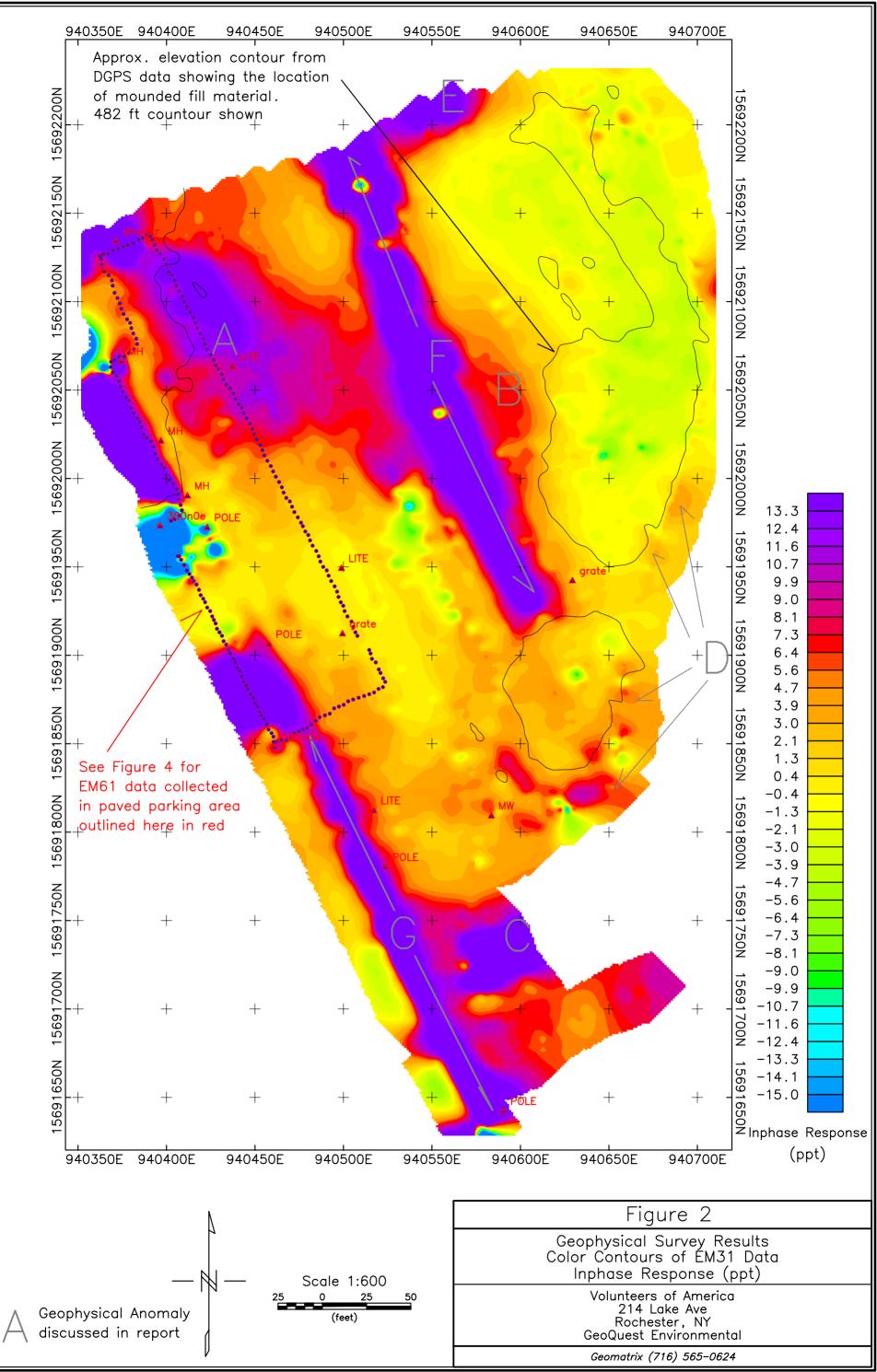
Please do not hesitate to contact us if you have any questions or require additional information.

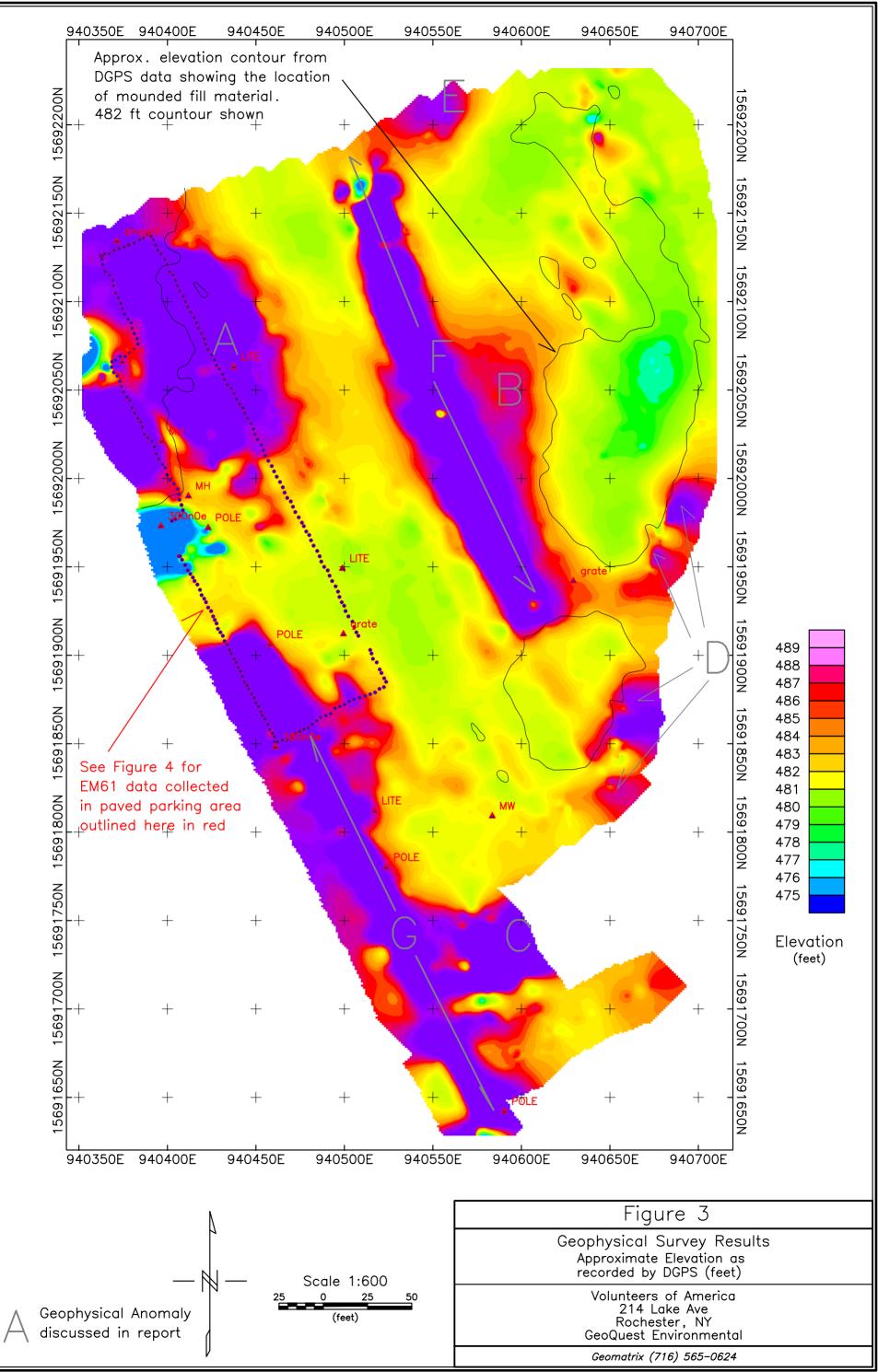
Sincerely yours,

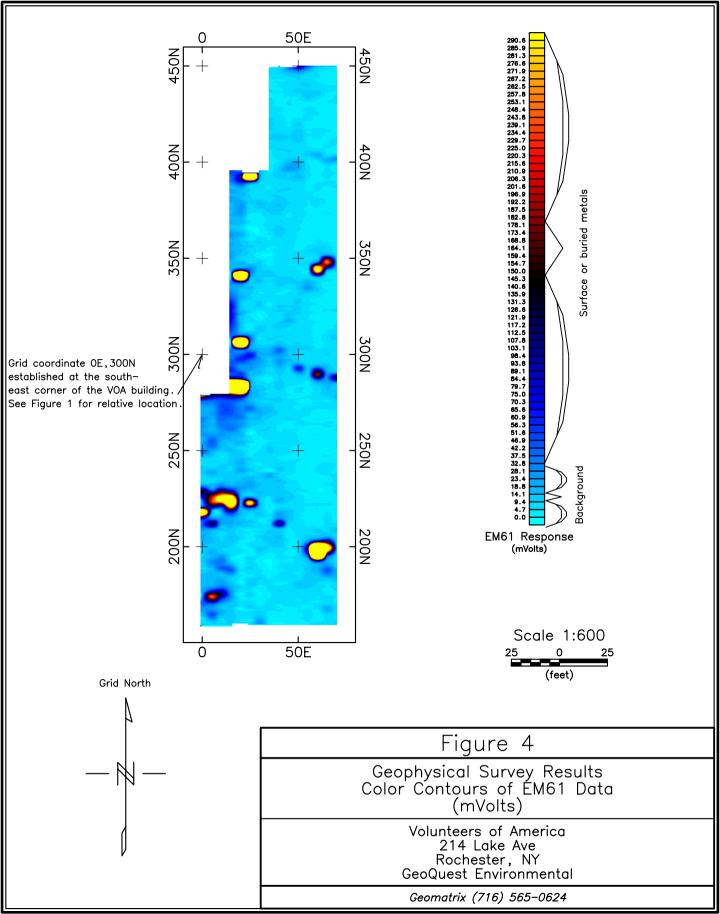
John Juttinga

John Luttinger Senior Geophysicist









Appendix E





WWW.PARADIGMENV.COM

179 Lake Avenue, Rochester, NY 14608 PHONE: 585-647-2530 TOLL FREE: 800-724-1997

997 FAX: 585-647-3311

DATA USABILITY SUMMARY REPORT

Volunteers of America Soil-Water Testing Testing Performed by: COLUMBIA ANALYTICAL SERVICES

This report is a review of the testing performed by Columbia Analytical Services for the soil and water samples submitted by GeoQuest Environmental, Inc. for the Volunteers of America site. A total of thirty-seven samples were submitted for testing. Samples were submitted on various dates between November of 2007 and February of 2009 under the following job numbers: R2740668, R2844756, R2844865, R2846908, and R0900889. Samples were submitted for Volatiles, Semi-volatiles, Pesticides/PCB's, Metals, Total Cyanide, % solids, pH, and a few samples were submitted for 8015-GRO and/or DRO. The samples were analyzed using ASP methods OLM and ILM-TCL and TAL lists, except the few for DRO and GRO which were analyzed using SW846 method 8015B.

INORGANICS

SDG #: TP102(10-10.5) Submission # R2740668

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all outliers correctly, except As on the serial dilution which appears to be outside limits at 17.1 %. All As data should be flagged with an "E" and considered estimated. All other outliers appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted.

All initial and continuing calibration verifications were acceptable.

There are low level, "B" flagged hits for Sb, As, Cd, Cr, Hg, Ni, and Tl dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks. These do not appear to impact the data. K is also present at a higher level (122). All K results in the samples should be considered estimated.

All hits between the IDL and CRDL are flagged with a "B" accordingly.

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

SDG #: 1113319 Submission #: R2844756

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all outliers correctly. These appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted.

All initial and continuing calibration verifications that apply to this SDG are acceptable.

There are low level hits for Sb, Ba, Be, Cd, Cr, Mn, and Tl dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks.

All hits between the IDL and CRDL are flagged with a "B" accordingly.

All elements for the CRQL standard are within acceptable limits.

There are no concerns with the data from this SDG for inorganics.

SDG #: MW102(22.0-22.5FT) Submission #: R2844865

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt was not compliant at 8°C but analysis was allowed to proceed per the client.

The SDG Narrative addresses all outliers correctly. These appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted. Ca and Fe results are flagged with an "E" due to serial dilution QC outliers and should be considered estimated.

All initial and continuing calibration verifications that apply to this SDG are acceptable.

There are low level hits for Sb, As, Be, Cd, Cr, Cu, Mg, Mn, Se, Ag, Tl, and Zn in the initial calibration, continuing calibration, and preparation blanks.

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

SDG #: VOAMW-101 Submission # R2846908

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all non-conformities correctly. No Qualifier flags were necessary on this SDG.

All initial and continuing calibration verifications were acceptable.

There are low level hits for Cr, Cu, Mg, Mn, Ni, Se, Zn, and K dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks.

All hits between the IDL and CRDL are flagged with a "B" accordingly.

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

SDG #: BXCA Index Submission # R0900889

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all non-conformities correctly with two exceptions. Most significantly, the chain of custody lists the metal's list required as TAL. However, the Laboratory only reported a PPL list (13 metals rather than 23 metals) on the Form 1's. It appears from the raw data that all metals were analyzed for but not reviewed and reported. There is no indication on the chain of custody, sample receipt log, sample inventory sheet, or case narrative as to why the full list was not reported. This appears to be a Laboratory error. Second, Ni and Zn are mentioned in the case narrative and shown on the serial dilution's page as being flagged with an "E" due to being outside QC limits. Further examination on the Ni result shows that the QC limits is in for this analyte. The Form 1's are correctly flagged to show only Zn results as "E" flagged and these results should be considered estimated.

All initial and continuing calibration verifications were acceptable.

There are low level hits for all metals except Hg and Se dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks.

All hits between the IDL and CRDL are flagged with a "B" accordingly.

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

VOLATILES

SDG #: TP102(10-10.5) Submission # R2740668

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. The method blank ID is incorrectly labeled and should be labeled as 11/8/07. Acetone is present at a low level in the blank and sample results are flagged accordingly and should be considered estimated if the sample result is less than 5x's the blank level.

All data for the initial calibration is complete, including raw data and quantitation reports.

All continuing calibration data is present, including raw data and quantitation reports. All are within acceptable limits, except 2 compounds that were not called out in the Case Narrative but are an allowable deviation and have no impact on the data.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

There are no other concerns with the data from this SDG for volatiles.

SDG #: 1113319 Submission # R2844756

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

All data for the initial calibration is complete, including raw data and quantitation reports.

All continuing calibration data is present, including raw data and quantitation reports and are within acceptable limits.

The sample data is complete, with all associated raw spectra and quantitation reports, except the following: target hits and TICs could not be verified for sample MW101(22-23) without copies of the full graphics, sample MW-105(26.0-26.3) had 1,1,2-Trichloroethane reported at 0.63J and due to insufficient spectral match, this analyte should be reported as 10U ug/Kg. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately. There are no other concerns with the data from this SDG for volatiles.

SDG #: MW102(22.0-22.5FT) Submission # R2844865

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. Acetone is present at a low level in the method blank and sample results are flagged accordingly. As the sample's result is greater than 5x's the blank level, this is a non-issue.

All data for the initial calibration is complete, including raw data and quantitation reports.

All continuing calibration data is present, including raw data and quantitation reports and are within acceptable limits.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

SDG #: VOAMW-101 Submission # R2846908

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. Acetone is present at a low level in the method blank and sample results are flagged accordingly and should be considered estimated if the sample result is less than 5x's the blank level.

All data for the initial calibration is complete, including raw data and quantitation reports.

All continuing calibration data is present, including raw data and quantitation reports. All are within acceptable limits, except 1 compound that was not called out in the Case Narrative but is an allowable deviation and has no impact on the data.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately. Sample VOAMW-102 has Cyclohexane and Methylcyclohexane reported on the Form 1 but no spectra are provided so these results could not be verified.

There are no other concerns with the data from this SDG for volatiles.

SDG #: BXCA Index Submission # R0900889

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

All data for the initial calibration is complete, including raw data and quantitation reports.

All continuing calibration data is present, including raw data and quantitation reports and are within acceptable limits.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

There are no concerns with the data from this SDG for volatiles.

SEMI-VOLATILES

SDG #: TP102(10-10.5) Submission # R2740668

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly with the following exception: the narrative states that "several" samples had elevated detection limits due to the lack of available GPC when, in fact, a GPC was not performed on any of the samples. Data usability is not impacted other than having elevated detection limits.

The method blanks are free from contamination. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. Sample 104(17-17.5) had Benzo(k)fluoranthene reported at 1500J. There is no discernable ion peak and this compound should be reported as 6800U ug/Kg. TICs were required and reported with "J" and "N" flags appropriately. Numerous TIC's were reported as specific compounds based on the library searches. In most cases, there are several other potential ID's of similar match so these compounds should be treated as unknowns.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits. All raw QC data is included. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

SDG #: 1113319 Submission # R2844756

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

The method blanks are free from contamination, except some low level TIC hits which have been flagged accordingly on the TIC reports. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. Sample MW-103(20-22.0) is incorrectly listed on the Form 1 with a dilution factor of 1.0, when, in fact, the dilution is 50.0. The reporting limits and calculations are correct. TICs were required and reported with "J" and "N" flags appropriately.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits, except Pentachlorophenol for the CC from 07/15/08. It was out high at 29% and although this analyte was not present in any of the associated samples, the reporting limit should be considered estimated.

All raw QC data is included. Samples went through a GPC clean-up. GPC data was included. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

SDG #: MW102(22.0-22.5FT) Submission # R2844865

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

The method blanks are free from contamination, except some low level TIC hits which have been flagged accordingly on the TIC reports. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits, except Pentachlorophenol for the CC from 07/15/08. It was out high at 29% and although this analyte was not present in the sample, the reporting limit should be considered estimated.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

SDG #: VOAMW-101 Submission # R2846908

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

The method blanks are free from contamination, except low level hits of Bis(2ethylhexyl)phthalate, Di-n-butyl Phthalate and an unknown TIC which have been flagged accordingly on the reports. These compounds should be considered estimated if the sample result is less than 5x's the blank level. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. VOAMW-106 was analyzed and reported at a dilution of 2.0, thus having elevated detection limits. Upon examination of all included data, no explanation can be found and none is given in the Case Narrative. Laboratory error is assumed. TICs were required and reported with "J" and "N" flags appropriately.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

SDG #: BXCA Index Submission # R0900889

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

The method blanks are free from contamination. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits, except 2,4-Dinitrophenol for the CC from 03/06/09 and from 03/09/09. It was out high at 29.7% and 27%. Results and the reporting limit for this analyte should be considered estimated.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

PESTICIDES

SDG #: TP102(10-10.5) Submission #: R2740668

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly with the following two exceptions. First, the narrative states that "several" samples had elevated detection limits due to the lack of available GPC when, in fact, a GPC was not performed on any of the samples. Data usability in this instance is not impacted other than having elevated detection limits. Second, the narrative neglects to point out exceedances in the PEM05 and INDAM04 standards from 12/09/07 for DDT and Methoxychlor, % RPD and breakdown. The data for these analytes for the following samples should be considered estimated: TP102(10-10.5), TP103(16.0-16.5), TP104(17-17.5), TP121 Soil Pile, TP123 Soil Pile, TP124 Soil Pile, TP122 Soil Pile (plus MS and MSD), TP125 Soil Pile, and TP126 Soil Pile.

Samples whose surrogate recoveries for DCB were outside limits have a potential bias.

The method blanks and instrument blanks are all free from contamination.

The sample data is complete, with all associated chromatograms and quantitation reports. The following samples/compounds have been incorrectly reported on the Form 1's (the correct results are in parentheses): TP121 Soil Pile-gamma chlordane(1.2J), DDT(6.5); TP123 Soil Pile-gamma chlordane(1.5J); TP122 Soil Pile-alpha-BHC(0.85J), DDD(5.6P), Endrin Ketone(5.7P); and TP126 Soil Pile-gamma chlordane(1.7J)

Any analytes flagged with a "P" should be considered estimated.

All data for the initial calibration is complete, including raw data and quantitation reports with the following exception: A retention time summary was not provided for column CLP-2 so results from this column could not be verified. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

SDG #: 1113319 Submission #: R2844756

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly with the following exception: the narrative neglects to point out exceedances in the PEM07 and INDAM05 standards for %D for Endrin, DDT and DDD. The data for these analytes for the following samples should be considered estimated: MW104(30-32), MW103(20-22), and MW101(22-23).

Samples whose surrogate recoveries for DCB were outside limits have a potential bias.

The method blanks and instrument blanks are all free from contamination.

Because the GPC recovery check for all the pesticides was low, all pesticide data should be considered as estimated, with a low bias.

The sample data is complete, with all associated chromatograms and quantitation reports. Sample MW-103(20-22) has several pesticides incorrectly reported on the Form 1's (the correct results are in parentheses). These are DDD(6.1P), Endrin Aldehyde(7.4P), and Endrin Ketone(46.8P).

Any analytes flagged with a "P" should be considered estimated.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

SDG #: MW102(22.0-22.5FT) Submission #: R2844865

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly.

Samples whose surrogate recoveries for DCB were outside limits have a potential bias.

The method blanks and instrument blanks are all free from contamination.

Because the GPC recovery check for all the pesticides was low, all pesticide data should be considered as estimated, with a low bias.

The sample data is complete, with all associated chromatograms and quantitation reports.

Any analytes flagged with a "P" should be considered estimated.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

SDG #: VOAMW-101 Submission #: R2846908

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly with the following exception: the MS/MSD recoveries for sample VOAMW-102 are outside limits for Aldrin, Endrin, DDT, and Dieldrin and are most likely the result of matrix interference. Results and reporting limits for this sample should be considered estimated.

Samples whose surrogate recoveries for DCB were outside limits have a potential bias.

The method blanks and instrument blanks are all free from contamination.

The sample data is complete, with all associated chromatograms and quantitation reports. Any analytes flagged with a "P" should be considered estimated.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

SDG #: BXCA Index Submission #: R0900889

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly.

Samples whose surrogate recoveries for DCB were outside limits have a potential bias.

The method blanks and instrument blanks are all free from contamination.

The sample data is complete, with all associated chromatograms and quantitation reports.

The Form 10's that show compliance between the two columns are not reported correctly in this SDG. All results and %D boxes are reported with "0". There should be values in these boxes. Upon examination of the raw data, it was surmised that any possible outliers do not impact the data.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. The samples went through a GPC clean-up. GPC data was included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

8015B-DRO and/or GRO

SDG #: TP102(10-10.5) Submission # R2740668

All preservation and holding times are met.

The SDG Narrative addresses the lack of outliers correctly.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports.

The sample data is complete, with all associated raw spectra and quantitation reports. There are no other concerns with the data from this SDG for 8015B-DRO.

SDG #: 1113319 Submission # R2844756

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports.

The sample data is complete, with all associated raw spectra and quantitation reports. There are no other concerns with the data from this SDG for 8015B-DRO and GRO.

(date) 7 10/2007 (date) 09/10/2009 (signed) Technical Director

1/ latur M ulli____Environmental Data Manager (signed) <





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DATA USABILITY SUMMARY REPORT

Volunteers of America Soil-Water Testing Testing Performed by: Columbia Analytical Services, Inc. and Adirondack Environmental Services, Inc.

This report is a review of the testing performed by Columbia Analytical Services, Inc. and Adirondack Environmental Services, inc. for the soil and water samples submitted by GeoQuest Environmental, Inc. for the Volunteers of America site. A total of nineteen samples were submitted for testing. Samples were submitted on July 28, 2009 and August 6, 2009 under the job numbers R20904170 and R0904398. Samples were submitted for Volatiles, Semi-volatiles, Pesticides/PCB's, Metals, Total Cyanide, % solids, and pH as outlined on the Chains of Custody. The samples were analyzed using ASP methods OLM and ILM-TCL and TAL lists.

INORGANICS

SDG #: VOAMW-101 Submission # R0904170

The chain of custody is complete. All preservation and holding times are met. The cooler temperatures at receipt are acceptable, except sample MW-104 which was at 10°C.

The SDG Narrative addresses all outliers correctly. These appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted. Ni results are flagged with an "E" due to serial dilution QC outliers and should be considered estimated.

All initial and continuing calibration verifications were acceptable.

There are low level, "B" flagged hits for Sb, As, Ba, Be, Ca, Cu, Mg, Mn, Ni, Na, V, Zn, and Pb dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks. These do not appear to impact the data. K is also present at a higher level (122). All K results in the samples should be considered estimated.

All hits between the IDL and CRDL are flagged with a "B".

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

SDG #: VOABIOCELL 101 Submission # R0904398

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all outliers correctly. These appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted. Fe results are flagged with an "E" due to serial dilution QC outliers and should be considered estimated.

All initial and continuing calibration verifications were acceptable.

There are low level, "J" flagged hits for all metals dispersed in the initial calibration blank, continuing calibration blanks, and preparation blanks, except the following: Al, Ca, Co, Cu, Na, and Zn. These do not appear to impact the data.

All hits between the IDL and CRDL are flagged with a "J".

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

VOLATILES

SDG #: VOAMW-101 Submission # R0904170

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. The Cooler Blank and Trip Blank have a low level "J" flagged hit of 2 for Acetone. The samples also have low level "J" flagged hits from 1 to 4 for Acetone. The Method Blank, however, is Non-Detect for this compound.

The method blank is free from contamination. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

All data for the initial calibration is complete, including raw data and quantitation reports. The run log for the initial calibration was not present in the report so could not be checked against the forms.

All continuing calibration data is present, including raw data and quantitation reports. All are within acceptable limits. The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

There are no other concerns with the data from this SDG for volatiles.

SEMI-VOLATILES

SDG #: VOAMW-101 Submission # R0904170

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. The MDL study is not present in the report so cannot be used as a reference.

The method blanks are free from contamination. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All semi-volatiles data for this SDG appears acceptable and complete.

SDG #: VOABIOCELL 101 Submission # R0904398

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. The MDL study is not present in the report so cannot be used as a reference.

The method blanks are free from contamination. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and PQL are "J" flagged. There appear to be low level, "J" flaggable hits for Dimethylphthalate in several samples and the Method Blank that were not reported. Without the MDL study, this question cannot be resolved. In addition, the Quantitation reports are not marked to indicate which results are being reported, so these offer no resolution either.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All semi-volatiles data for this SDG appears acceptable and complete except where outlined above.

PESTICIDES/PCBs

SDG #: VOAMW-101 Submission #: R0904170

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly.

The method blanks and instrument blanks are all free from contamination.

The sample data is complete, with all associated chromatograms and quantitation reports.

Heptachlor is flagged with a "P" and should be considered estimated in samples VOAMW-101MS, VOAMW101MSD, and PEMSB01.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

SDG #: VOABIOCELL 101 Submission #: R0904398

All holding time and preservation requirements are within acceptable guidelines.

The SDG Narrative addresses all outliers correctly.

The method blanks and instrument blanks are all free from contamination.

The sample data is complete, with all associated chromatograms and quantitation reports.

Endrin Aldehyde is flagged with a "P" and should be considered estimated in sample VOABIOCELL 101. All spiked compounds in the MS, MSD, and LCS (except gamma-BHC in the LCS) are flagged with a "P" and should be considered as estimates.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports, and within acceptable limits.

All raw QC data is included. All Pesticide and PCB data for this SDG appears acceptable and complete except where noted above.

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(signed)	junity	Technical Director	(date)	10/5/204

Valentino M/hell Environmental Data Manager (date) 10/5/09 (signed)





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DATA USABILITY SUMMARY REPORT

Volunteers of America Soil-Water Testing Testing Performed by: COLUMBIA ANALYTICAL SERVICES

This report is a review of the testing performed by Columbia Analytical Services for the soil and water samples submitted by Bergmann Associates for the Volunteers of America site. A total of nine samples were submitted for testing. Samples were submitted on October 26th and 28th and November 5th of 2010. Samples were assigned the following job numbers: R1005989 and R1006192. Samples were submitted for Volatiles, Semi-volatiles, Metals, and % solids, and one sample was submitted for 8015-DRO. The samples were analyzed using SW846 methods for the TCL and TAL lists.

INORGANICS

SDG #: VOAMW7 Submission # R1006192

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all outliers correctly.

All initial and continuing calibration verifications were acceptable.

The initial calibration blanks, continuing calibration blanks, and preparation blanks are all below the required reporting limits for all analytes.

All elements for the CRQL standard are within acceptable limits.

There are no concerns with the data from this SDG.

SDG #: TP-127 Submission #: R1005989

The chain of custody is complete. All preservation and holding times are met. The cooler temperature at receipt is acceptable.

The SDG Narrative addresses all outliers correctly with one minor exception. Calcium was omitted from the not applicable list for the Matrix Spike Recovery. This result was also greater than four times the amount added as spike. Also, there was an entry error on

the QC forms for Mercury. The result should have been 0.111 mg/Kg rather than 0.001 mg/Kg. The original sample report is correct. The Mercury QC outliers are still outside limits. All outliers appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be impacted. The Magnesium and Manganese may be biased low, while the Mercury, Lead and Sodium may be biased high. These appear to be matrix related so only the actual sample used for Duplicate and Matrix Spike analysis may be biased high.

All initial and continuing calibration verifications that apply to this SDG are acceptable.

The initial calibration blanks, continuing calibration blanks, and preparation blanks are all below the required reporting limits for all analytes.

All elements for the CRQL standard are within acceptable limits.

There are no other concerns with the data from this SDG for inorganics.

VOLATILES

SDG #: TP-127 Submission # R1005989

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly. The Acetone results in samples TP-131 and TP-133 are acceptable as outlined in the Case Narrative. The Method Blanks are free from contamination, the instrument tunes pass all criteria, and the internal standards all show acceptable area and retention times.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports. All are within acceptable limits, except as mentioned in the Case Narrative. Although there were hits for Acetone in the samples associated with the non-compliant ICAL, the Case Narrative was correct in further outlining that the results were acceptable. Results for all other outlying compounds from the CCVs are deemed acceptable as they were Non-detect in the samples.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and MRL are "J" flagged. TICs were required and reported with "J" and "N" flags appropriately.

It should be noted that the sample reports and Case Narrative indicated method 8260C, but the raw data indicated method 8260B. The 8260C guidelines were used to review this data.

There are no other concerns with the data from this SDG for volatiles.

SEMI-VOLATILES

SDG #: TP-127 Submission # R1005989

All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly with the following exceptions. For the LCS/LCSD extracted 11/3, Benzo(a)anthracene was an outlier thus the result for this compound in sample TP-128 should be considered as estimated with a high bias. Also, for the LCS/LCSD extracted 11/10, numerous compounds were out. Thus, for sample TP-133Rep. (analyzed 11/12) the following is suggested: the result for Benzo(a)anthracene should be estimated biased high, the result for Benzo(b)fluoranthene should be estimated biased low, and the reporting limits for 2,4-Dinitrophenol, 2,2-Oxybis(1-Chloropropane) and Bis(2-Chloroethyl)ether should be considered estimated.

The method blanks are free from contamination, except an unknown TIC at RT 13.86 that was not present in the associated sample so is not an issue. The instrument tunes pass all criteria. The internal standards all show acceptable areas and retention times.

The sample data is complete, with all associated raw spectra and quantitation reports. All hits between the MDL and MRL are "J" flagged. The QC limits for the surrogate Terphenyl-d14 on the report forms did not agree with the raw data and this surrogate appeared to be out high in locations TP-128, TP-134, and the Method Blank extracted 11/03 if one went by the raw data. The report forms were presumed correct for this review. For sample TP-133, that was re-extracted and re-analyzed, the second run date of 11/12/2010 appears to have more QC compliant results which are still comparable to the sample extracted on 11/03/2010 which had very low surrogate recoveries. Despite its being extracted one day outside holding time, it is suggested that the 11/12/2010 date analyzed results be used for site assessment purposes. Both sets of results should be considered as estimates, however.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports. All are within acceptable limits, except as mentioned in the Case Narrative. Results for all outlying compounds can be considered usable as they are all Non-Detect in the samples.

All raw QC data is included. There is an entry error on the run log for the ICAL ID 82701026.M that does not impact data usability. The date on the run log should be 10/26/2010. All semi-volatiles data for this SDG appears acceptable and complete except where noted above.

8015B-DRO

SDG #: TP-127 Submission # R1005989 All preservation and holding times are met.

The SDG Narrative addresses all outliers correctly.

All data for the initial calibration is complete, including raw data and quantitation reports. All continuing calibration data is present, including raw data and quantitation reports.

The sample data is complete, with all associated raw spectra and quantitation reports. There are no concerns with the data from this SDG for 8015B-DRO.

Technical Director (signed)

 $(date) \frac{3}{30} \frac{30}{2011}$ $(date) \frac{0.3}{25} \frac{3}{2011}$

Valamin _Environmental Data Manager (signed)

Appendix F

Fish and Wild Life Assessment Volunteers of America 214 Lake Avenue Rochester, New York BCA Index #B 8-0688-05-04

Introduction

Environmental Science Group of Rochester, New York performed a Fish and Wildlife Impact Analysis (FWIA) as part of the of the Remedial Investigation (RI) report for the VOA site. As requested by the NYSDEC, the FWIA (Step I through Step I B) was performed in accordance with the *NYSDEC Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites* (October 1994) guidance document. NYSDEC typically recommends that Step I of the FWIA be prepared prior to and during the remedial investigation (RI) for planning purposes. Given that the RI has been partially implemented, DEC will utilize the Step I to help determine environmental impact, and the potential need for further ecological investigation, remediation options, and/or additional field sampling efforts. As part of the FWIA, a field biologist from Environmental Science Group performed a qualitative field survey of the impacted areas and general vicinity of the site. Environmental Science Group also reviewed available records of site contamination and past site investigations.

FWIA Step I

The procedures outlined in Step I of the Fish and Wildlife Analysis (FWIA) document are titled "Site Description." Step I is subdivided into four specific tasks, which are described below performed by Environmental Science Group as follows:

Site Maps

A topographic map is provided (see Figure 1) that depicts the VOA study area and general vicinity within a two-mile perimeter. This map also lists environmental receptors such as surface waters and wetlands if present. Figure 2 illustrates the RI study area. Figure 2 is a more site specific map that shows the site area and cover types within approximately 0.5-mile perimeter. This map was based on photos (see Appendix A) taken by Environmental Science Group during field surveys and USGS topographic maps.

Fish and Wild Life Assessment Volunteers of America 214 Lake Avenue Rochester, New York BCA Index #B 8-0688-05-04

Based on available topographic maps, field surveys, and the online NYS Resource Mapper, there were no habitats of special concern or natural surface waters located directly at the impacted study area. However, note that the Genesee River is located approximately 200 yards down gradient of the study area.

General Characteristics of the Impacted Area

The area impacted is characterized as an impacted urban fill area / vacant lot. The Site is located on the east of the VOA Human Service Complex and east of Haidt Place and is bounded by Ambrose Street to the south, the RAECO Site to the east, and by a contractor's yard and building to the north. The size of this Brownfield Site, as defined in the Brownfield Cleanup Agreement (BCA) is approximately 3 acres. The majority of the Site is undeveloped with soil debris piles, former bio-cells and vegetation cover. The remainder of the lot along the western portion of the Site is improved with pavement parking spaces / roadway for VOA's Human Service Complex that adjoins the Site to the west. The project location and surrounding vicinity are shown on Figure 1 – Site Vicinity Map.

Soils in Study Area

Standardized chemical and physical parameters were characterized in this section. The majority of the surface cover is vegetation or exposed fill soils and some of the Site along the western side are covered with pavement. In general, fill is found from the ground surface down to depths ranging from 22 to greater than 45 feet below ground surface. The fill soil is indicative of "historic fill", as defined by the NYSDEC in DER-10, and is primarily composed of cinders, ash slag and coal with lesser amounts of brick, concrete, wood, sand and gravel. A native Glacial till deposit was encountered below the historic fill soils and overlies the bedrock formation. The Glacial Till was described as very dense and was encountered at depths of 22, 34 and 44 feet below ground surface

Fish and Wild Life Assessment Volunteers of America 214 Lake Avenue Rochester, New York BCA Index #B 8-0688-05-04

General Observations of Soil Quality

Surface soil samples were collected from 6 locations, VOA SS-1 through VOA SS-6, at depths of approximately six inches below the ground surface. The subsurface soil samples that were analyzed by the laboratory are historic fill soils (subsurface soils). A summary of the Metals surface soil sample results is presented in Table 5 – Soil Sample Analytical Summary Metals. The Metals surface soil sample results indicate that concentrations detected in 1 out of the 6 samples exceed the SCO. The Metals detected that exceed the SCO are listed below with concentration ranges in ppm:

Metal	Concentration Range (ppm)	SCO (ppm)	
Lead	1,050	1,000	
 Mercury 	10	1	

The surface soil sample VOA SS-1 exceeded the SCO for lead and mercury with concentrations of 1,050 ppm and 10 ppm, respectively. This surface soil sample is located in the northern section of the Site where the deepest areas of buried coal and coke were observed to depths below 20 ft. (test pit TP - 129). Coal, cinders and slag were observed on the ground surface during the RI/SI project. It appears that the distribution of concentrations that exceed the SCO for surface soils is generally limited with respect to depth and location. This is also the case with the other 10 metals that were detected. In general, fewer metals were detected and concentrations of metals detected are lower when compared to subsurface soils.

Description of Fish and Wildlife Resources

The primary goal of this step of the FWIA is to identify, in a qualitative manner, natural resources that presently exist and that likely existed before contamination of the area. Information from the NYS Natural Heritage Program, US Fish and Wildlife Service and NYS DEC were used during this step. Although it is beyond the scope of this screening analysis to perform a quantitative field survey of wildlife, field observations were used to augment published information in this step of the FWIA process. Obvious ecological observations in contaminated areas were identified during the field surveys; these activities included assessing any atypical biotic conditions, stressed wildlife, or absence of common species.

It is noted that no records of actual natural resource damage reports were found. Furthermore, no evidence of stressed wildlife was found at the site during site visits. To Fish and Wild Life Assessment Volunteers of America 214 Lake Avenue Rochester, New York BCA Index #B 8-0688-05-04

reiterate, there were atypical soil conditions found directly at the study area from urban/historic fill and contaminated soils.

For this project, fish and wildlife resources, if likely to be present, were briefly described below.

Study Area and General Vicinity

A brief description of the general site vicinity and study area is given below for the purposes of the FWIA. Site descriptions are based on field surveys performed by GeoQuest, photos, and information from the US Fish Wildlife Service, NYS DEC, and the NYS Natural Heritage Program, Ecological Communities of NYS, as updated. Photos and wetland maps (Federal and State) are provided for review. Note that no State or Federal wetlands were identified at or near the study area (see Appendix A).

To reiterate, observations of dominant vegetation were described for the study area. Note that no surface waters or aquatic biota are present at the study area.

The general vicinity of the area is characterized as dense urban to the north, south and west of the study area. East of the study area are commercial storage buildings and vacant lots. Further east is the steep sloped forested shoreline of the Genesee River. The upland study area was observed to be dominated by four physiognomic groups: grasses, sedges, forbs and successional deciduous trees. The study area, 3 acres in size, could be defined as a successional older field. Refer to photos and maps in Appendix A.

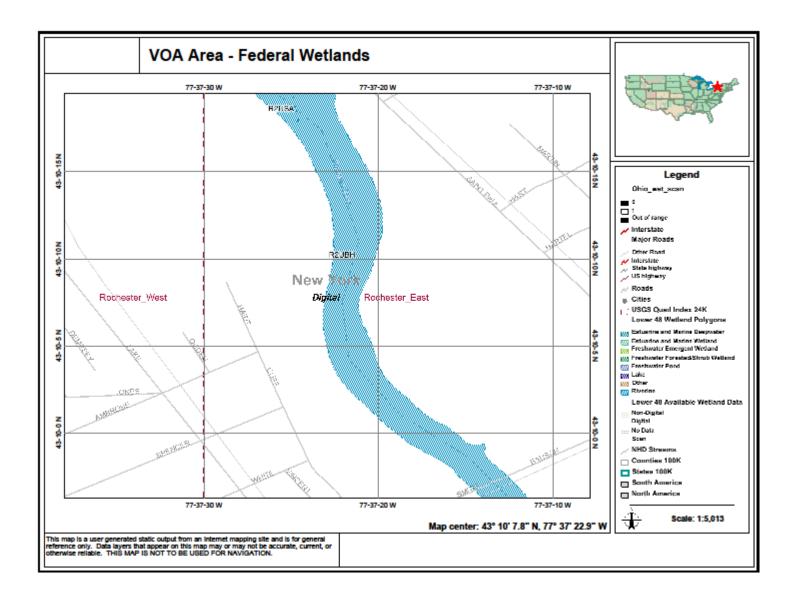
Dominate vegetation include sumac, rye grass, thistles, sedges, and poplar trees. Terrestrial wildlife that were incidentally observed at the site included the shrew (Blarina), cottontail rabbit (Sylvilagus), whitetail deer (Odocoileus), and english sparrow (Passer). Fish and Wild Life Assessment Volunteers of America 214 Lake Avenue Rochester, New York BCA Index #B 8-0688-05-04

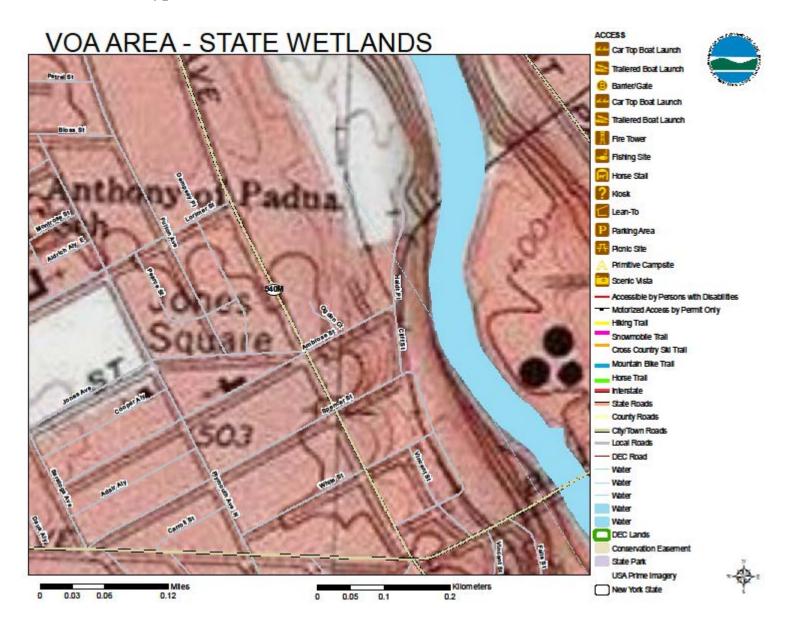
Ecological Receptors of Special Concern

A field survey to identify threatened and endangered species near the site was beyond the scope of this assessment. However, a brief description of important species known to exist in the general region of the Genesee River basin. This characterization was summarized from information from the NYS Natural Heritage Program, NYS DEC, and the US Fish and Wildlife website databases.

Vicinity of Study Area

Wildlife within the Genesee River basin in the City Rochester appears to be limited to those species that can inhabit a relatively narrow riparian corridor, and are somewhat tolerant of human urban activities in adjacent areas. The Genesee River basin is an important sport fishery, especially for salmonids. Possible breeding bird species include mallard, wood duck, great horned owl, red-tailed hawk, spotted sandpiper, belted kingfisher, blackbird, swamp sparrow, woodpeckers, and woodland passerine birds. Several beaver colonies inhabit the lower Genesee in the vicinity of the study area. The spotted salamander and spotted turtle have been observed in the lower river gorge. Other wildlife species occurring in the area include raccoon, muskrat, northern water snake, wild turkey, deer, and painted turtle. Note that the natural resources of the Genesee River and its adjacent woodlands are locally important for bird watching, nature study, and other recreation uses.







Study Area – Covertype Aerial





View Southeast of Study Area (View from VOA Parking Lot)



View Northeast of Study Area (View from VOA Parking Lot)



View East of Study Area (View from VOA Parking Lot)



Example of Dominate Vegetation



Example of Dominate Vegetation



Example of Dominate Vegetation



Example of Soil / Fill Type and Vegetation

Attachments 1

VOA 214 Lake Avenue Rochester, NY 14613

Inquiry Number: 3083948.2 June 02, 2011

The EDR Aerial Photo Decade Package



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EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

Aerial Photography June 02, 2011

Target Property:

214 Lake Avenue Rochester, NY 14613

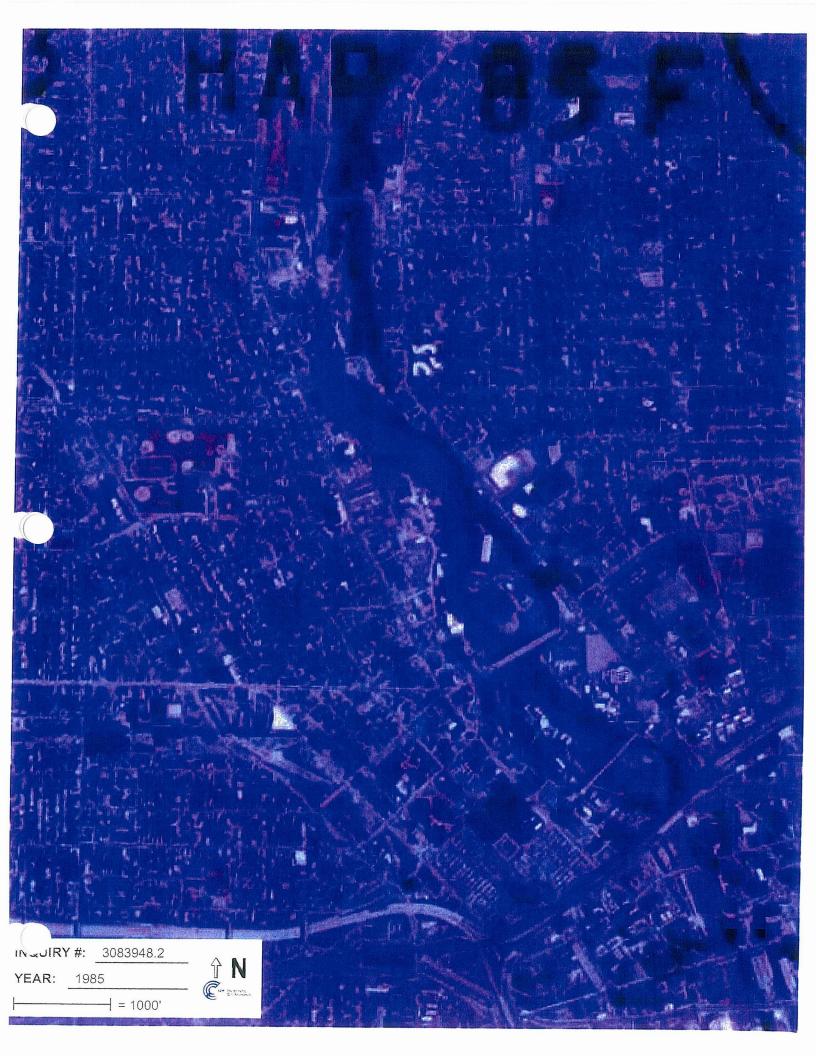
<u>Year</u>	Scale	<u>Details</u>	<u>Source</u>
1958	Aerial Photograph. Scale: 1"=500'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: July 20, 1958	EDR
1966	Aerial Photograph. Scale: 1"=500'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: July 01, 1966	EDR
1971	Aerial Photograph. Scale: 1"=500'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: May 07, 1971	EDR
1980	Aerial Photograph. Scale: 1"=750'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: June 17, 1980	EDR
1985	Aerial Photograph. Scale: 1"=1000'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: April 29, 1985	EDR
1994	Aerial Photograph. Scale: 1"=750'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: April 22, 1994	EDR
2006	Aerial Photograph. Scale: 1"=604'	Panel #: 43077-B5, Rochester East, NY;/Flight Date: January 01, 2006	EDR

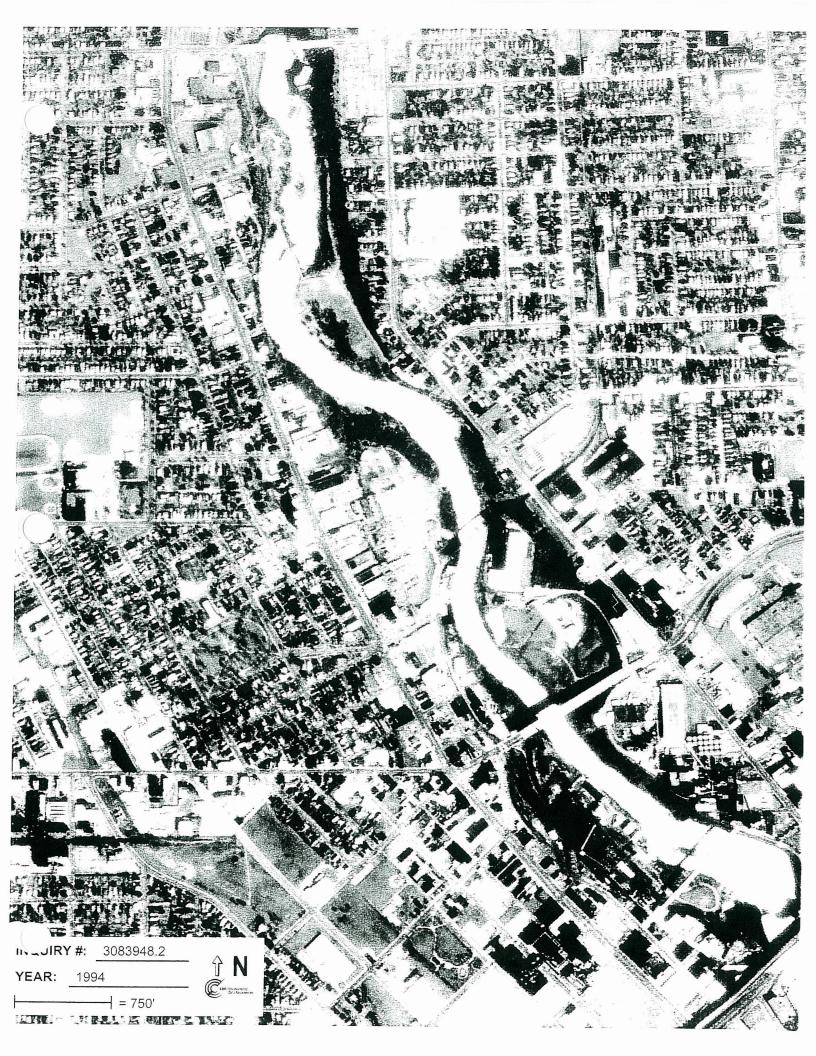


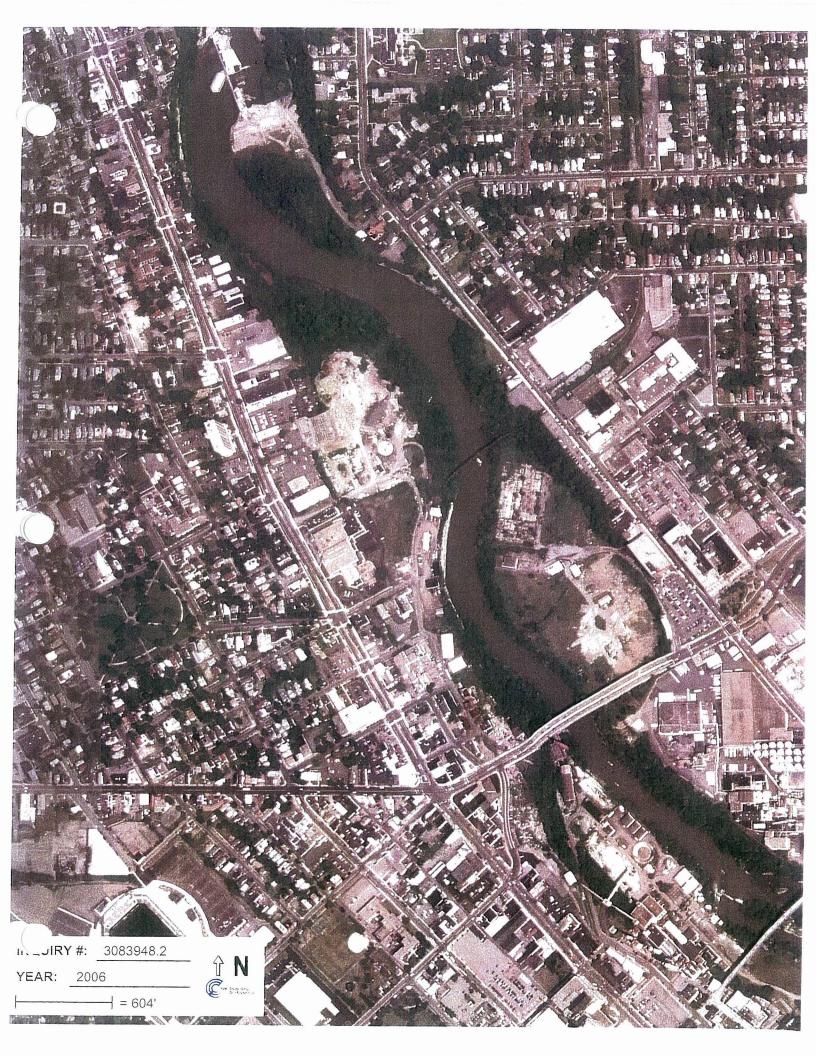


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		NR 441	
		412	Catter 1
IN & UIRY #: 3083948.2			
YEAR: 1971	Log Mary		
		NAME Y	









VOA 214 Lake Avenue Rochester, NY 14613

Inquiry Number: 3083948.1 June 01, 2011

EDR Historical Topographic Map Report



440 Wheelers Farms Road Milforc, CT 06461 800.352.0050 www.edrnet.com

EDR Historical Topographic Map Report

Environmental Data Resources, Inc.s (EDR) Historical Topographic Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topographic Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the early 1900s.

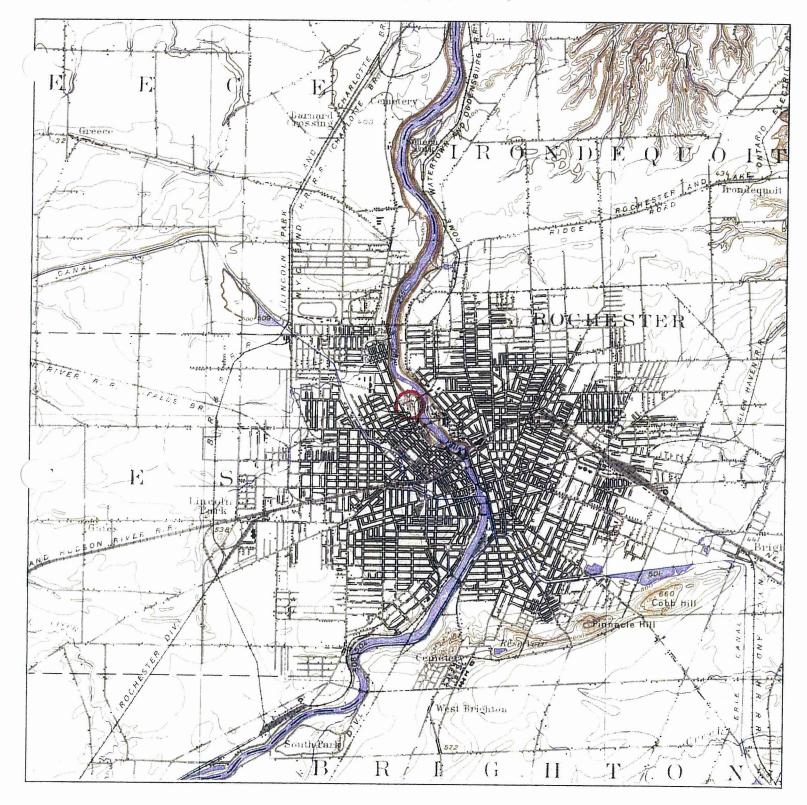
Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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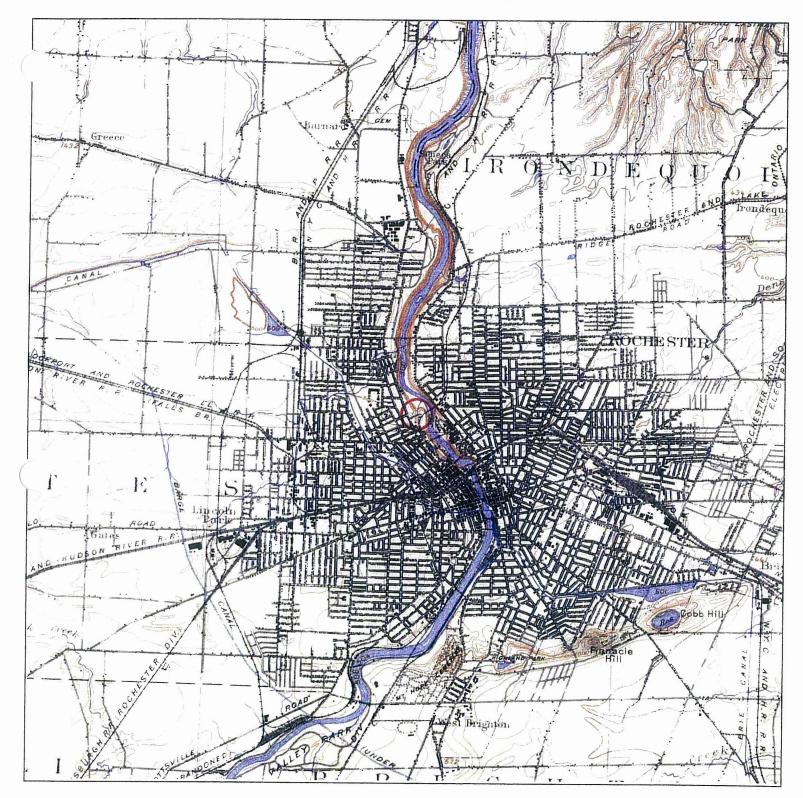
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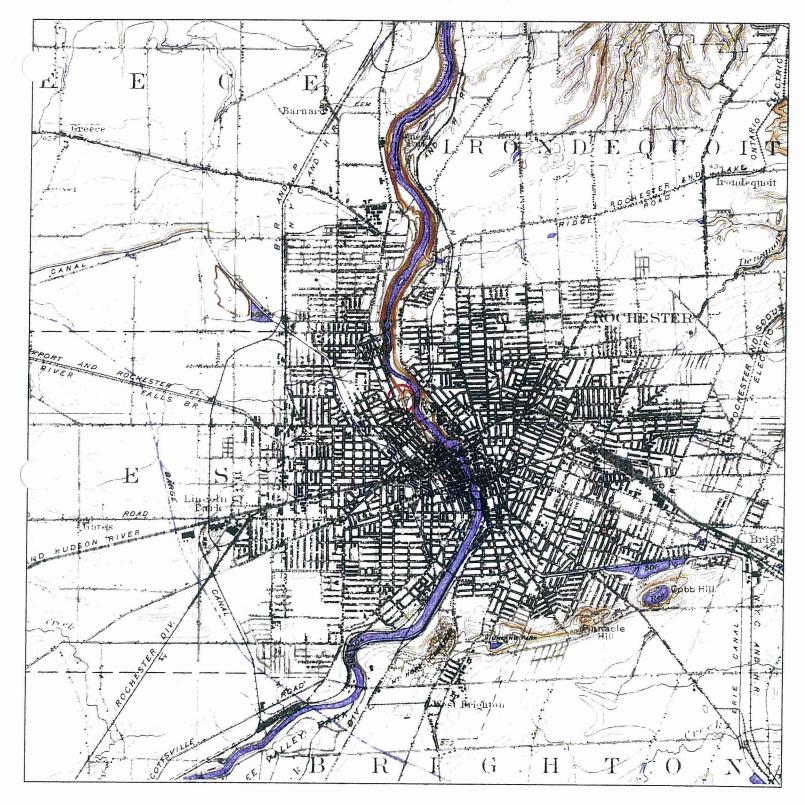
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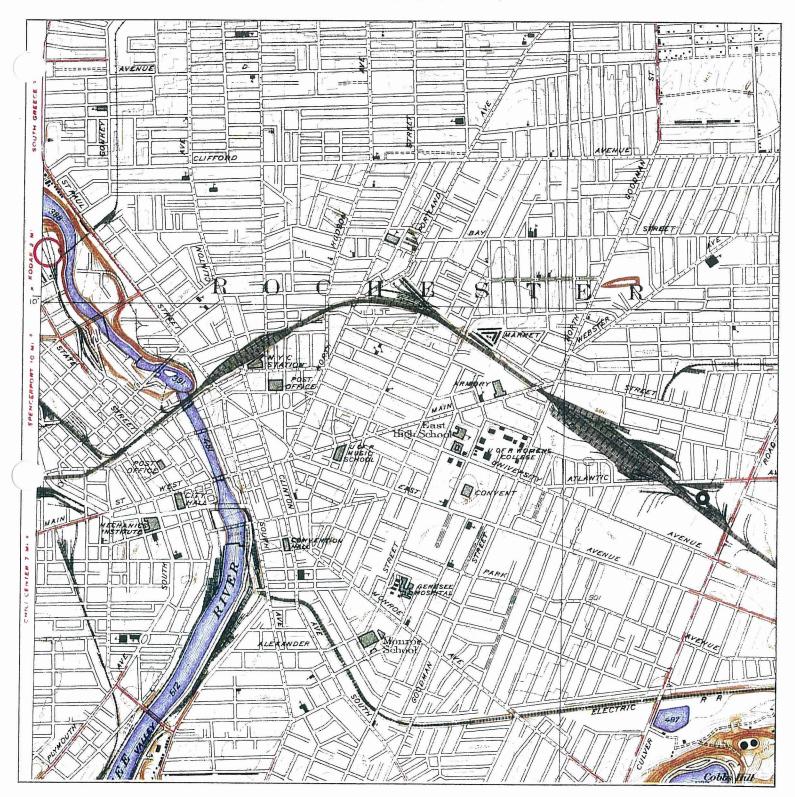
N	TARGET QUAD NAME: ROCHESTER MAP YEAR: 1898 SERIES: 15 SCALE: 1:62500	ADDRESS: 214 Lake Avenue CONTACT: Rochester, NY 14613 INQUIRY#:	Bergmann Associates Steve Demeo 3083948.1 ATE: 06/01/2011
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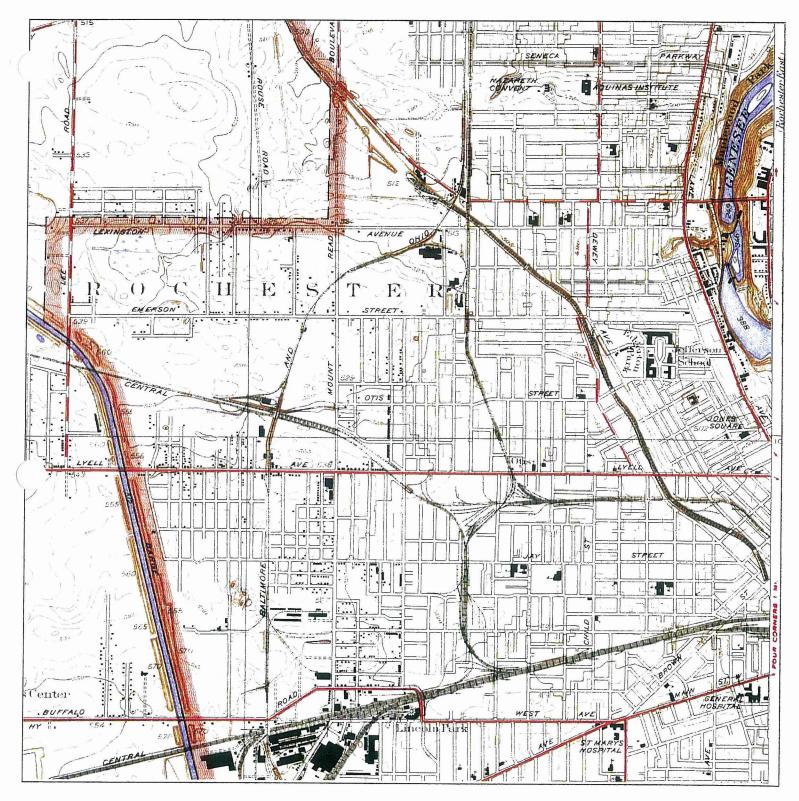
N	MAP YEAR: 19 SERIES: 15	OCHESTER SPECIAL 912		214 Lake Avenue	CLIENT: CONTACT: INQUIRY#: RESEARCH I	Bergmann Associates Steve Demeo 3083948.1 DATE: 06/01/2011
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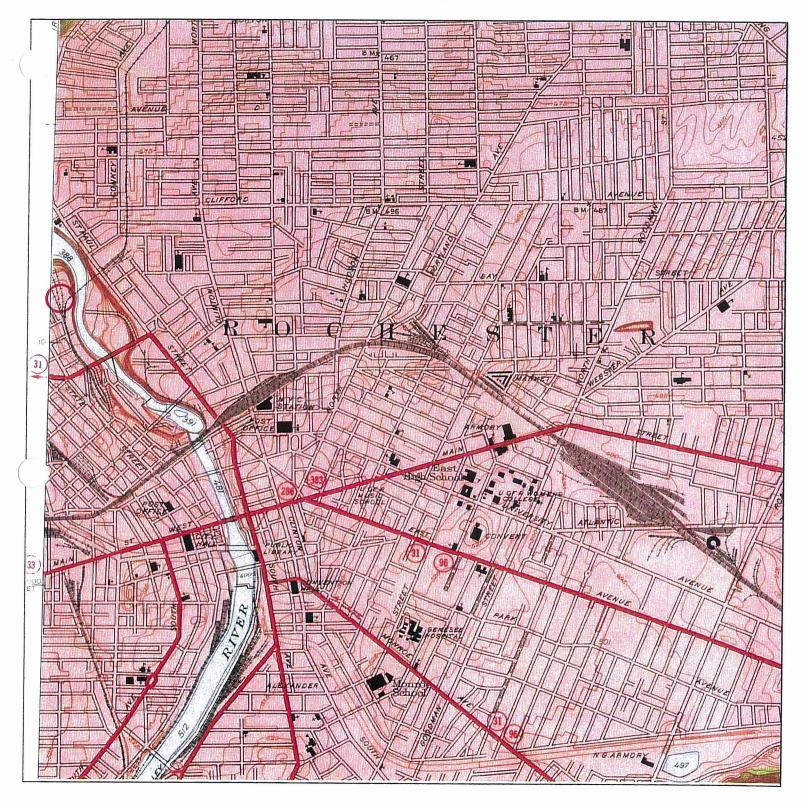
N	TARGET QUAD NAME: ROCHESTER MAP YEAR: 1920 SERIES: 15 SCALE: 1:62500	SITE NAME: VOA ADDRESS: 214 Lake Avenue Rochester, NY 14613 LAT/LONG: 43.169 / -77.6238	CLIENT: Bergmann Associates CONTACT: Steve Demeo INQUIRY#: 3083948.1 RESEARCH DATE: 06/01/2011
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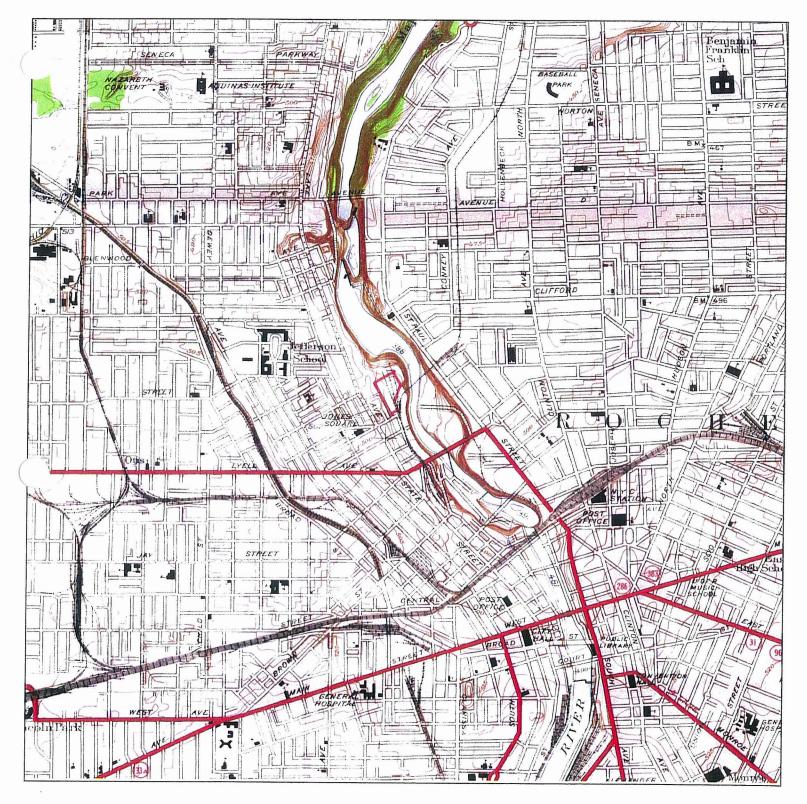
N 🛧	MAP YEAR:	ROCHESTER EAST		VOA 214 Lake Avenue Rochester, NY 14613 43.169 / -77.6238	CLIENT: CONTACT: INQUIRY#: RESEARCH	Bergmann Associates Steve Demeo 3083948.1 DATE: 06/01/2011
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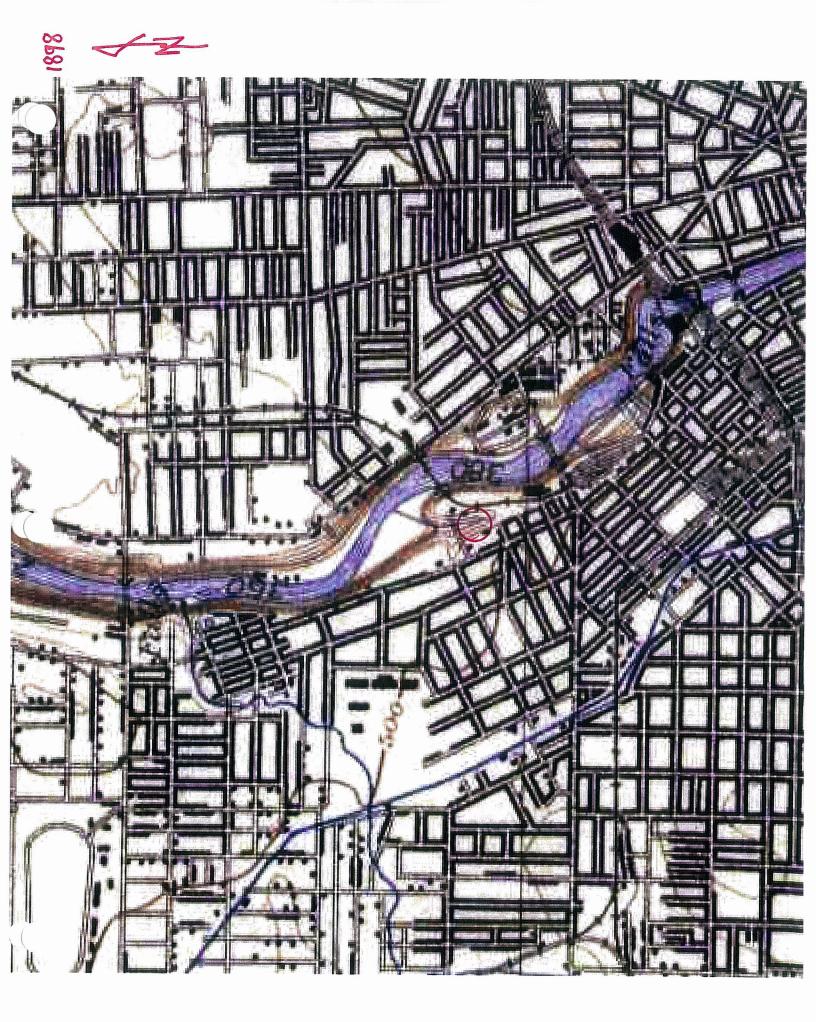
TARGET QUAD SITE NAME: VOA CLIENT: Bergmann Associates N NAME: ROCHESTER WEST ADDRESS: 214 Lake Avenue CONTACT: Steve Demeo 4 MAP YEAR: 1935 Rochester, NY 14613 INQUIRY#: 3083948.1 LAT/LONG: 43.169 / -77.6238 RESEARCH DATE: 06/01/2011 SERIES: 7.5 SCALE: 1:24000

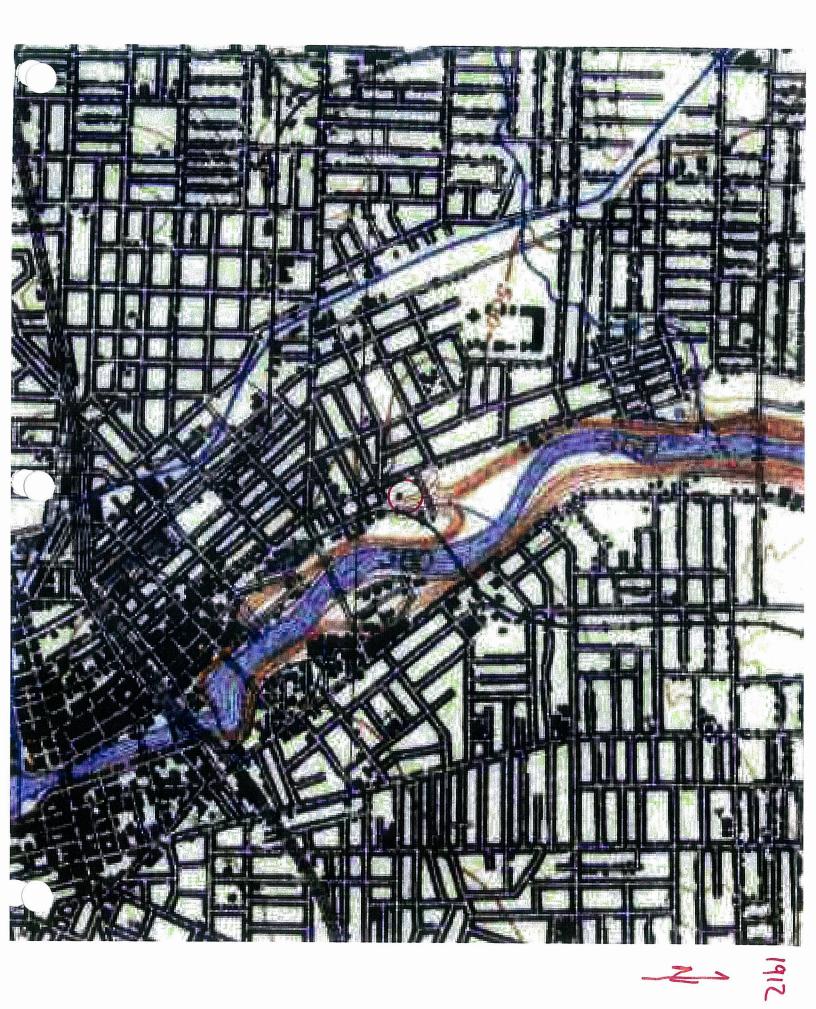


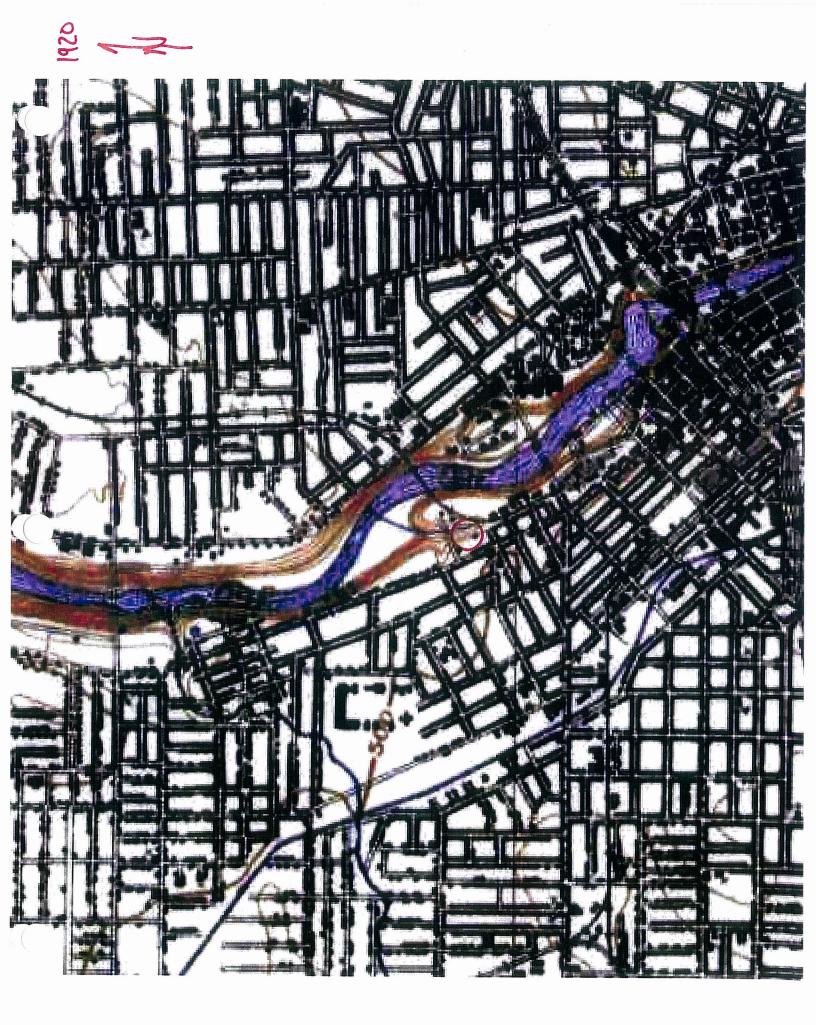
N	TARGET QUAD NAME: ROCHESTER EAST MAP YEAR: 1952 REVISED:1931 SERIES: 7.5 SCALE: 1:24000		VOA 214 Lake Avenue Rochester, NY 14613 43.169 / -77.6238	CLIENT: CONTACT: INQUIRY#: RESEARCH	Bergmann Associates Steve Demeo 3083948.1 DATE: 06/01/2011
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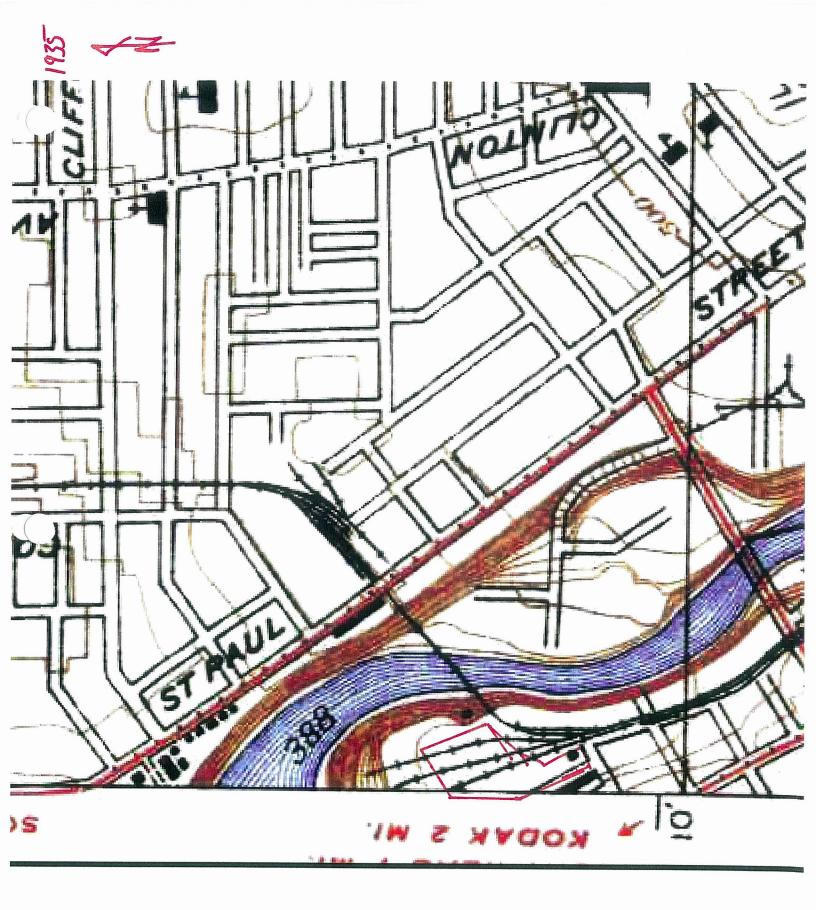


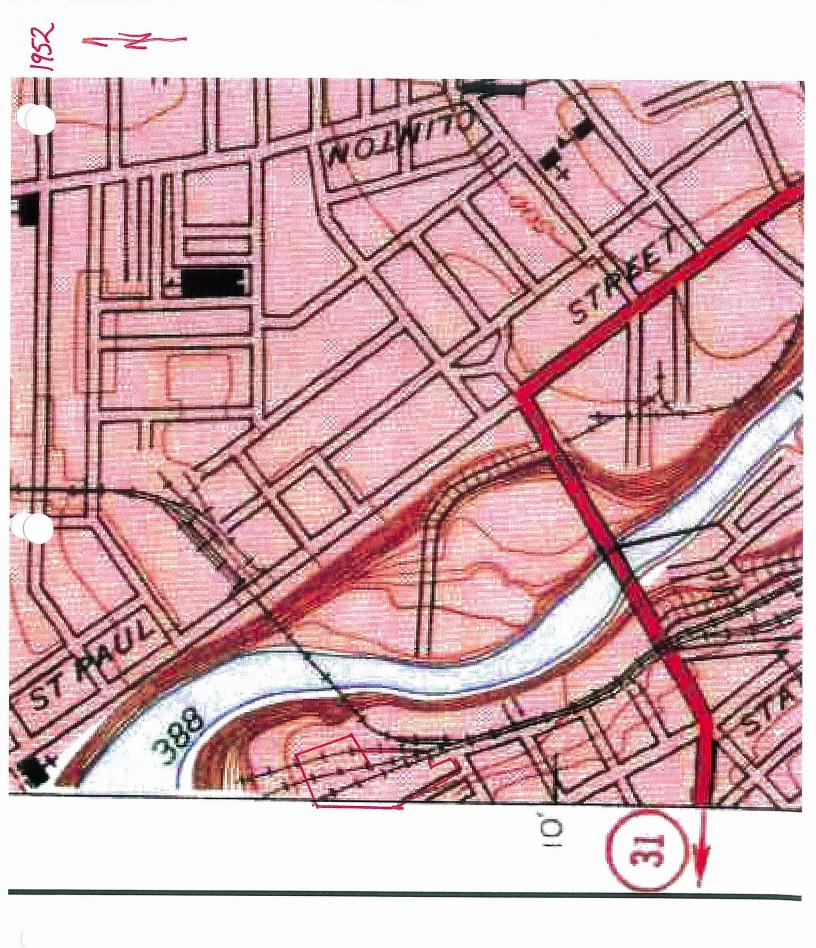
N 🔶	TARGET QU NAME: MAP YEAR:	ROCHESTER VICINITY 2 OF 2		CLIENT: CONTACT: INQUIRY#: RESEARCH	Bergmann Associates Steve Demeo 3083948.1 DATE: 06/01/2011
	SERIES: SCALE:	7.5 1:24000			

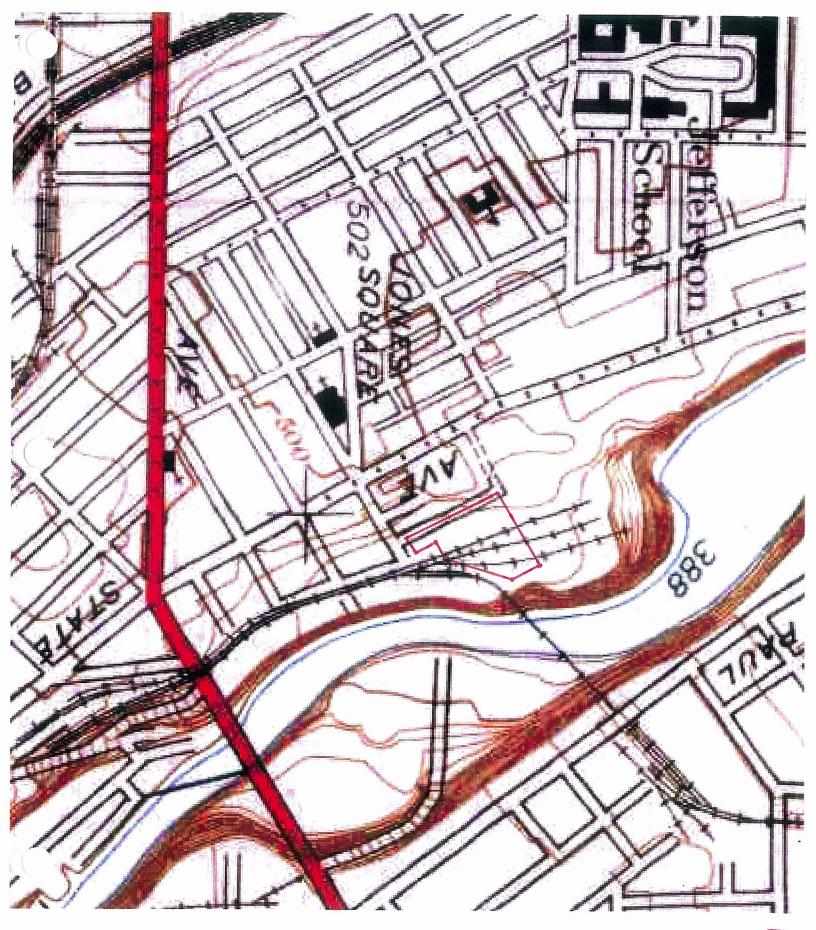




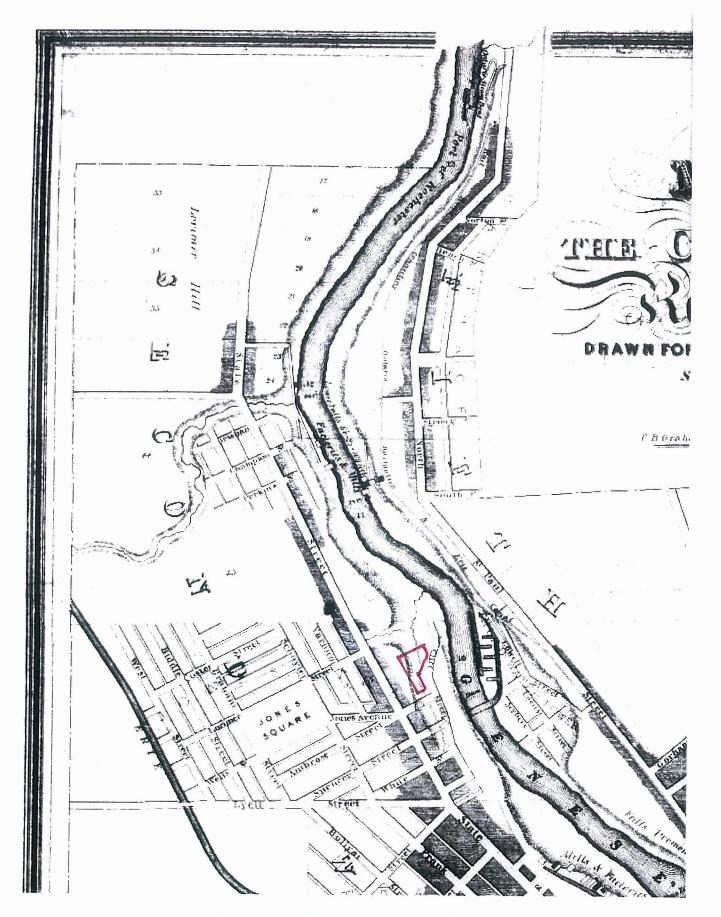




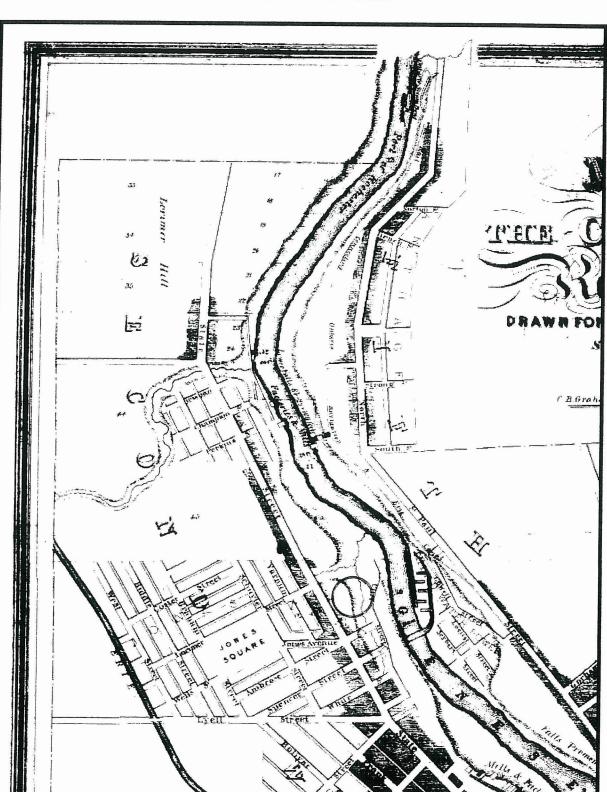








O'Reilly's sketches of Rochester Map - NW, 1934



~ ROCHESTER'S HISTORY ~ AN ILLUSTRATED TIMELINE

O'Reilly's Sketches of Rochester Map - NW, 1834

Attachments 3



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

Tax I.D. 62-0814289

Est. 1970

Mr. Stephen DeMeo Geo Quest Environmental 43 Legionnaire Dr.

Rochester, NY 14617

Report Summary

Thursday August 13, 2009

Report Number: L415933 Samples Received: 07/25/09 Client Project:

Description: Drum Disposal VOA 214 Lake Ave

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hestate to call.

Entire Report Reviewed By:

Leslie Newton, ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - I-2327, CT - PH-0197, FL - E87487 GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375,DW21704, ND - R-140 NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 00109, WV - 233 AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910

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

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> 1 Samples Reported: 08/12/09 15:56 Revised: 08/13/09 11:51 Page 1 of 2

ENVIRONM	IENTAL	
Science	Corp.	

Mr. Stephen DeMeo Geo Quest Environmental 43 Legionnaire Dr. Rochester, NY 14617 12065 Lebanon Rd. Mt. Juliet, TN 37122 (615) 758-5858 1-800-767-5859 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

August 13,2009

Date Received	:	July 25, 20			ES	C Sample # :	L415933-01	-
Description	:	Drum Disposal V	OA 214 Lake Av	re	si	te ID :		
Sample ID	:	SOIL DRUM SAMPL	E			oject # :		
Collected By Collection Date		Stephen J. DeMed 07/24/09 10:00	-					
Parameter			Dry Result	Det. Limit	Units	Method	Date	Dil.

rarameter	DIY REBUIL	Det. Dimit	UIIICS	Method	Date	
Total Solids	77.2		00	2540G	08/07/09	1
Pesticide/PCBs						
Aldrin	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Alpha BHC	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Beta BHC	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Delta BHC	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Gamma BHC	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Chlordane	BDL	0.26	mg/kg	8081/8082	08/10/09	1
4,4-DDD	BDL	0.026	mg/kg	8081/8082	08/10/09	1
4,4-DDE	BDL	0.026	mg/kg	8081/8082	08/10/09	1
4,4-DDT	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Dieldrin	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endosulfan I	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endosulfan II	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endosulfan sulfate	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endrin	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endrin aldehyde	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Endrin ketone	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Heptachlor	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Heptachlor epoxide	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Hexachlorobenzene	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Methoxychlor	BDL	0.026	mg/kg	8081/8082	08/10/09	1
Toxaphene	BDL	0.52	mg/kg	8081/8082	08/10/09	1
PCB 1016	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1221	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1232	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1242	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1248	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1254	BDL	0.022	mg/kg	8081/8082	08/11/09	1
PCB 1260	BDL	0.022	mg/kg	8081/8082	08/11/09	1
Pest/PCBs Surrogates						
Decachlorobiphenyl	63.7		% Rec.	8081/8082	08/10/09	1
Tetrachloro-m-xylene	63.1		% Rec.	8081/8082	08/10/09	1

Results listed are dry weight basis. BDL - Below Detection Limit Det. Limit - Practical Quantitation Limit(PQL) Note: This report shall not be reproduced, except in full, without the written approval from ESC. The reported analytical results relate only to the sample submitted Reported: 08/12/09 15:56 Revised: 08/13/09 11:51

Page 2 of 2

Summary of Remarks For Samples Printed $08/13/09 \mbox{ at } 11{:}51{:}44$

TSR Signing Reports: 044 R5 - Desired TAT

Sample: L415933-01 Account: GEOQUESNY Received: 07/25/09 09:00 Due Date: 08/13/09 00:00 RPT Date: 08/12/09 15:56 Expires 8/7. Relogged from L414097-01





Bergmann Associates

For Lab Project #11-3921 Issued September 21, 2011 This report contains a total of 13 pages

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

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The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

- "<" = analyzed for but not detected at or above the reporting limit.
- "E" = Result has been estimated, calibration limit exceeded.
- "Z" = See case narrative.
- "D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
- "M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.

"B" = Method blank contained trace levels of analyte. Refer to included method blank report.

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

LAB REPORT FOR IGNITABILITY OF SOLIDS

Client:	Bergmann Associates

Client Job Site:	214 Lake Ave. VOA

Client Job No.: N/A

Lab Project No.:	11-3921
Sample Type: Method:	Soil SW846 1030
Date Sampled:	09/15/2011
Date Received:	09/15/2011
Date Analyzed:	09/15/2011

Lab Sample No.	Field ID No.	Field Location	Burn Rate (In mm/sec)
13574	N/A	TP-132R-S	No Burn
13575	N/A	TP-132R-A	No Burn
		·	

ELAP ID No.:10958

Comments: A burn rate of more than 0.17mm/sec for metalic samples, or 2.2mm/sec for nonmetalic samples, are considered to have a positive result for ignitability.

Approved By:

Bruce Hoogesteger, Technical Director



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

LAB REPORT FOR PAINT FILTER ANALYSIS

Client:	Bergmann Associates	Lab Project No.:	11-3921
Client Job Site:	214 Lake Ave. VOA	Sample Type: Method:	Soil SW846 9095
Client Job No.:	N/A	Date Sampled:	09/15/2011
		Date Received:	09/15/2011
		Date Analyzed:	09/16/2011

Lab Sample No.	Field ID No.	Field Location	Paint Filter Test Results (Pass/Fail)
13574	N/A	TP-132R-S	Pass
13575	N/A	TP-132R-A	Pass

ELAP ID No.:10958

Comments:

Approved By:

Bruce Hoogesteger, Technical Director



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

LABORATORY REPORT FOR TCLP RCRA METALS ANALYSIS

Client:	Bergmann Associates	Lab Project No.:	11-3921
Client Job Site:	214 Lake Ave VOA	Sample Type: Method:	TCLP Extract SW846 1311/3005/6010,7470
Client Job No.:	N/A	Date Sampled: Date Received:	09/15/2011 09/15/2011
		Date Analyzed:	09/20/2011

Lab Sample ID	Field ID	Field Location	Ag (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Cr (mg/L)	Pb (mg/L)	Se (mg/L)	Hg (mg/L)
13574	N/A	TP-132 R-S	<0.050	0.185	<0.500	<0.025	<0.050	1.14	<0.100	<0.0020
13575	N/A	TP-132 R-A	<0.050	<0.100	<0.500	<0.025	<0.050	<0.100	<0.100	<0.0020
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										,
		,							ELAP ID No.: 10	

	Ag (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Cr (mg/L)	Pb (mg/L)	Se (mg/L)	Hg (mg/L)
Regulatory Limit (mg/L):	5.0	5.0	100	1.0	5.0	5.0	1.0	0.2

Comments:

Approved By: _

Bruce Hoogesteger, Technical Director

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PCB Analysis Report for Soils/Solids/Sludges

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	Soil	Date Analyzed:	09/20/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.540
Aroclor 1221	< 0.540
Aroclor 1232	< 0.540
Aroclor 1242	< 0.540
Aroclor 1248	< 0.540
Aroclor 1254	< 0.540
Aroclor 1260	< 0.540

ELAP Number 10958

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

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 113921P1.XLS requirements upon receipt.

PCB Analysis Report for Soils/Solids/Sludges

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	Soil	Date Analyzed:	09/19/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.449
Aroclor 1221	< 0.449
Aroclor 1232	< 0.449
Aroclor 1242	< 0.449
Aroclor 1248	< 0.449
Aroclor 1254	< 0.449
Aroclor 1260	< 0.449

ELAP Number 10958

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

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. 113921P2.XLS



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

Pesticide Report for TCLP Extract

Client: Bergmann Associates

214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
N/A		
TP-132R-S	Date Sampled:	09/15/2011
N/A	Date Received:	09/15/2011
TCLP Extract	Date Analyzed:	09/20/2011
	N/A TP-132R-S N/A	Lab Sample Number:N/ATP-132R-SDate Sampled:N/ADate Received:

Results in ug / L	Regulatory Limits in ug / L
< 1.00	400
< 1.00	30.0
< 1.00	20.0
< 1.00	8.00
< 1.00	8.00
< 1.00	10000
< 5.00	500
	< 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00

ELAP Number 10958

Analytical Method: EPA 8081B Prep Method: EPA 1311 & 3510C

Comments: ug / L = microgram per Liter

WH H

Signature:

Bruce Hoogesteger: Technical Director
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Pesticide Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011

Results in ug / L	Regulatory Limits in ug / L
< 1.00	400
< 1.00	30.0
< 1.00	20.0
< 1.00	8.00
< 1.00	8.00
< 1.00	10000
< 5.00	500
	< 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00

ELAP Number 10958

Analytical Method: EPA 8081B Prep Method: EPA 1311 & 3510C

Comments: ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Orector
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requirements upon receipt.
113921C2.XLS



Semi-Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011

Results in ug / L	Regulatory Limits in ug / L
< 40.0	7,500
< 40.0	130
< 40.0	130
< 40.0	500
< 40.0	3000
< 40.0	2000
< 40.0	5000
Deculto in we / I	Regulatory Limits in ug / L
	< 40.0 < 40.0 < 40.0 < 40.0 < 40.0 < 40.0 < 40.0

Results in ug / L	Regulatory Limits in ug / L
< 40.0	200,000
< 100	100,000
< 100	400,000
< 40.0	2000
	< 40.0 < 100 < 100

ELAP Number 10958

Analytical Method: EPA 8270C Prep Method: EPA 1311 & 3510C Data File: S58752.D

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. 113921S1.XLS



Semi-Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	< 400	7,500
2,4-Dinitrotoluene	< 400	130
Hexachlorobenzene	< 400	130
Hexachlorobutadiene	< 400	500
Hexachloroethane	< 400	3000
Nitrobenzene	< 400	2000
Pyridine	< 400	5000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	< 400	200,000
Pentachlorophenol	< 1,000	100,000
2,4,5-Trichlorophenol	< 1,000	400,000
2,4,6-Trichlorophenol	< 400	2000

ELAP Number 10958

Analytical Method: EPA 8270C Prep Method: EPA 1311 & 3510C Data File: S58753.D

Comments: ug / L = microgram per Liter

Signature:

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Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/19/2011

Compound	Results in ug / L	Regulatory Limits in ug / L
Benzene	< 20.0	500
2-Butanone	< 100	200,000
Carbon Tetrachloride	< 20.0	500
Chlorobenzene	< 20.0	100,000
Chloroform	< 20.0	6,000
1,2-Dichloroethane	< 20.0	500
1,1-Dichloroethene	< 20.0	700
Tetrachloroethene	< 20.0	700
Trichloroethene	< 20.0	500
Vinyl chloride	< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: V91652.D

Comments: ug / L = microgram per Liter

Bruce Hoogesteger: Technical Directory 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. 113921V1.XLS



Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/19/2011

Compound	Results in ug / L	Regulatory Limits in ug / L
Benzene	< 20.0	500
2-Butanone	< 100	200,000
Carbon Tetrachloride	< 20.0	500
Chlorobenzene	< 20.0	100,000
Chloroform	< 20.0	6,000
1,2-Dichloroethane	< 20.0	500
1,1-Dichloroethene	< 20.0	700
Tetrachloroethene	< 20.0	700
Trichloroethene	< 20.0	500
Vinyl chloride	< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: V91653.D

Comments: ug / L = microgram per Liter

Signature:

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. 113921V2.XLS

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	-3311	179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311	5) 647-2530	08 Office (58	er, NY 146	nue, Rochest	179 Lake Ave				Ì	



Analytical Report Cover Page

Bergmann Associates

For Lab Project # 11-3921 Issued September 21, 2011 Re-Issued September 22, 2011 This report contains a total of 13 pages

This project has been re-issued to correct the Semi-Volatile reporting limits for sample 13575.

The reported results relate only to the samples as they have been received by the laboratory.

Any noncompliant QC parameters having impact on the data are flagged or documented on the final report.

All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

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The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of frequently used data flags and their meaning:

- "<" = analyzed for but not detected at or above the reporting limit.
- "E" = Result has been estimated, calibration limit exceeded.
- "Z" = See case narrative.
- "D" = Duplicate results outside QC limits. May indicate a non-homogenous matrix.
- "M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
- "B" = Method blank contained trace levels of analyte. Refer to included method blank report.

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

LAB REPORT FOR IGNITABILITY OF SOLIDS

Client:	Bergmann Associates

Client Job Site:	214 Lake Ave. VOA

Client Job No.: N/A

Lab Project No.:	11-3921
Sample Type: Method:	Soil SW846 1030
Date Sampled:	09/15/2011
Date Received:	09/15/2011
Date Analyzed:	09/15/2011

Lab Sample No.	Field ID No.	Field Location	Burn Rate (In mm/sec)
13574	N/A	TP-132R-S	No Burn
13575	N/A	TP-132R-A	No Burn
		·	

ELAP ID No.:10958

Comments: A burn rate of more than 0.17mm/sec for metalic samples, or 2.2mm/sec for nonmetalic samples, are considered to have a positive result for ignitability.

Approved By:

Bruce Hoogesteger, Technical Director



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LAB REPORT FOR PAINT FILTER ANALYSIS

Client:	Bergmann Associates	Lab Project No.:	11-3921
Client Job Site:	214 Lake Ave. VOA	Sample Type: Method:	Soil SW846 9095
Client Job No.:	N/A	Date Sampled:	09/15/2011
		Date Received:	09/15/2011
		Date Analyzed:	09/16/2011

Lab Sample No.	Field ID No.	Field Location	Paint Filter Test Results (Pass/Fail)
13574	N/A	TP-132R-S	Pass
13575	N/A	TP-132R-A	Pass

ELAP ID No.:10958

Comments:

Approved By:

Bruce Hoogesteger, Technical Director



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

LABORATORY REPORT FOR TCLP RCRA METALS ANALYSIS

Client:	Bergmann Associates	Lab Project No.:	11-3921
Client Job Site:	214 Lake Ave VOA	Sample Type: Method:	TCLP Extract SW846 1311/3005/6010,7470
Client Job No.:	N/A	Date Sampled: Date Received:	09/15/2011 09/15/2011
		Date Analyzed:	09/20/2011

Lab Sample ID	Field ID	Field Location	Ag (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Cr (mg/L)	Pb (mg/L)	Se (mg/L)	Hg (mg/L)
13574	N/A	TP-132 R-S	<0.050	0.185	<0.500	<0.025	<0.050	1.14	<0.100	<0.0020
13575	N/A	TP-132 R-A	<0.050	<0.100	<0.500	<0.025	<0.050	<0.100	<0.100	<0.0020
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	Ag (mg/L)	As (mg/L)	Ba (mg/L)	Cd (mg/L)	Cr (mg/L)	Pb (mg/L)	Se (mg/L)	Hg (mg/L)
Regulatory Limit (mg/L):	5.0	5.0	100	1.0	5.0	5.0	1.0	0.2

Comments:

Approved By: _

Bruce Hoogesteger, Technical Director

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PCB Analysis Report for Soils/Solids/Sludges

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	Soil	Date Analyzed:	09/20/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.540
Aroclor 1221	< 0.540
Aroclor 1232	< 0.540
Aroclor 1242	< 0.540
Aroclor 1248	< 0.540
Aroclor 1254	< 0.540
Aroclor 1260	< 0.540

ELAP Number 10958

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

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 113921P1.XLS requirements upon receipt.

PCB Analysis Report for Soils/Solids/Sludges

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	Soil	Date Analyzed:	09/19/2011

PCB Identification	Results in mg / Kg
Aroclor 1016	< 0.449
Aroclor 1221	< 0.449
Aroclor 1232	< 0.449
Aroclor 1242	< 0.449
Aroclor 1248	< 0.449
Aroclor 1254	< 0.449
Aroclor 1260	< 0.449

ELAP Number 10958

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

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. 113921P2.XLS



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

Pesticide Report for TCLP Extract

Client: Bergmann Associates

214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
N/A		
TP-132R-S	Date Sampled:	09/15/2011
N/A	Date Received:	09/15/2011
TCLP Extract	Date Analyzed:	09/20/2011
	N/A TP-132R-S N/A	Lab Sample Number:N/ATP-132R-SDate Sampled:N/ADate Received:

Results in ug / L	Regulatory Limits in ug / L
< 1.00	400
< 1.00	30.0
< 1.00	20.0
< 1.00	8.00
< 1.00	8.00
< 1.00	10000
< 5.00	500
	< 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00

ELAP Number 10958

Analytical Method: EPA 8081B Prep Method: EPA 1311 & 3510C

Comments: ug / L = microgram per Liter

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Signature:

Bruce Hoogesteger: Technical Director
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Pesticide Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011

Results in ug / L	Regulatory Limits in ug / L
< 1.00	400
< 1.00	30.0
< 1.00	20.0
< 1.00	8.00
< 1.00	8.00
< 1.00	10000
< 5.00	500
	< 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00 < 1.00

ELAP Number 10958

Analytical Method: EPA 8081B Prep Method: EPA 1311 & 3510C

Comments: ug / L = microgram per Liter

Signature:

Bruce Hoogesteger: Technical Orector
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requirements upon receipt.
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Semi-Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13574
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011

Results in ug / L	Regulatory Limits in ug / L
< 40.0	7,500
< 40.0	130
< 40.0	130
< 40.0	500
< 40.0	3000
< 40.0	2000
< 40.0	5000
Deculto in we / I	Regulatory Limits in ug / L
	< 40.0 < 40.0 < 40.0 < 40.0 < 40.0 < 40.0 < 40.0

Results in ug / L	Regulatory Limits in ug / L
< 40.0	200,000
< 100	100,000
< 100	400,000
< 40.0	2000
	< 40.0 < 100 < 100

ELAP Number 10958

Analytical Method: EPA 8270C Prep Method: EPA 1311 & 3510C Data File: S58752.D

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. 113921S1.XLS



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

Semi-Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	11-3921 13575
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/20/2011
		Date Reissued:	09/22/2011

Base / Neutrals	Results in ug / L	Regulatory Limits in ug / L
1,4-Dichlorobenzene	< 40.0	7,500
2,4-Dinitrotoluene	< 40.0	130
Hexachlorobenzene	< 40.0	130
Hexachlorobutadiene	< 40.0	500
Hexachloroethane	< 40.0	3000
Nitrobenzene	< 40.0	2000
Pyridine	< 40.0	5000

Acids	Results in ug / L	Regulatory Limits in ug / L
Cresols (as m,p,o-Cresol)	< 40.0	200,000
Pentachlorophenol	< 100	100,000
2,4,5-Trichlorophenol	< 100	400,000
2,4,6-Trichlorophenol	< 40.0	2000

ELAP Number 10958

Analytical Method: EPA 8270C Prep Method: EPA 1311 & 3510C Data File: S58753.D

Comments: ug / L = microgram per Liter

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Signature:

Bruce Hoogesteger: Technical Director
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requirements upon receipt.
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Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	
Client Job Number:	N/A		
Field Location:	TP-132R-S	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/19/2011

Compound	Results in ug / L	Regulatory Limits in ug / L
Benzene	< 20.0	500
2-Butanone	< 100	200,000
Carbon Tetrachloride	< 20.0	500
Chlorobenzene	< 20.0	100,000
Chloroform	< 20.0	6,000
1,2-Dichloroethane	< 20.0	500
1,1-Dichloroethene	< 20.0	700
Tetrachloroethene	< 20.0	700
Trichloroethene	< 20.0	500
Vinyl chloride	< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: V91652.D

Comments: ug / L = microgram per Liter

Bruce Hoogesteger: Technical Directory 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. 113921V1.XLS



Volatile Analysis Report for TCLP Extract

Client: Bergmann Associates

Client Job Site:	214 Lake Ave VOA	Lab Project Number: Lab Sample Number:	
Client Job Number:	N/A		
Field Location:	TP-132R-A	Date Sampled:	09/15/2011
Field ID Number:	N/A	Date Received:	09/15/2011
Sample Type:	TCLP Extract	Date Analyzed:	09/19/2011

Compound	Results in ug / L	Regulatory Limits in ug / L
Benzene	< 20.0	500
2-Butanone	< 100	200,000
Carbon Tetrachloride	< 20.0	500
Chlorobenzene	< 20.0	100,000
Chloroform	< 20.0	6,000
1,2-Dichloroethane	< 20.0	500
1,1-Dichloroethene	< 20.0	700
Tetrachloroethene	< 20.0	700
Trichloroethene	< 20.0	500
Vinyl chloride	< 20.0	200
ELAP Number 10958	Method: EPA 8260B	Data File: V91653.D

Comments: ug / L = microgram per Liter

Signature:

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. 113921V2.XLS

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Attachments 4

Memorandum



To:	Linda Shaw	From:	Steve DeMeo	Page 1 of 3
Date:	November 18, 2011	Re:	VOA – PCB, PEST,	cyanide and 8015 results

Below is a list of the Pesticide, 8015B, total cyanide and PCB soil and groundwater results. These chemicals are not contaminates of concern and detected concentrations are below NYSDEC SRO. NYSDEC does not have criteria for 8015 results.

The results are for soil samples unless listed as groundwater samples.

<u>Sample</u> <u>Type</u>	Sample Name	Date	Result	Commercial SRO	Residential SRO
Pesticide	TP102 (10.0-10.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP102 (10.0-10.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP103 (16.0-16.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP103 (16.0-16.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP104 (17.0-17.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP104 (17.0-17.5 ft.)	11/2/07	ND	NA	NA
Pesticide	TP121 Soil Pile	11/2/07	gamma-Chlordane 1.2J ppb	No Standard	No Standard
			4,4'-DDT 6.5 ppb	47 ppm	1.7 ppm
Pesticide	TP121 Soil Pile	11/2/07	ND	NA	NA
Pesticide	TP123 Soil Pile	11/2/07	gamma-Chlordane	1.5 ppb No Standard	No Standard
Pesticide	TP123 Soil Pile	11/2/07	ND	NA	NA
Pesticide	TP124 Soil Pile	11/2/07	gamma-Chlordane	2.5 ppb No Standard	No Standard
			4,4'-DDT 2.5 ppb	47 ppm	1.7 ppm
			Dieldrin 3.5 ppb	1.4 ppm	0.039 ppm
			4,4'-DDD 5.4 ppb	92 ppm	2.6 ppm
			4,4'-DDT 17.0 ppb	47 ppm	1.7 ppm
Pesticide	TP124 Soil Pile	11/2/07	ND	NA	NA
Pesticide	TP122 Soil Pile	11/2/07	gamma-Chlordane	3.0 ppb No Standard	No Standard
Pesticide	TP122 Soil Pile	11/2/07	ND	NA	NA
Pesticide	TP125 Soil Pile	11/2/07	ND	NA	NA
Pesticide	TP126 Soil Pile	11/2/07	gamma-Chlordane	1.7 ppb No Standard	No Standard
Pesticide	TP126 Soil Pile	11/2/07	ND	NA	NA
Pesticide	MW101 (22.0-23.0 ft.)	6/27/08	ND	NA	NA
Pesticide	MW103 (20.0-22.0 ft.)	6/27/08	4,4'-DDE 5.1 ppb	66 ppm	1.8 ppm
Pesticide	MW104 (30.0-32.0 ft.)	6/27/08	ND	NA	NA
Pesticide	MW105 (26.0-26.3 ft.)	6/27/08	ND	NA	NA
Pesticide	MW106 (26.0-28.0 ft.)	6/27/08	ND	NA	NA
Pesticide	MW102 (22.0-22.0 ft.)	7/7/08	EndrinKetone 50 ppb	89 ppm	2.2 ppm
Pesticide	VOAMW-101	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-1014	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-106	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-102	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-103	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-105	10/31/08	ND	Groundwater Sample	NA
Pesticide	VOAMW-105 DUP	10/31/08	ND	Groundwater Sample	NA

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<u>Sample</u>					
<u>Type</u>	Sample Name	<u>Date</u>	<u>Result</u>	Commercial SRO	Residential SRO
Pesticide	VOA SS-1	2/17/09	4,4'-DDT 8.1 ppb	47 ppm	1.7 ppm
8015B (DRO)	TP105 (15.0-15.5 ft.)	10/31/07	250,000 ppb	No Standard	No Standard
8015B (GRO)	TP105 (15.0-15.5 ft.)	10/31/07	54 JB ppb	No Standard	No Standard
8015B (GRO)	MW103 (20.0-22.0 ft.)	7/1/08	89 B ppb	No Standard	No Standard
8015B (DRO)	MW103 (20.0-22.0 ft.)	7/1/08	2,600,000 ppb	No Standard	No Standard
8015B (GRO)	MW101 (22.0-23.0 ft.)	7/2/08	41 JB ppb	No Standard	No Standard
8015B (GRO)	MW101 (22.0-23.0 ft.)	7/2/08	38 JB ppb	No Standard	No Standard
8015B (DRO)	MW101 (22.0-23.0 ft.)	7/2/08	1,400,000 ppb	No Standard	No Standard
8015B (DRO)	TP-132	10/26/10	2,200,000 ppb	No Standard	No Standard
00102 (21(0)	11 102	10/20/10	_,0,000 pp.		
Total Cyanide	TP105 (15.0-15.5 ft.)	10/31/07	ND	NA	NA
Total Cyanide	TP107 (8.0-8.5 ft.)	11/7/07	ND	NA	NA
Total Cyanide	TP121 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	TP122 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	TP123 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	TP124 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	TP125 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	TP126 Soil Pile	11/2/07	ND	NA	NA
Total Cyanide	MW104 (30.0-32.0 ft.)	6/27/08	ND	NA	NA
Total Cyanide	MW104 (30.0-32.0 ft.) MW106 (26.0-28.0 ft.)	6/27/08	ND	NA	NA
•					
Total Cyanide	MW105 (26.0-26.3 ft.)	6/30/08	ND	NA NA	NA NA
Total Cyanide	MW103 (20.0-22.0 ft.)	7/1/08	ND		
Total Cyanide	Total Cyanide	7/2/08	ND	NA	NA
Total Cyanide	MW102 (22.0-22.0 ft.)	7/7/08	ND Overside 0.0124 mmm	NA Orașe devetar Carrada	NA Otan dand is 200 and
Total Cyanide	VOAMW-101	10/30/08	Cyanide 0.0124 ppm	Groundwater Sample	Standard is 200 ppb
Total Cyanide	VOAMW-104	10/30/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-106	10/30/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-102	10/31/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-103	10/31/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-105	10/31/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-105 DUP	10/31/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMWR-101	10/30/08	ND	Groundwater Sample	NA
Total Cyanide	VOAMWR-102	10/31/08	ND	Groundwater Sample	NA
Total Cyanide	VOA SS-1	2/17/09	ND	NA	NA
Total Cyanide	VOA SS-2	2/17/09	ND	NA	NA
Total Cyanide	VOA SS-3	2/17/09	ND	NA	NA
Total Cyanide	VOA SS-4	2/17/09	ND	NA	NA
Total Cyanide	VOA SS-5	2/17/09	ND	NA	NA
Total Cyanide	VOA SS-6	2/17/09	ND	NA	NA
Total Cyanide	VOAMW-101	7/27/09	ND	Groundwater Sample	NA
Total Cyanide	VOAMWR-101	7/27/09	ND	Groundwater Sample	NA
Total Cyanide	VOAMWR-102	7/27/09	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-102	7/27/09	ND	Groundwater Sample	NA
Total Cyanide	VOAMW-101 DUP	7/27/09	ND	Groundwater Sample	NA
PCBs	VOAMW-101	7/27/09	ND	Groundwater Sample	NA

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<u>Sample</u> <u>Type</u>	Sample Name	Date	<u>Result</u>	Commercial SRO	Residential SRO
PCBs	VOAMW-101 DUP	7/27/09	ND	Groundwater Sample	NA
PCBs	VOAMW-102	7/29/09	ND	Groundwater Sample	NA
PCBs	VOAMW-105	7/29/09	ND	Groundwater Sample	NA
PCBs	VOAMW-106	7/29/09	ND	Groundwater Sample	NA
PCBs	VOABIOCELL101	8/7/09	AROCLOR1260 940 ppb	1 ppm	1 ppm
PCBs	VOABIOCELL104	8/7/09	ND	NA	NA
PCBs	VOABIOCELL107	8/7/09	ND	NA	NA



Attachments 5



Analytical Services* 1565 Jefferson Road, Bidg 300, Ste. 360, Rochester, NY 14623 | 585.288.5380 | 585.288.8475 (fax) www.caslab.com

October 25, 2011

Mr. Stephen J. DeMeo Bergmann Associates 28 East Main Street 200 First Federal Plaza Rochester; New York 14614-1909

Re: Volunteers of America Submissions #: R2740668, R2844756 and R1005989

Dear Mr. DeMeo:

Per your request dated September 22, 2011, we have evaluated certain data from the above referenced submissions for the possible presence of petrogenic and pyrogenic compounds. Our findings are as follows:

- Lab Submission R2740668 Order # 1051294; TP105 (15.0-15.5') sampled 11/2/2007: Examination of the chromatogram for the SW846 8015B testing yielded no distinct findings. The chromatography does not match any standards.
- Lab Submission R2844756 Order # 1114430; MW-103 (20-22.0) sampled 7/1/2008: Examination of the chromatogram for the SW846 8015B testing showed the possible presence of a light lubricating oil.
- Lab Submission R2844756 Order # 1114871; MW101 (22-23FT) sampled 7/2/2008: Examination of the chromatogram for the SW846 8015B testing showed the possible presence of a light lubricating oil.
- Lab Submission R1005989-005; TP-132 (15.0-15.5') sampled 10/26/2010: Examination of the chromatogram for the SW846 8015C testing showed the possible presence of a light lubricating oil.

Our SW846 8015 testing only includes standards of a petrogenic nature as described above. This testing does not include standards of a pyrogenic nature. However, the samples above were also analyzed for Semivolatile Organic Compounds by SW846 8270. This testing showed the presence of Polycyclic Aromatic Compounds that are pyrogenic in nature for all of the above samples.

If you should have any questions or concerns, please contact me at (585) 672-7470.

Sincerely,

COLUMBIA ANALYTICAL SERVICES

Carlton Beechler Project Manager