VOLUNTARY CLEANUP PROGRAM SITE INVESTIGATION/REMEDIAL ALTERNATIVES REPORT

ROCO, LTD SITE 1746 DALE ROAD CHEEKTOWAGA, NEW YORK

Prepared For:

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1.0 INTRODUCTION

Leader Professional Services, Inc. ("Leader") was retained by Jaeckle, Fleischmann & Mugel, LLP ("JFM") to prepare a Site Investigation/Remedial Alternatives Report, under the Voluntary Cleanup Program ("VCP") guidelines, for the property at 1746 Dale Road, Cheektowaga, Erie County, New York (hereafter referred to as "the Site"). Figure 1 is a Site Location Map.

1.1 LOCATION AND LEGAL DESCRIPTION OF THE SITE

The Site is located on the northwest corner of Dale Road and Anderson Road and is part of lot No. 24, Township 11, Range 7 (Section, Lot and Block No. 102.03-2-30) and has the following coordinates: Latitude (North) 42.904900 - 42° 54' 17.6" and Longitude (West) 78.771851 - 78° 46' 18.7".

The Site is owned by RoCo, Ltd. (formerly known as the Rotary Company, Inc.) and is currently comprised of one single-story building structure of approximately 33,000 square-feet. The Rotary Company, Inc. sold certain assets including its name to the Husvar Group in 1994. The company then changed its name to RoCo, Ltd. The Husvar Group leased the Site from RoCo, Ltd. in 1994 to approximately 1998. In 1999 the Site was leased to Diversified Manufacturing, Inc. The Site is currently leased to Upstate Farms Cooperative, Inc. for warehouse space.

1.2 SITE AND VICINITY CHARACTERISTICS

The Site is zoned for commercial and light manufacturing. The closest body of water to the Site is Cayuga Creek, which is located approximately 1.5 miles southeast of the Site. The properties in the general vicinity of the Site are light industrial companies. Davis Electrical Supply Company (SBL No.102.03-2-29) is adjacent to the Site to the north and operates as a commercial electrical lighting equipment distributor. Prior to 1949, Kolk Manufacturing operated at this location as a cutlery manufacturer and metal fabricator.

Anderson Road forms the eastern boundary of the Site and Dale Road forms the southern boundary. Upstate Farms Cooperative, Inc. (SBL No.102.03-2-20) is the adjacent property to the west. Figure 2 shows the Tax Map for the Site and the neighboring properties.

1.3 Description Of The Site Structures

The Site is irregular in shape with one irregularly shaped building structure. Refer to Figure 3 for a Site Plan that depicts the Site's layout and building locations. The building was built in approximately 1946 and is comprised of cement block, and slab-on-grade construction. The Site has a total street frontage on Dale Road of approximately 365 feet and a total street frontage on Anderson Road of approximately 220 feet. The Upstate Farms Cooperative, Inc. property abuts the Site to the west with Davis Electric Supply Company property to the north. The building encompasses the majority of the Site with an asphalt parking area located in the eastern portion of the Site.

1.4 Nearby Public Areas Of Concern

The Niagara Transformer Corporation is located south of the Site across Dale Road. A Remedial Investigation/Feasibility Study ("RI/FS") and remedial design activities have been conducted at this facility to access and remediate a release of polychlorinated biphenyl ("PCB") contamination. Based on the investigations done at this facility and the fact that groundwater and surface flow directions appear to be in a southerly direction, it is unlikely that the Site has been impacted due to migration of contamination from the Niagara Transformer Corporation.

Public areas of concern located in close proximity to the Site are: 1) St. Joseph's Hospital, located approximately 0.8 miles northwest of the Site; and 2) Cheektowaga Central High School and Union Road School, both located approximately 1.6 miles northeast of the Site. The Walden Galleria Mall is located approximately 0.8 miles to the northeast and the Thruway Mall is located approximately 0.4 miles west of the Site. The

Upstate Farms Cooperative, Inc. facility is located adjacent to the Site to the west and the St. Adalbert Cemetery is located across Dale Road, southwest of the Site.

1.5 Site History

The following sections summarize available historical information for the previous 50 years.

1.5.1 History of the Site Transactions

Below is a summary of the property transactions associated with the Site.

Careo Oxygen Corporation	1924
General American Transportation Corp.	pre-1946
(Formerly General American Tank Car Corp.)	
Walden Properties	1946
W. Weiss and others	1949
The Rotary Company, Inc.	1954
RoCo, Ltd.	1994

1.5.2 Previous Site Uses

In approximately 1924, the Careo-Oxygen Co. Air Reduction Plant operated on-Site. Two railroad lines, branching to four lines, traversed the eastern portion of the Site. The buildings associated with this air reduction plant were removed and the Site was vacant up to the construction of the current building structure in approximately 1946. The manufacturing operations in the current structure are summarized in Sections 1.5.3.

Approximate Year of Purchase

1.5.3 Type Of Operations And Chemical Substances Used Or Manufactured

The on-Site operations since the building's initial construction were reportedly precision sheet metal fabrication, metal weldments, and assemblies. In addition to these activities, there were manufacturing, shearing, punching, forming, stamping, machining, painting and silk screening, metal preparation and finishing. The materials involved in the manufacturing process included stainless steel, aluminum, brass, copper, exotic metals, specialty metals, extrusions, and plastics.

Mr. William M. Weiss, the current president of RoCo, Ltd., worked at the Site on Saturdays and summers from the early 1950s through 1956. Mr. Weiss also visited the Site many times each year from 1956 through 1979. From 1980 through 1994, Mr. Weiss was president of the company. Based on his recollection over the period spanning the early 1950s through 1994, the only process chemicals used, except for the paint and paint-related materials, occurred in the Metal Prep Room. The Metal Prep Room is located in the northwest corner of the facility. Metal cleaning in preparation for painting and aluminum iriditing were the only processes conducted in this area.

The information presented below regarding on-Site chemical usage was obtained from the 1998 Phase I Environmental Site Assessment ("ESA") performed by Panamerican Environmental, Inc. The chemicals observed and their locations (see Figure 3) were reported as follows:

- 1. Shipping and Receiving Area
 - pH Buffer Solutions
 - Glypure EG Crystal Clear
 - Antifreeze Extender
- 2. Silk Screen Storage Area
 - Flammable Storage Cabinet for Inks & Resins
 - Floor Drain
- 3. Painting Room Area
 - Paint Spray Booths (2)

- 55-gallon container for empty containers and rags (solvent odor noted)
- Flammable Storage Cabinets (3) for solvents (i.e., toluene) and spray cans
- Hazardous waste accumulation area containing a 55-gallon drum (grounded) labeled "Waste Paint Loose Pack" – Waste Code D001, F003)

4. Metal Preparation/Processing Area

This area contained 10 approximately 600-gallon dip tanks that were labeled as follows:

- Iron Phosphate
- Phosphoric Acid
- Chromic Cyanide
- Sulfuric Acid
- Hot Water
- Caustic Soda
- Cold Water
- Alkaline Cleaner
- Nitric Acid
- Water Rinse

An L-shaped cement trough was located behind the tanks. The trough reportedly drains to the sanitary sewer line. Air vents, open to the exterior environment are located at the base of the trough. Drainpipes for overflow were also observed within this area as well as a manhole sewer drain and a floor drain beneath a handwashing sink. A 55-gallon drum storage area was also located in this room containing the following chemicals:

- Acid Deoxidizer 2213
- Chem Cote 3057 Iron Phosphate
- Chem Clean 1220 Alkaline Cleaner
- Chem Etch 7100
- Mineral Spirits

A green-colored liquid was observed spilled on the floor and an old white-colored stain was observed in the area of the dip tanks.

5. Grinding Room Area – contained a Paint Storage Room and a Flammable Liquids Room

Paint Storage Room

- Three 55-gallon containers without labels marked full
- 30 to 40 paint cans on shelves
- Polyurethene enamel
- Mill Special paint
- A 1-gallon container of Toluene
- 5-gallon container of a Curing Agent

Flammable Liquids Room

- Three 55-gallon drums
- Containers of thinner, catalyst and finisher

6. Compressor and Boiler Room

Numerous 5-gallon containers of oil and grease (some were observed to be opened) were present. Spills and leaks on the floor were observed within this area as well as a floor drain that reportedly connects to the sewer. A cabinet located just outside of the doorway to this room contained containers of enamel, spray paint, lubricants, and brake cleaner.

7. Electrical Room

- Numerous pieces of electrical equipment were observed (No labeling pertaining to PCB oils)
- 8. Receiving/Shear and Punch/Assembly Area
 - A dehumidifier with a 5-gallon container of oily water mixture was observed.

9. Compressor Room

This area was designated as a Hazardous Waste Storage Area. Seventeen (17) 55-gallon drums were observed, filled with the following chemicals:

- Phosphate
- (3) 55-gallon drums
- Chem Seal 3601
- (5) 55-gallon drums
- Chemcid 2213
- (2) 55-gallon drums
- Etch Caustic Soda
- (3) 55-gallon drums
- Chemcid 2213
- (4) 55-gallon drums
- Glycerin
- (2) 1-gallon containers

10. Scrap Drum Area

A scrap drum area was located on the north side of the building. Fourteen (14) empty drums were observed in this area. The area was enclosed with a fence and also contained scrap metal and miscellaneous discarded materials.

1.5.4 Information Regarding Spills Or Other Releases Of Chemical Substances On The Site

As previously mentioned, the Panamerican ESA identified a green-colored liquid spilled on the concrete floor and a white-colored stain was observed in the area of the dip tanks within the Metal Preparation/Processing Area. Spills and leaks on the floor were observed within the Compressor and Boiler Room area. There have been no reported releases outside the building.

1.5.5 Review Of Existing Aerial Or Other Photographs Of The Site

The 1924 Sanborn map indicated that the Site operated as the Careo-Oxygen Company Air Reduction Plant. The plant was located primarily in the southwestern portion of the Site; however, there was a small structure located in the northeast corner of the Site. The Buffalo Steel Car Co., Inc. was located east of the Site. Two railroad lines entered the

Site from the southeast and then branched into four-five different lines before exiting the Site to the north.

The 1939 Sanborn Map indicated that no building structures were located on-Site at this time; however, the railroad lines were still present. The small building was no longer present and the structure previously noted as the Buffalo Steel Car Co., Inc. was listed as vacant.

The 1949 Sanborn Map indicated that a building structure was located in the southwest portion of the Site. A small portion of a larger building structure abutted the Site along the northern border. The previous location of the Buffalo Steel Car Co., Inc. included some building additions and was labeled as Road Machinery Sales & Service.

The 1959 Sanborn Map indicated that the Rotary Co., Inc. operated on-Site. The building footprint showed the building slightly smaller than it exists today. The building additions to the east and west were not included at this time. The neighboring property to the north was the Kolk Manufacturing Company, manufacturers of cutlery and metal stampings. The building structure was primarily located in the eastern portion of the property and had the same footprint as the current building structures used by Davis Electrical Supply Company. There were no building structures visible on the adjoining property to the west.

1.6 Regulatory History

The Site historically operated under both air and wastewater permits and completed SARA and NYS Hazardous Material Reporting. The Site's air permits were registered with the NYSDEC Division of Air. An odor complaint to the NYSDEC in January 1998 resulted in a change in elevation of the Site's stack height.

The Site discharged wastewater from the facility to the Town of Cheektowaga and the Buffalo Municipal Sewer System under a permit by the Buffalo Sewer Authority (TC/BPDES Permit No. 98-01-CH001). Semi-annual monitoring reports were submitted

for monitoring the wastewater discharged from the metal preparation line, which released wastewater to the floor drain and subsequently discharged to the municipal sewer system. No exceedences were noted in the Town of Cheektowaga records.

The October 18, 1998 Panamerican Environmental, Inc. Phase I ESA noted that a number of 55-gallon drums and containers were observed during the Site reconnaissance. The Site was designated as a small quantity generator of hazardous waste under RCRA. Heritage Environmental Services, Inc. of Indianapolis, Indiana, transported and disposed of the Site's hazardous waste. The Phase I ESA reported that records were reviewed indicating that the Site had completed USEPA and NYSDEC hazardous waste and hazardous material reports, had records of waste analysis, and had satisfied RCRA and SARA reporting requirements. The USEPA completed a hazardous waste compliance inspection at the Site in 1992 with no reported violations; however, a 1996 NYSDEC hazardous waste compliance inspection reported some violations requiring corrective action. According to the database search performed on the Site by Environmental Data Resources, Inc., the Site was listed in the following environmental databases:

1) RCRA Small Quantity Generator database ("RCRIS-SQG")

This database is associated with waste storage operations. Two violations were noted associated with generator land band requirements and other generator requirements.

2) The Facility Index System ("FINDS") list.

The Site description as reported under the CERCLIS-NFRAP section states that approximately 92 kg of spent plating bath solutions is generated on a weekly basis from electroplating operations. Of this 92 kg, 0.2 kg contains chromium-bearing salts, which are used as an inorganic paint pigment.

3) The Comprehensive Environmental Response Compensation, and Liability Information System ("CERCLIS") and No Further Remedial Action Planned ("NFRAP") database.

No details were available on this listing; however, this database contains sites that have been removed from the CERCLIS database.

4) Hazardous Waste Disposal Inventory ("HSWDS") database.

This database includes known, suspected, or de-listed hazardous substance waste disposal sites. The Phase I ESA notes that the Site may have been in this database due to a Preliminary Assessment ("PA") having been completed on the facility in 1986 by the US EPA. No further action was required. The NY HSWDS section indicates that the Site is a commercial paint facility. In addition, the Site reportedly operated as an electroplater.

1.7 Previous Studies

Several studies have been completed for the Site. Additionally, a Phase II ESA was conducted immediately west of the Site on Upstate Farms Cooperative, Inc. property. An October 19, 1998 Phase I ESA was performed by Panamerican Environmental, Inc. for Mr. Charles Husvar, the President of The Rotary Company, Inc. (formerly known as the Husvar Group). The Rotary Company was leasing the Site from the current owner, RoCo, Ltd. The Phase I ESA identified some issues of environmental concern such as: 1) flammable storage areas; 2) three separate waste storage areas (no secondary containment was noted for one of these areas); 3) floor stains and minor spills were observed in some areas; 4) staining and discoloration was observed surrounding various dip tanks and around a waste drum within a waste storage area adjacent to the press break room; and 5) stains and signs of spillage were observed surrounding a number of opened 5-gallon containers of oil and grease in the compressor/boiler room.

An October 1999 Phase II ESA was completed by Panamerican Environmental, Inc. for Upstate Farms Cooperative, Inc. and Harter, Secrest & Emery. This Phase II ESA was performed at the Site to assess the potential for subsurface contamination. The results of this subsurface investigation indicated that organic solvent contamination was detected above the NYSDEC Technical and Administrative Guidance Memorandum:

Determination of Soil Cleanup Objectives and Cleanup Levels ("TAGM") No. 4046 guidelines dated January 24, 1994. A number of analytes were detected; however, two compounds (trichloroethene and vinyl chloride) were above the NYSDEC TAGM 4046 guidance values (see Table 1 – Previous Studies Soil Analysis). Some RCRA metals were detected below NYSDEC TAGM 4046 guidance values; however, B5 results indicated RCRA metals; cadmium, chromium and mercury were detected slightly above TAGM 4046 guidance values. B5 is located at the base of the driveway of Davis Electrical Supply Company along Anderson Avenue.

A March 3, 2000 Analytical Data/Soil Investigation Report was prepared by Frontier Technical Associates, Inc. for RoCo, Ltd. This report was prepared to assess the possible presence of volatile organic compounds ("VOCs") at the Site. The results of the investigation indicated that VOCs were detected above the NYSDEC TAGM 4046 guidelines. Table 1 lists the seven VOCs detected and their concentrations. According to the report, trichloroethene and tetrachloroethene were the most commonly found compounds. The other compounds detected could potentially have resulted from the breakdown of the trichloroethene and the tetrachloroethene through chemical and microbial decomposition of chlorinated solvents or trace constituents present in other reagents. No groundwater was encountered during this investigation. The presence of VOCs appears to be primarily located in the northwest portion of the Site at depths ranging between 2–12 feet.

A July 2000 Phase II ESA was prepared by TriTech Environmental Health and Safety, Inc. for Upstate Farms Cooperative, Inc. and Harter, Secrest & Emery. The Phase II ESA was performed at the neighboring property, west of the Site. The investigation was completed to assess the potential for subsurface contamination adjacent to the RoCo, Ltd. Site. This study detected VOC contamination in the southeast portion of Upstate's property at depths ranging between 4-12 feet. The highest VOC contamination encountered was bordering the RoCo, Ltd. Site.

1.8 Description Of Intended Site Use

The Site is currently leased to Upstate Farms Cooperative, Inc., which uses the facility as a warehouse. The future intended use of the Site is commercial and industrial.

1.9 Purpose

Previous studies detected chlorinated organic compounds (e.g., primarily trichloroethene ["TCE"] and tetrachloroethene ["PCE"]) in subsurface soil samples from the Site and the Upstate Farms Cooperative, Inc. property. These compounds were found at the Site, and the limits of the contamination were not identified to the north, south or east. The purpose of this VCP study was to further delineate the extent of contamination in soil and groundwater, to quantify the mass and volume of impacted soil and groundwater and to identify a cost effective remedial alternative for the Site.

1.10 Scope of Work

Task 1: Review of Background Information and Site Reconnaissance

Initially, Leader reviewed available Site historical information and conducted interviews to evaluate the past use of the Site. Leader visited the Site and observed the interior of the building to evaluate potential source areas (i.e., sump pits and floor cracks) and to assess potential boring locations.

Task 2: Project Kick-off Meeting

Leader hosted a kick-off meeting to discuss project management and communications. Additionally, Site access issues and agreements were discussed to ensure that Leader and its subcontractors had access to the Site, the Upstate Farms Cooperative, Inc. property and the Davis Electrical Supply Company property.

Task 3: Subsurface Explorations and Analytical Testing Program

The locations of the subsurface explorations were refined based on the findings of Task 1. Prior to initiation of fieldwork, Leader prepared a NYSDEC-approved Work Plan that included a Quality Assurance/Quality Control ("QA/QC") and a Site-specific Health and Safety Plan for its employees.

Leader retained Zebra Environmental, Inc. ("Zebra") to provide a track-mounted Geoprobe to the Site for three days of subsurface explorations. Approximately 19 boreholes were advanced to a depth of 16-feet (approximately 11 outside and 8 inside the building). Approximately 4 samples were collected in each boring at depths of 0-4 feet, 4-8 feet, 8-12 feet and 12-16 feet. Each soil sample was screened in the field using a PID. Twenty-four (24) soil samples were selected for analytical testing.

Based on Task 1, the results of previous studies and the PID concentrations measured during the soil sampling program, five (5) of the borings were converted into monitoring wells [4 outside (GW-1, GW-2, GW-4 and GW-5) and 1 inside the building (GW-3)]. These wells were developed and sampled in accordance with the NYSDEC protocols.

Task 4: Monitoring Well Survey and Groundwater Elevation Measurements

Following installation of the monitoring wells, the location and elevation of the monitoring points at each well (i.e., top of flush-mount well box) were surveyed. The depth to groundwater was then measured in each well and the direction of groundwater flow was estimated based on these data.

Task 5: Volume Estimate

Leader reduced the data collected in the field and prepared a figure showing the chlorinated solvent concentration data. These data were compared to applicable clean-up objectives. An estimate of the volume of soil and groundwater requiring remediation was prepared.

Task 6: Evaluation of Remedial Alternatives

Based on a review of technologically feasible remedial technologies for the Site, four alternatives were identified for further evaluation. These alternatives were evaluated based on effectiveness, implementability and cost to identify the most cost-effective alternative for the Site.

Task 7: Written Report

This written report was prepared relating the findings of the study.

1.11 Report Organization

The report includes the following sections:

Section 1: Introduction.

This section summarizes the background of the Site and the activities leading up to the Site Investigation/Remedial Alternatives Report.

Section 2: Description of Investigation Activities.

This section summarizes the Geoprobe exploration program and the details of the soil and groundwater sampling and testing programs.

Section 3: Investigation Findings.

This section summarizes the results of the soil and groundwater sampling and testing program and the geology and hydrogeologic conditions of the Site.

Section 4: Human Health Exposure Assessment.

This section summarizes the contaminants found in the VCP investigation and their potential impact to human health at the Site and surrounding properties.

Section 5: Development and Evaluation of Remedial Alternatives.

This section summarizes the volume and extent of contamination at the Site and the evaluation of remedial alternatives for the Site.

Section 6: Conclusions and Recommendations.

This section summarizes the conclusions of the VCP investigation and describes the tasks involved in implementing the selected remedial alternative.

Section 7: Limitations.

This section summarizes the limitations of this report.

Section 8: References.

This section summarizes the references used in developing this report.

Included with this report are the summary tables (Appendix A), figures (Appendix B); remedial cost analysis tables (Appendix C); photographs of field activities (Appendix D), test boring/monitoring well logs (Appendix E), analytical laboratory reports (Appendix F) and data completeness report (Appendix G).

2.1 GEOPROBE EXPLORATION PROGRAM

Leader retained Zebra to provide a Geoprobe unit to the Site for the purpose of test boring/monitoring well installation and soil sampling on October 25, November 1, and November 2, 2001. Six Geoprobe borings (BH-1, BH-2, BH-3, BH-4, GW-1, and GW-5) were completed in the exterior portion of the Site (see Appendix D – Photograph No. 1) and eight Geoprobe borings (BH-8, BH-9, BH-10, BH-11, BH-12, BH-13, BH-14, and GW-3) were completed within the interior of the Site building (see Appendix D – Photographs 2, 3 and 4). Additionally, two Geoprobe borings (BH-7, and GW-4) were completed on the adjoining property to the west, the Upstate Farms Cooperative, Inc. property, and three Geoprobe borings (BH-5, BH-6, and GW-2) were completed on the adjoining property to the north, the Davis Electrical Supply Company. These borings were advanced to depths ranging from approximately fourteen (14) feet to twenty (20) feet below ground surface.

2.2 SOIL SAMPLING AND TESTING PROGRAM

Figure 3 shows the locations of the Geoprobe borings. For each of the nineteen (19) borings, acetate liners were inserted into four-foot long micro tip sampling devices. Approximately 4 samples were collected in each boring at depths of 0-4 feet, 4-8 feet, 8-12 feet, and 12-16 feet (see Appendix D – Photograph No. 5). The four-foot soil samples were then divided into two, 2-foot long soil samples and screened using a PID to assess whether VOCs were present (see Appendix D – Photograph No. 6). The soil samples collected were then characterized using the Burmister Soil Classification System. In addition to the soil strata information, the amount of sample recovery, the presence of soil staining, and the relative moisture content were recorded on boring logs for each bore

hole (see Appendix E – Test Boring/Monitoring Well Logs). A portion of each sample was placed in a clean sample jar. Soil waste produced during the soil boring activities was placed back in the boring hole it originated from. Stained soil and soil with elevated PID measurements that was not chosen for sampling, was containerized for off-Site disposal in an appropriate disposal or treatment facility.

Approximately 24 soil samples were selected for TCL VOC analysis using USEPA Method 8260 (see Table 3 – Soil Analysis for Volatile Organic Compounds). Of these 24 soil samples, six samples [BH-11 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (10'-12'); GW-4 (6'-8'); and GW-5 (8'-10')] were also analyzed for semi-volatiles using USEPA Method 8270D, PCBs using USEPA Method 8082A, Pesticides using USEPA Method 8081B and Priority Pollutant Metals. The samples were sent to Paradigm Environmental Laboratories in Rochester, New York using appropriate chain of custody procedures.

2.3 GROUNDWATER SAMPLING AND TESTING PROGRAM

Five (5) Geoprobe borings (GW-1, GW-2, GW-3, GW-4 and GW-5) were converted into groundwater monitoring wells upon completion. GW-1 and GW-2 are located north of the Site on the Davis Electrical Supply Company property. GW-3 is located in the northwest corner of the building interior. GW-4 is located east of the Site on the Upstate Farms Cooperative, Inc. property. GW-5 is located along the southwestern border of the Site (see Figure 3).

A 2-inch diameter, schedule 4D, PVC monitoring well was constructed in each monitoring well borehole. Approximately 5-inches of QRock sand was placed in the base of the boreholes. A 10-foot long PVC screen was then placed at the base of each borehole attached to approximately 5-feet of PVC riser. A sand filter pack was then poured around the screened interval. On the top of the filter pack, approximately 6-12 inches of bentonite pellets were placed to form a seal. A flush-mounted well box was

fitted over the PVC casing and sealed in place with concrete. Each monitoring well was then fitted with a watertight locking well cap.

Following completion of the monitoring wells, each monitoring well was evacuated using a dedicated 1 ½-inch bailer to free the well screen of sediment and to enhance the communication between the screen and the groundwater zone. Groundwater monitoring wells GW-1, GW-2, GW-3, GW-4 and GW-5 were evacuated on November 8, 2001 (see Appendix G – Well Development Logs).

Samples from each monitoring well were collected in accordance with the Site-specific QA/QC Plan. On November 9, 2002, samples were collected using dedicated 1 ½-inch diameter PVC bailers to prevent cross-contamination. Groundwater samples from GW-1, GW-2, GW-3, GW-4 and GW-5 were submitted for analyses for TCL VOC analysis USEPA Method 8260. To assess downgradient water quality, GW-5 was originally targeted for a complete laboratory analyses for TCL VOC analysis USEPA Method 8260, Semi-Volatile analysis USEPA Method 8270, PCB analysis USEPA Method 8082, pesticides analysis USEPA Method 8081, and Priority Pollutant Metals; however, little sample volume was available in monitoring well GW-5. Thus, this testing was completed on samples collected from GW-3 to further evaluate the full range of contaminants near GW-3, which appeared to contain the highest VOC contamination levels. The samples were sent to Paradigm Environmental Laboratories in Rochester, New York using appropriate chain of custody procedures.

2.4 SURVEY

On November 15, 2001, Leader retained the services of McIntosh & McIntosh, P.C. to perform a survey at the Site. The locations and elevations for each boring hole and monitoring well were surveyed. The elevations were referenced to NAVD 88. Additionally, McIntosh & McIntosh, P.C. surveyed the buildings and property lines around the Site and developed an AutoCAD file of pertinent Site information.

2.5 GROUNDWATER ELEVATION MEASUREMENTS

Following surveying of the monitoring well locations, the depth to groundwater was then measured in each well on November 8, 2001, using a Solinist water level indicator. Water level measurements were taken to the nearest hundredth of a foot (see Table 2 – Groundwater Elevations and Figure 4 – Groundwater Contour Map).

3.1 GEOLOGY/HYDROGEOLOGIC CONDITIONS

The Site is located on the Lake Erie Plain, which is approximately six to twelve miles wide and extends from the Onondaga Escarpment (northern border) to northern Chautauqua County. This plain was covered by glacial lakes in recent geologic time and is relatively flat near the Site.

The predominate soil in the vicinity of the Site is a lacustrine silty clay, reportedly deposited when the Lake Erie plain was occupied by a series of glacial lakes from approximately 10,000 to 14,000 years ago. This deposit consists predominantly of a medium to stiff, gray to brown, silty clay to clayey silt and is generally not conducive to groundwater flow. These soils are thought to overlie shales and limestones of the Middle Devonian Skaneateles Formation. Depth to bedrock at the Site is unknown; however, bedrock was encountered at depths ranging from 44 to 54 feet below ground surface at the Niagara Transformer Site, which is located south of the Site, across Dale Road.

The on-Site borings completed during the Phase II ESA by Frontier Technical Associates, Inc. encountered no groundwater to a maximum depth of 20-feet. The underlying soils were reportedly fine sand to silty clays with some gravel. The TriTech Environmental Health and Safety, Inc. Phase II ESA reported groundwater at 8 to 9 feet from ground surface, immediately west of the Site.

During the VCP Investigation, the approximate depth to the upper water-bearing zone was between 1 and 10 feet below the ground surface. Based on the Geoprobe borings competed, the overburden soil was comprised of fine to coarse sand in the upper two feet followed by a mixture of silty clay and fine to coarse sand lenses to the bottom of the boreholes.

Based on the November 8, 2001 monitoring well water elevations, the direction of groundwater flow is generally north to south. The hydraulic gradient is approximately 0.06. However, based on the low permeability of overburden soils and the apparent distribution of contaminants, little north to south migration of contaminants has occurred.

3.2 SUBSURFACE SOIL TESTING RESULTS

Twenty-four (24) soil samples [BH-1 (8'-10'); BH-2 (8'-10'); BH-3 (8'-10'); BH-4 (0'-2'); BH-4 (8'-10'); BH-5 (8'-10'); BH-6 (8'-10'); BH-7 (6'-8'); BH-7 (8'-10'); BH-8 (8'-10'); BH-9 (6'-8'); BH-10 (8'-10'); BH-11 (8'-10'); BH-12 (8'-10'); BH-13 (8'-10'); BH-14 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (6'-8'); GW-3 (10'-12'); GW-3 (16'-18'); GW-4 (6'-8'); and GW-5 (8'-10')] were analyzed for TCL VOC analysis using USEPA Method 8260 (see Table 3 – Soil Analysis for Volatile Organic Compounds). Samples were composites from these depth ranges based on visual and odor indications of contamination and/or PID measurements. Below is a narrative summary of the analytes detected.

Carbon tetrachloride was detected in BH-11 (8'-10'). However, this compound did not exceed the NYSDEC soil cleanup objective (TAGM No. 4046, December 2000) for carbon tetrachloride, which is 600 parts per billion ("PPB").

Cis-1,2-dichloroethene was detected in BH-1 (8'-10'); BH-3 (8'-10'); BH-4 (0'-2'); BH-4 (8'-10'); BH-5 (8'-10'); BH-6 (8'-10'); BH-7 (6'-8'); BH-7 (8'-10'); BH-9 (6'-8'); BH-10 (8'-10'); BH-11 (8'-10'); BH-13 (8'-10'); BH-14 (8'-10'); GW-1 (8'-10'); and GW-3 (16'-18'). A NYSDEC soil cleanup objective is not available for this compound.

Trans-1,2-dichloroethene was detected in BH-4 (0'-2') at 12.7 PPB. This concentration does not exceed the NYSDEC soil cleanup objective of 300 PPB for this compound.

Tetrachloroethene was only detected in BH-7 (6'-8') at 3,990 PPB. This concentration exceeds the NYSDEC soil cleanup objective of 1,400 PPB for this compound.

Trichloroethene was detected in the following samples: BH-1 (8'-10'); BH-3 (8'-10'); BH-4 (8'-10'); BH-5 (8'-10'); BH-7 (6'-8'); BH-7 (8'-10'); BH-8 (8'-10'); BH-9 (6'-8'); BH-10 (8'-10'); BH-11 (8'-10'); BH-12 (8'-10'); BH-13 (8'-10'); BH-14 (8'-10'); GW-1 (8'-10'); GW-3 (2'-4'); GW-3 (6'-8'); GW-3 (10'-12'); GW-3 (16'-18'); GW-4 (6'-8'); and GW-5 (8'-10'). The NYSDEC soil cleanup objective for trichloroethene is 700 PPB. The following samples had concentrations exceeding this standard: BH-7 (6'-8')(10,900 PPB); BH-7 (8'-10')(2,130 PPB); BH-9 (6'-8')(1,150 PPB); BH-13 (8'-10')(1,440 PPB); GW-3 (2'-4')(2,310 PPB); GW-3 (6'-8')(16,800 PPB) and GW-3 (10'-12')(2,270 PPB).

Ethylbenzene was detected in GW-1 (8'-10'). This compound did not exceed the NYSDEC soil cleanup objective of 300 PPB for ethylbenzene.

Toluene was detected in BH-11 (8'-10') and GW-1 (8'-10') at concentrations below the NYSDEC cleanup objective. However, toluene was detected in BH-6 (8'-10') at 10,200 PPB, which exceeds the NYSDEC soil cleanup objective of 1,500 PPB for this compound.

M,p-xylene was detected in BH-3 (8'-10'), BH-8 (8'-10'), BH-11 (8'-10'), and GW-1 (8'-10') at concentrations below the NYSDEC soil cleanup objective for this compound.

Six (6) samples [BH-11 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (10'-12'); GW-4 (6'-8'); and GW-5 (8'-10')] were analyzed for semi-volatiles using USEPA Method 8270D. Those samples were selected for analysis based on PID concentrations measured during the soil sampling program, visual assessment and odors (see Table 4 – Soil Analysis for Semi-Volatile Organic Compounds).

Fluoranthene was detected in GW-5 (8'-10')(748 PPB). This compound did not exceed the NYSDEC soil cleanup objective of 50,000 PPB for fluoranthene.

Phenanthrene was detected in GW-5 (8'-10')(483 PPB). This compound did not exceed

the applicable NYSDEC soil cleanup objective of 50,000 PPB.

Bis (2-etylhexyl) phthalate was detected in BH-11 (8'-10')(674 PPB). This compound did not exceed the applicable NYSDEC soil cleanup objective of 50,000 PPB.

Pyrene was detected in GW-5 (8'-10')(620 PPB). This compound did not exceed the applicable NYSDEC soil cleanup objective of 50,000 PPB.

Six (6) samples [BH-11 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (10'-12'); GW-4 (6'-8'); and GW-5 (8'-10')] were analyzed for PCBs using USEPA Method 8082A. These samples were selected for PCB testing based on historical use information, visual assessment and odors (see Table 5 – Soil Analysis for PCBs). No PCBs were detected in the samples analyzed.

Six (6) samples [BH-11 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (10'-12'); GW-4 (6'-8'); and GW-5 (8'-10')] were analyzed for Pesticides using USEPA Method 8081B. These samples were selected for pesticide testing based on historical use information, visual assessment and odors (see Table 6 – Soil Analysis for Pesticides). No pesticides were detected in the samples analyzed.

Six (6) samples [BH-11 (8'-10'); GW-1 (8'-10'); GW-2 (8'-10'); GW-3 (2'-4'); GW-3 (10'-12'); GW-4 (6'-8'); and GW-5 (8'-10')] were analyzed for Priority Pollutant Metals. These samples were selected for testing based on visual assessment and odors (see Table 7 – Soil Analysis for Priority Pollutant Metals). Antimony, arsenic, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, and zinc were detected in each of the six samples below the NYSDEC recommended soil cleanup objectives and/or Site background levels. Note that GW-5 (8'-10') was selected as the background sample because its location is outside the area impacted by the contaminants of concern. Copper was detected slightly above 25 PPB (i.e., the concentration of copper in GW-5 (8'-10'))

in BH-11 (8'-10')(30.9 PPM) and GW-1 (8'-10')(27.1 PPM).

3.3 GROUNDWATER TESTING RESULTS

Groundwater samples from GW-1, GW-2, GW-3, GW-4 and GW-5 were submitted for analyses for TCL VOC analysis using USEPA Method 8260 (see Table 8 – Groundwater Analysis for Volatile Organic Compounds). Below is a narrative summary of the VOC analytes detected.

Cis-1,2-dichloroethene was detected in GW-1 (481 PPB), GW-2 (14.1 PPB), GW-3 (4,860 PPB), GW-4 (4,280 PPB), and GW-5 (10.6 PPB). These concentrations exceed the applicable NYSDEC groundwater standard of 5.0 PPB.

Trans-1,2-dichloroethene was detected in GW-1 (5.42 PPB). This concentration exceeds the applicable NYSDEC groundwater standard of 5.0.

Trichloroethene was detected in GW-1 (7.09 PPB), GW-2 (88.1 PPB), GW-3 (71,600 PPB), and GW-4 (8,230 PPB). These concentrations exceed the applicable NYSDEC groundwater standard of 5.0 PPB.

Vinyl chloride was detected in GW-1 (291 PPB) and GW-4 (707 PPB). These concentrations exceed the applicable NYSDEC groundwater standard of 2.0 PPB.

Benzene was detected in GW-5 (7.66 PPB). This concentration marginally exceeds the applicable NYSDEC groundwater standard of 0.70 PPB.

A groundwater sample from GW-3 was submitted for analysis for TCL semi-volatiles using USEPA Method 8270 (see Table 9 – Groundwater Analysis for Semi-Volatile Organic Compounds). No semi-volatiles were detected in this sample.

A groundwater sample from GW-3 was submitted for analysis for PCBs using USEPA Method 8082 (see Table 10 – Groundwater Analysis for Polychlorinated Biphenyls). No

PCBs were detected in the sample analyzed.

A groundwater sample from GW-3 was submitted for analysis for pesticides using USEPA Method 8081 (see Table 11 – Groundwater Analysis for Chlorinated Hydrocarbon Pesticides). No pesticides were detected in the sample analyzed.

A groundwater sample from GW-3 was submitted for analysis for priority pollutant metals (see Table 12 – Groundwater Analysis for Heavy Metals). Antimony, beryllium, mercury, selenium, silver, thallium, and zinc were detected at concentrations below applicable NYSDEC groundwater standards. However, arsenic (0.048 PPM, standard 0.025 PPM), cadmium (0.012 PPM, standard 0.005 PPM), chromium (0.516 PPM, standard 0.050 PPM), copper (0.434 PPM, standard 0.200 PPM), lead (0.135 PPM, standard 0.025 PPM), and nickel (0.158 PPM, standard 0.100 PPM) were detected marginally above the applicable NYSDEC groundwater standards.

3.4 CHLORINATED SOLVENT DELINEATION

Figure 5 includes the soil and groundwater analytes detected above applicable NYSDEC recommended soil cleanup objectives or groundwater standards. Figure 6 includes the VCP data and the pertinent data from previous studies. The shaded areas shown on Figure 6 represent the approximate limits of the chlorinated solvent contamination above applicable NYSDEC standards or guidance values. The limits of the areas were based on direct interpolation between known data points for soil and groundwater data collected from six to ten feet below ground surface.

The area associated with the elevated toluene concentration in soil near BH-6 is not on-Site and does not appear to be related to RoCo, Ltd.'s former activities. The slightly elevated benzene concentration in the GW-5 groundwater sample appears to be an isolated condition likely related to the use of this area of the Site for automobile parking. The metals concentrations detected in soil and groundwater at GW-3 are only marginally above applicable standards and are limited in extent based on previous metals testing

completed throughout the Site during the Panamerican Environmental Phase II ESA and soils testing during the current VCP Investigation. Thus, these analytes will not be addressed by this VCP. The area of contamination near GW-1 and BH-13 has been approximated based on the spacing between GW-1 and BH-3. The western area near GW-3 is fairly well delineated and the source appears to have been identified near GW-3.

4.1 DETECTED ANALYTES

The Site is located on a property zoned for light industrial manufacturing. Surrounding properties include a dairy product distribution center, an electrical transformer manufacturing facility and an electrical supply company. The RoCo, Ltd. building was constructed on a concrete slab and the surrounding property is sealed with asphalt. Past manufacturing operations conducted on- Site include sheet metal fabrication comprised of shearing, punching, machining, painting, silk screening, metal preparation, and metal finishing. A variety of chemicals were used in these processes such as acids, caustics, degreasing agents, paint, and paint-related solvents.

The VCP Investigation focused on chlorinated solvent contamination. The Site was also tested for the presence of semi-volatiles, pesticides, metals, and PCBs. Soil and groundwater samples were collected and analyzed using USEPA Methodology. The volatile and semi-volatile compounds and metals detected during this investigation were:

Volatiles

cis-1,2-dichloroethene (cis-DCE) trans-1,2-dichloroethene (trans-DCE) Trichloroethene (TCE) Tetrachloroethene (PCE) Carbon tetrachloride Vinyl chloride Benzene Toluene Ethylbenzene m,p-Xylene o-Xylene

Semi-Volatiles

Bis (2-ethylhexyl) phthalate Fluoranthene Pyrene Metals

Arsenic Lead Copper Cadmium Nickel

Chromium Zinc

A summary of the analytical data collected during this VCP is presented in Appendix A and the analytical laboratory reports are in Appendix F. The detection of a contaminant does not necessarily mean that its presence is a public health concern. Contaminants selected for further review are identified and evaluated in subsequent sections of this exposure assessment to assess whether exposure to them has public health significance. When selected for further evaluation in one medium, that contaminant will be reported in all media where it is detected. These contaminants are selected and discussed based upon the following factors:

- 1. Concentrations of contaminants in environmental media both on-Site and off-Site;
- 2. Sampling design, field data quality, and laboratory data quality; and
- 3. Comparison of on-Site and off-Site concentrations with background concentrations.

4.2 ON-SITE AND OFF-SITE CONTAMINATION

The VCP investigation data indicate that contamination is present in the groundwater and soil both on-Site and off-Site. It should be noted that the off-Site contamination exists at other industrial facilities, not residential properties.

SOIL

VOCs were detected in the near surface soil (0-4 feet) and in the subsurface soil (4-18 feet) at various locations throughout the Site. TCE was found at elevated levels below the concrete slab in the surface soil sample, GW-3 (2'-4'). VOCs were also detected above NYSDEC soil recommended cleanup objectives in the subsurface soils. Soil contaminants included cis-DCE with concentrations up to 592 PPB, trans-DCE at 12.7

PPB, PCE at 3,990 PPB, and TCE up to 16,800 PPB. Pesticides and PCBs were not found in any of the sampled soils. Metal analysis showed levels of copper slightly above background levels. Lead levels in New York State for industrial sites can range from 200 to 500 ppm. The lead levels found during the VCP were below this range. The levels of bis (2-ethylhexyl) phthalate, fluoranthene, and pyrene found were detected at levels below the TAGM 4046 levels.

GROUNDWATER

One round of groundwater samples was collected. The five groundwater monitoring wells were tested for VOCs, metals, semi-volatiles, pesticides, and PCBs. Levels of cis-DCE, trans-DCE, TCE, vinyl chloride, and benzene were detected above the 6 NYCRR Part 703 NYSDEC Water Quality Standards.

The on-Site and off-Site wells were installed to monitor the uppermost water-bearing zone. The antimony, beryllium, mercury, selenium, thallium and zinc levels in GW-3 were below applicable NYSDEC Groundwater Quality Standards. However, the arsenic, cadmium, chromium, copper, lead, and nickel concentrations in the groundwater were detected slightly above the NYSDEC standards.

There were no semi-volatiles, pesticides, or PCBs found in the tested groundwater samples.

4.3 QUALITY ASSURANCE AND QUALITY CONTROL

Appendix H includes the Data Usability Report, which concludes that adequate quality control measures were followed with regard to chain of custody, laboratory procedures, and data reporting. Paradigm Environmental Laboratory's NYSDOH certifications are included in Appendix H.

4.4 PATHWAY ANALYSES

To assess whether nearby residents and persons on-Site could be exposed to contaminants migrating from the Site, an evaluation was made of the environmental and human components that lead to potential human exposure. The pathway analysis consists of five elements: 1) a source or location of contamination; 2) fate and transport through an environmental medium; 3) a point of exposure; 4) a route of human exposure; and 5) an exposed population.

An exposure pathway is categorized as a completed or potential exposure pathway if the exposure pathway cannot be eliminated. A completed pathway occurs when the five elements of an exposure pathway link the contaminant source to a receptor population. Should a completed pathway exist in the past, present, or future, the population is considered exposed. A potential exposure pathway exists when one or more of the five elements are missing, or if modeling is performed to replace the real sampling data. Potential pathways indicate that exposure to a contaminant could have occurred in the past, could be occurring now, or could occur in the future. An exposure pathway can be eliminated if at least one of the five elements is missing and will never be present. The discussion that follows incorporates only those pathways that are important or relevant to the Site. There is also a discussion of the pathways that have been eliminated.

4.5 ELIMINATED EXPOSURE PATHWAYS

AIR

Ambient air has not been sampled at this Site; however, exposures to ambient air are not expected to be significant based on the levels of contaminants found in near surface soils. Also, either a concrete floor slab or an asphalt driveway/parking lot covers the on-Site and off-Site properties. The highest levels of TCE were found between 6 to 8 feet below ground surface within the building. This area is beneath the concrete slab and should not

affect the air quality within the building.

GROUNDWATER

The contaminated groundwater at the Site and the off-Site neighboring industrial properties will not come into contact with the public. The public drinking water supply in this area is not drawn from the upper water-bearing zone; therefore, there will be no workers or residents of the surrounding community exposed to the contaminated groundwater.

4.6 Completed Exposure Pathway

SOIL

Workers on-Site and neighboring industrial sites (i.e., Upstate Cooperative and Davis Electric) might be exposed to VOCs if construction activities disturb the soil beneath the asphalt driveways. Currently, the soil is contained below asphalt driveways and concrete-floored buildings that serve as a barrier to workers. Exposures to contaminants during excavation activities could occur through dermal contact, incidental ingestion, and possibly inhalation. The proposed remediation of contaminated soils should eliminate potential future exposures. In the interim, any excavation activities should be monitored.

GROUNDWATER

The public drinking water supply is not drawn from the on-Site water-bearing zone; therefore, exposures of workers and residents by VOC contaminated water has not occurred. Exposures of workers may occur in the future due to possible excavation activities. Exposures to contaminants could occur through dermal contact or incidental ingestion. The proposed remediation of the contaminated soils and groundwater should eliminate potential future exposures. In the interim, any excavation activities should be monitored.

4.7 TOXICOLOGICAL EVALUATION

DERMAL, INCIDENTAL INGESTION AND INHALATION

Construction workers engaged in on-Site and off-Site (neighboring industry) excavation activities have the potential for exposure to VOC and metal contaminants by multiple routes. Factory workers who could come in contact with contaminated soil during construction activities should be at low risk from exposure to VOCs due to safety precautions set-up prior to any groundbreaking. Individuals engaged in the actual cleanup activities could also be exposed, but use of proper procedures, appropriate dust suppression methods, personal protective equipment, and air monitoring procedures during cleanup would minimize this potential risk.

5.0 DEVELOPMENT AND EVALUATION OF REMEDIAL ALTERNATIVES

The following sections estimate the volume of impacted media, provide remedial cost estimates and include the basis for the preliminary selection of insitu bioremediation as the most cost-effective remedial alternative for the Site.

5.1 VOLUME ESTIMATE

Based on the surface area approximated on Figure 6 and the depths of contamination identified by the soil sample data, the volume of soil requiring remediation is approximately 1,900 cubic yards for the western area and 900 cubic yards for the eastern area. This approximation is based on the conservative estimate that the average depth of contamination is twelve feet below ground surface and that all soil below the groundwater table is impacted (i.e., the impacted zone would be from 3 to 12 feet, or 9 feet in thickness). This approach is conservative because the majority of the borings in the impacted areas did not indicate the presence of chlorinated solvent contamination below the 10-foot depth, based on photoionization detector readings. Additionally, because the soil sample from GW-3 (i.e., the probable source area) form the 16-18 foot interval indicated only trace amounts of TCE, it appears that the natural soils have formed a barrier to downward vertical migration of the chlorinated solvents. Remedial soil volume estimates are included in Appendix C.

5.2 REMEDIAL ALTERNATIVE EVALUATION

Based on a review of technologically feasible remedial technologies for the Site, four alternatives were identified for further evaluation. Each alternative provides distinct advantages and disadvantages. All four alternatives address the area of soil and groundwater contamination simultaneously because the area of groundwater contamination appears to be a subset of the contaminated soil area. A brief description of

each alternative is presented below with a preliminary discussion of its effectiveness, technical implementability and cost.

The remedial cost estimates for these alternatives were developed by contacting local remedial contractors and disposal facilities to obtain current cost information. Some components of the cost estimates were based on engineering estimates. The basis of the remedial cost estimates is included in Attachment C.

The remedial cost estimates provide a conservative estimate of the costs to address the chlorinated solvent contamination at the Site. The actual remedial costs are anticipated to be less than these estimates based on the probability that additional delineation in the vicinity of GW-1 will indicate that less than 900 cubic yards of soil will require remediation. However, note that the cost information presented herein is based on data collected at relatively large spacing intervals and that the extent of contamination has not been completely identified.

Alternative 1 - Excavation and Removal

This technology involves excavation of the contaminated soil, backfilling, restoration and disposal of the contaminated soil. Approximately, 953 tons of soil are anticipated to be hazardous waste (i.e., Toxicity Characteristic Leachate Procedure ["TCLP"] level of TCE greater than 0.5 parts per million) and approximately 1,863 tons of soil are anticipated to be non-hazardous waste. The contaminated soil can be disposed of at Waste Management's Model City (i.e., for the hazardous portion) or Seneca Meadows (i.e., for the non-hazardous portion) facilities. The total cost for this alternative, based on 2,817 tons of contaminated soil, is approximately \$407,000. Excavation dewatering and groundwater treatment/disposal costs were included in the estimate. The additional costs to excavate under the building were also estimated.

This alternative is effective in addressing the impacted soil and groundwater in a

relatively short time period. However, this alternative is expensive and implementing this alternative during operation of the warehouse building would be difficult. Additionally, of the alternatives considered, it represents the greatest potential for worker exposure.

Alternative 2 - Insitu Bioremediation

This technology involves insitu bioremediation of the soil and groundwater through addition of a proprietary compound called Hydrogen Release Compound ("HRC"), or equivalent, that enhances natural biodegradation of the chlorinated compounds. This technology appears to be appropriate for the Site based on the presence of the daughter products of TCE (i.e., indicating that natural biodegradation is already occurring) and the relatively shallow depth of the contamination.

A grid pattern of injection wells would be established in the area of contamination and the HRC would be injected and monitored until the soil and groundwater concentrations satisfy the cleanup levels. The total cost for this alternative is estimated to be approximately \$94,000. It is anticipated that two injections would be needed in the area of GW-3 to address this source area.

This alternative is effective in addressing the impacted soil and groundwater without disruption of the warehousing operations. This alternative may take approximately 2 years before satisfying cleanup objectives. This alternative appears to be the most cost-effective of the four alternatives evaluated.

Alternative 3 - Insitu Oxidation

This technology involves insitu treatment of soil and groundwater through the addition of permanganate (i.e., an oxidization agent). A grid pattern of injection wells is established in the area of contamination and the oxidation agents are

injected during at least two events or until the soil and groundwater concentrations satisfy the cleanup levels. The total cost for this alternative is estimated to be approximately \$901,000. The anticipated time to satisfy cleanup objectives is approximately one year.

This alternative is effective in addressing the impacted soil and groundwater without disruption of the warehousing operations. Additionally, it would achieve the cleanup objectives more rapidly than insitu bioremediation. However, this alternative is nearly 10 times more expensive than Alternative 2.

Alternative 4 - Soil Vapor Extraction with Insitu Oxidation

This technology involves the installation of shallow and deep sparge wells, venting wells, and groundwater extraction wells. This system would actively remove the chlorinated solvents from the soil and groundwater through subsurface airflow. The treatment system may include horizontal sparge tanks, catalytic oxidation units, and carbon absorption units.

Any residual contamination would be mitigated by chemical oxidation using the permanganate injection technology discussed above. The total costs for this alternative are estimated to be approximately \$1,290,000. The anticipated time to satisfy cleanup objectives is less than one year.

This alternative is effective in addressing the impacted soil and groundwater without disruption of the warehousing operations. Additionally, it would achieve the cleanup objectives more rapidly than Alternatives 2 or 3. However, this alternative is by far the most expensive alternative evaluated.

Based on a comparison of costs, implementability and effectiveness criterion, Alternative 2 is the most cost-effective alternative for the Site. Alternative 2 is the least expensive and can be implemented without facility disruption. Additionally, Alternative 2 would

result in the lowest potential risk to workers during implementation. Alternative 2 will satisfy cleanup objectives as effectively as the other alternatives, but will require the longest time to complete (i.e., 2 years or more).

6.1 CONCLUSIONS

Based on the results of this VCP investigation and the evaluation of feasible remedial alternatives, the following conclusions have been developed:

- During the VCP Investigation, the approximate depth to the upper water-bearing zone was between 1 and 10 feet below the ground surface. Based on the Geoprobe borings competed, the overburden soil was comprised of fine to coarse sand in the upper two feet followed by a mixture of silty clay and fine to coarse sand lenses to the bottom of the boreholes.
- Twenty-four soil samples were analyzed for TCL VOC analysis using USEPA Method 8260. Carbon tetrachloride, cis-1,2-dichloroethene, trans-1,2-dichloroethene, ethylbenzene, and m,p-xylene were detected; however, these compounds did not exceed the applicable NYSDEC soil cleanup objectives. Tetrachloroethene, trichloroethene, and toluene were detected at concentrations above the applicable NYSDEC recommended soil cleanup objectives.
- Six soil samples were analyzed for semi-volatiles using USEPA Method 8270D. Fluoranthene, phenanthrene, bis (2-etylhexyl) phthalate pyrene were detected. These compounds did not exceed the applicable NYSDEC soil cleanup objectives.
- Six soil samples were analyzed for PCBs using USEPA Method 8082A. No PCBs were detected in the samples analyzed.
- Six soil samples were analyzed for Pesticides using USEPA Method 8081B. No
 pesticides were detected in the samples analyzed.
- Six soil samples were analyzed for Priority Pollutant Metals. Antimony, arsenic, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver, thallium, and

zinc were detected below the NYSDEC recommended soil cleanup objectives and/or Site background levels. Copper was detected at levels marginally above the designated Site background levels; however, this condition does not appear to be a remedial concern because the upper water-bearing zone is not supplying any on or off-Site wells.

- Groundwater samples were submitted for analyses for TCL VOC analysis using USEPA Method 8260. Cis-1,2-dichloroethene was detected in all of the groundwater samples at concentrations that exceeded applicable NYSDEC groundwater standards. Trans-1,2-dichloroethene, trichloroethene, vinyl chloride, benzene were detected in some groundwater samples at concentrations that exceeded applicable NYSDEC groundwater standards.
- Elevated VOC concentrations in groundwater were generally detected in areas of elevated VOC concentrations in soil.
- A groundwater sample was submitted for analysis for TCL semi-volatiles using USEPA Method 8270. No semi-volatiles were detected in the sample analyzed.
- A groundwater sample was submitted for analysis for PCBs using USEPA Method 8082. No PCBs were detected in the sample analyzed.
- A groundwater sample was submitted for analysis for pesticides using USEPA
 Method 8081. No pesticides were detected in the sample analyzed.
- Antimony, beryllium, mercury, selenium, silver, thallium, and zinc were detected at concentrations below applicable NYSDEC groundwater standards. However, arsenic cadmium, chromium, copper, lead, and nickel were detected at concentrations above the applicable NYSDEC groundwater standards. These elevated metals concentrations do not appear t warrant remediation due to their limited extent and the lack of supply wells in the area.

- The VCP data and the pertinent data from previous studies were used to approximate the extent of chlorinated solvent contamination above applicable NYSDEC standards or guidance values. The limits of the areas were based on direct interpolation between known data points for soil and groundwater data collected from six to ten feet below ground surface (the zone primarily impacted by the chlorinated solvents).
- Two areas of soil and groundwater above applicable standards or guidance values were identified. One area is in the northwestern portion of the Site in the vicinity of GW-3 and the second area is in the northeastern portion of the Site near GW-1.
- Based on a qualitative exposure assessment, the impacted soil and groundwater are contained below asphalt driveways and concrete-floored buildings that serve as a barrier. The public drinking water supply is not drawn from the on-Site water-bearing zone; therefore, exposures of workers and residents by VOC contaminated water has not occurred. Exposures to contaminants during excavation activities could occur through dermal contact, incidental ingestion, and possibly inhalation. The proposed remediation of contaminated soils should eliminate potential future exposures. In the interim, any excavation activities should be monitored.
- Based on a review of technologically feasible remedial technologies for the Site, four alternatives were identified for further evaluation. Based on a comparison of costs, implementability and effectiveness criterion, the insitu bioremediation alternative is effective in achieving cleanup levels and is by far the most cost-effective alternative for the Site. This alternative can be implemented without facility disruption and represents the lowest potential risk to workers during implementation. It does, however, require the longest time to implement, approximately 2 years.

6.2 RECOMMENDATIONS

Based on the evaluation of technologically feasible remedial alternatives, it is recommended that an insitu bioremediation program be initiated at the Site. This

remedial program should be initiated in the spring of 2002 and would include the following tasks, listed below in sequential order.

- 1. A Remediation Work Plan would be developed specifying realistic cleanup objectives for protecting human health and the environment.
- 2. Supplemental Investigation A limited supplemental investigation in the area of GW-1 would be conducted to further delineate the extent of contamination in this area.
- 3. Treatability Study A limited bench scale treatability study would be conducted to verify applicability of the selected technology on Site soil samples.
- 4. HRC Injection Following review of the results from tasks 2 and 3 above, HRC injection, or equivalent, would occur using a Geoprobe unit over a grid pattern covering the areas of concern.
- 5. Monitoring A limited monitoring program would be implemented monthly to include groundwater level and oxygen reduction measurements. Groundwater samples would be collected and analyzed from selected monitoring wells on a quarterly basis.
- 6. Second Injection Approximately twelve months following the HRC injection, the groundwater samples will be reviewed and based on the results a second injection of HRC may be necessary depending on the levels of contamination at that time.
- 7. Closure Report A closure report would be prepared documenting the bioremediation program and its results.

This Voluntary Cleanup Program Site Investigation/Remedial Alternative Report was prepared by Leader Professional Services, Inc. in accordance with generally accepted practices of other consultants preparing similar reports, and we observed that degree of care and skill generally exercised by other consultants under similar circumstances and conditions. The analyses and conclusions submitted in this report are based upon data and information, provided by others, and are contingent upon their validity. Cost and volume estimates included herein should be considered approximate.

This Voluntary Cleanup Program Site Investigation/Remedial Alternative Report was prepared exclusively for Jackle, Fleischmann & Mugel, LLP for specific application to the RoCo, Ltd, Cheektowaga, New York Site in accordance with generally accepted engineering practice. No other warranty, expressed or implied, is made.

8.0 REFERENCES

The following references were used to develop this Voluntary Cleanup Program Report for Jaeckle, Fleischmann & Mugel, LLP:

- 1. Frontier Technical Associates, Inc., Analytical Data/Soil Investigation Report, March 2000.
- Koenigsberg, Stephen S. and Ward, C.H. Accelerated Bioremediation of Chlorinated Compounds in Groundwater, Batelle Press, Columbus, Ohio, 2000.
- Koenigsberg, Stephen S. and Norris, Robert D. Accelerated Bioremediation Using Slow Release Compounds, Batelle Press, Columbus, Ohio, 1999.
- 4. Merrit, Frederick S., **Standard Handbook for Civil Engineers**, Third Edition, McGraw-Hill, Book 6, New York, New York, 1983.
- 5. Hackman, E. Ellsworth, **Toxic Organic Chemicals: Destruction and Waste Treatment**, Noyes Data Corporation, Park Ridge, New Jersey, 1978.
 - 6. Metcalf and Eddy, Inc., **Wastewater Treatment: Treatment, Disposal, and Reuse**, McGraw-Hill Book Co., New York, New York, 1979.
- 7. New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum No. 4046, **Determination of Soil Cleanup Objectives and Cleanup Levels**, NYSDEC, December 2000.
- 8. New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum No. 4030, Selection of Remedial Actions at Inactive Hazardous Waste Sites, NYSDEC, May 1990.

- New York State Department of Environmental Conservation Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York ("6 NYCRR"), Part 703 Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, NYSDEC, January 2000.
- New York State Department of Environmental Conservation Division of Hazardous Waste Remediation, Record of Decision – Niagara Transformer Site, NYSDEC, December 1993.
- 11. Panamerican Environmental, Inc., Phase I Environmental Site Assessment,
 October 1998.
- 12. Panamerican Environmental, Inc., Phase II Subsurface Environmental Assessment, The Rotary Company, Inc., October 1999.
- TriTech Environmental Health and Safety, Inc., Phase II Environmental Site Assessment, July 2000.
- 14. Todd, David K., Groundwater Hydrology, John Wiley & Sons, New York, 1980.
- U.S. Environmental Protection Agency, Guide Manual for Minimizing Pollution from Waste Disposal Sites, EPA-600/2-78-142, 1978.
- U. S. Environmental Protection Agency, Remedial Action at Waste Disposal Sites, Office of Emergency and Remedial Response, Washington, D.C., EPA/625/6-85/006, October 1985.
- U. S. Environmental Protection Agency, Risk Reduction Engineering Laboratory
 Treatability Data Base, Office of Emergency and Remedial Response, Washington,
 D.C., 1991.

- 18. U.S. Environmental Protection Agency, Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA, Office of Emergency and Remedial Response, Office of Solid Waste and Emergency Response, Washington, D.C., EPA/540/G- 89/004, October 1988.
- 19. U.S. Environmental Protection Agency, Technology Screening Guide for Treatment of CERCLA Soils and Sludges, Office of Emergency and Remedial Response, Office of Solid Waste and Emergency Response, Washington, D.C., EPA/540/2-88/004, September 1988.
- 20. Wagner, K., Remedial Action Technology for Waste Disposal Sites, Second Edition, Noyes Data Corporation, Park Ridge, New Jersey, 1986.
- Woodward-Clyde Consultants, Remedial Investigation Niagara Transformer Corporation, August 1993.

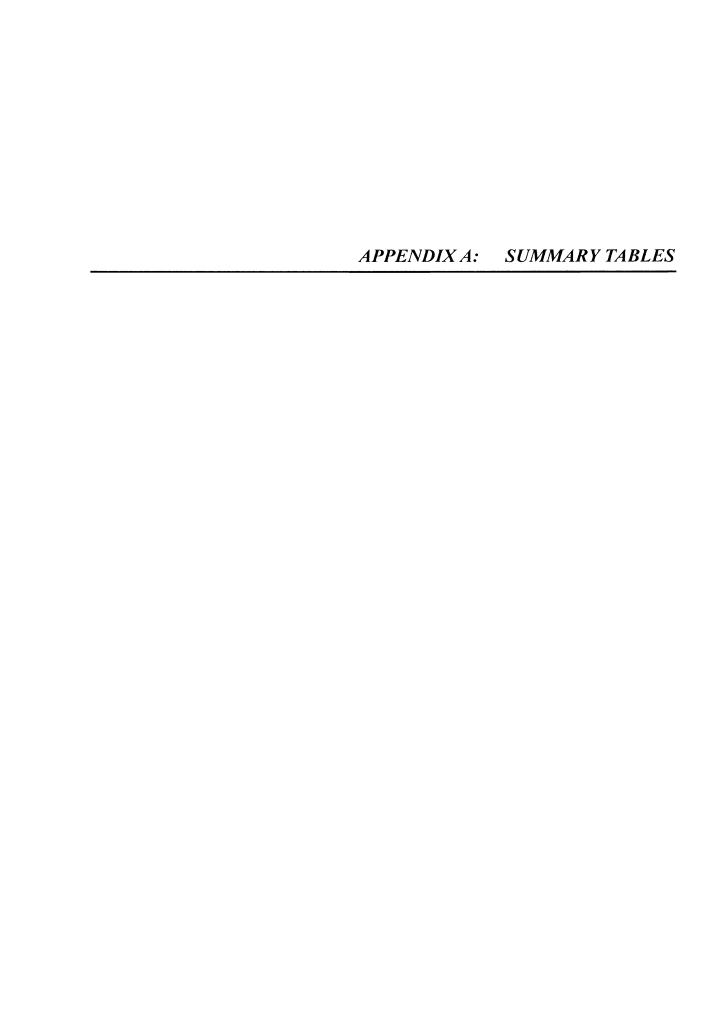


Table 1 Previous Studies - Soil Analysis RoCo, Ltd 1746 Dale Road, Cheektowaga, New York John Charles **VOC Compounds Detected in Soil** Samples (ppb) TAGM 4046 Soil Cleanup Objectives (ppb) 1,400 400 700 No Value 200 200 100 Panamerican Phase II ESA Boring 4 (NW corner of RoCo Site) 1'-7' 257,000 0 0 Boring 6 (NW corner of RoCo Site) 14,000 0 FTA Phase II ESA Boring 5A (Davis Electric Driveway) 260 0 0 4'-6' 14 0 43 0 0 2,100 6'-8' 2,100 24 150 160 330 8'-10' 0 2,100 110 17 8 10'-12 0* 45* 22* 0* 5.600* 293* Boring 6A (Davis Electric Driveway) 18 0 1,400 2,800 15,000 160,000 6,200 5,300 8'-10 10'-12 68,692* 2,242* Boring 7A (Davis Electric Driveway) 2'-4' 14 0 4'-6' 15,000 0 6'-8' 18,000 0 8'-10' 34,000 3,000 10'-12' 4,782* 421* Boring 8A (Davis Electric Driveway) 3,500 5,600 0 0 25,000 2,200 0 6'-8' 0 57,000 6,100 0 8'-10' 0 18 39 10'-12' 0* 1.2* 1.5* 3.3* Boring 4A (Davis Electric Driveway) 4'-6' 130,000 33,000 0 6'-8' 73,000 240,000 8,100 4,100 8'-10 48,000 4.900

4,456*

22

0

0 0*

10'-12

4'-6'

6'-8'

8'-10'

10'-12

Boring 9A (Davis Electric Driveway)

43,636*

1,200

0

0 0* 3,727*

0

14

6

0*

D. V. Dal V.											
Phase II ESA Upstate Farms Cooperative, Inc.											
BH-10											
7.5'-8'	ND<9.34	ND<9.34	ND<9.34								
BH-11											
6'-8'	4,000	11,100	218								
9'-10'	69	150	56								
10'-12'		2,170	ND<20.1								
13'-14.5'	165	2,000	117								
BH-13											
6'-8'	ND<25	243	1,110								
8'-10'	ND<8.07	ND<8.07	490								
10'-12'	ND<22.2	ND<22.2	977								
12'-15'	ND<8.96	28	18								
BH-14											
8'-10'	ND<7.48	ND<7.48	ND<7.48								
10'-12'	ND<10.4	ND<10.4	ND<10.4								
BH-15											
6'-8'	ND<10.3	356	61								
8'-10'	ND<10.7	143	76								
BH-16											
6'-8'	10		ND<9.21								
8'-10'	ND<6.24	36	ND<6.24								
BH-17											
8'-10'	ND<7.77	25	ND<7.77								
BH-18											
8'-10'	ND<7.13	ND<7.13	ND<7.13								
BH-19											
8'-11'	ND<5.53	ND<5.53	ND<5.53								
BH-20											
4'-6'	11,800		254								
6'-8'	9,400		366								
8'-10'	1,340	473	99								
10'-12'	867	361	149								
12'-14'	377	225	85								
18'-20'	38	856	346								

NOTES:

- 1) Concentrations are in µg/kg, or ppb.
- 2) ND (Non-Detect)
- 3) Shaded areas indicate an exceedence of applicable standards.
- Based on ratio of the photoionization detector measurements

TABLE 2 GROUNDWATER ELEVATIONS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

76.		NO	VEMBER 8,	2001	
	GW-1	GW-2	GW-3	GW-4	GW-5
Depth to Groundwater (ft.)	1.13	1.20	2.44	3.08	9.83
Monitoring Point Elevation (ft.)	655.79	656.92	658.34	658.40	659.51
Groundwater Elevation (ft.)	654.66	655.72	655.90	655.32	649.68

Notes:

Monitoring point elevations shown refer to NAVD 88.

TABLE 3 SOIL ANALYSIS FOR VOLATILE ORGANIC COMPOUNDS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

VOLATILE ORGANIC COMPOUNDS	BH-1 (8'-10')	BH-2 (8'-10')	BH-3 (8'-10')	BH-4 (0'-2')	BH-4 (8'-10')	BH-5 (8'-10')	BH-6 (8'-10')	BH-7 (6'-8')	BH-7 (8'-10')	BH-8 (8'-10')	BH-9 (6'-8')	BH-10 (8'-10')	BH-11 (8'-10')	BH-12 (8'-10')	BH-13 (8'-10')	BH-14 (8'-10')	GW-1 (8'-10')	GW-2 (8'-10')	GW-3 (2'-4')	GW-3 (6'-8')	GW-3 (10'-12')	GW-3 (16'-18')	GW-4 (6'-8')	GW-5 (8'-10')	NYSDEC Soil Cleanup Objectives
Sample Collection Date:	10/25/01	10/25/01	10/25/01	10/25/01	10/25/01	10/25/01	10/25/01	10/25/01	10/25/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/02/01	11/01/01	11/01/01	11/02/01	11/02/01	11/02/01	11/02/01	11/01/01	11/01/01	
Units:	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg
Bromodichloromethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
Bromomethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA_
Bromoform	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
Carbon tetrachloride	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	12.4	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	600
Chloroethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	1,900
Chloromethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
2-Chloroethyl vinyl ether	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9 04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
Chloroform	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	300
Dibromochloromethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
1,1-Dichloroethane	ND<8.91	ND<11.0	ND<10.2	ND<8 48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	200
1,2-Dichloroethane	ND<8.91	ND<11.0	ND<10.2	ND~8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	100
1,1-Dichloroethene	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	400
cis-1,2-Dichloroethene	18.8	ND<11.0	73.7	19.2	17.6	29.1	545	592	325	ND<9.86	127	16.6	12.8	ND<8.51	423	107	76.4	ND<8.40	ND<112	ND<187	ND<147	53.6	ND<84.6	ND<9.13	NA
trans-1,2-Dichloroethene	ND<8.91	ND<11.0	ND<10.2	12.7	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	300
1,2-Dichloropropane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
cis-1,3-Dichloropropene	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
trans-1,3-Dichloropropene	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
Methylene chloride	ND<22.3	ND<27.6	ND<25.5	ND<21.2	ND<22.6	ND<26.3	ND<636	ND<688	ND<135	ND<24.7	ND<53.6	ND<25.1	ND<9.24	ND<21.3	ND<56.5	ND<27.5	ND<19.7	ND<21.0	ND<279	ND<467	ND<367	ND<20.0	ND<212	ND<22.8	100
1,1,2,2-Tetrachloroethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	600
Tetrachloroethene	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	3.990	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	1,400
1,1,1-Trichloroethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	800
1,1,2-Trichloroethane	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<110	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	NA
Trichloroethene	118	ND<11.0	.18.1	ND<8.48	25.1	189	ND<254	10,900	2,130	65.8	1,150	89.9	116	67.5	1,440	628	82.0	ND<8.40	2,310	16,800	2,270	90.0	681	, 12.7	700
Vinyl Chloride	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	200
Benzene	ND<8.91	ND<11.0	ND<10.2	ND<8.48	ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	ND<9.24	ND<8.51	ND<22.6	ND<11.0	ND<7.88	ND<8.40	ND<112	ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	60
Chlorobenzene					-											ND<11.0								ND<9.13	
Ethylbenzene				ND<8.48				ND<275		ND<9.86	ND<21.4		To the second of	ND<8.51	ND<22.6		14.40	ND<8.40	ND<112			ND<8.02			5,500
Toluene			ND<10.2		ND<9.04	ND<10.5	10,200	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1	23.8	ND<8.51	ND<22.6	ND<11.0	46.40	ND<8.40	ND<112		ND<147		ND<84.6		1,500 1,200
m,p, - xylene	ND<8.91	ND<11.0	20.4		ND<9.04	ND<10.5		ND<275	ND<53.9	11.1	ND<21.4	ND<10.1	23.6	ND<8.51	ND<22.6						ND<147	ND<8 02 ND<8.02		ND<9.13	1,200
o-xylene	ND<8.91	ND<11.0	ND<10.2		ND<9.04	ND<10.5	ND<254	ND<275	ND<53.9	ND<9.86	ND<21.4	ND<10.1		ND<8.51	ND<22.6		15.30	ND<8.40	ND<112 ND<112	ND<187 ND<187	ND<147	ND<8.02	ND<84.6	ND<9.13	1,200 NA
Styrene						ND<10.5				ND<9.86		ND<10.1				ND<11.0		ND<8.40	ND<112	ND<934	ND<735	ND<8.02 ND<40.1	ND<84.6	ND<9.13	200
Acetone					ND<45.2		ND<1,270			ND<49.3	ND<107		ND<46.2	ND<42.6			ND<39.4 ND<19.7	ND<42.0 ND<21.0	ND<338	ND<467	ND<367	ND<20.0	ND<212	ND<22.8	NA NA
Vinyl acetate				ND<21.2		ND<26.3		ND<688		ND<24.7	ND<53.6		ND<23.1 ND<23.1	ND<21.3 ND<21.3	ND<56.5 ND<56.5			ND<21.0	ND<279	ND<467	ND<367	ND<20.0			300
2-Butanone 4-Methyl-2-pentanone	ND<22.3 ND<22.3		ND<25.5 ND<25.5	ND<21.2 ND<21.2	ND<22.6 ND<22.6	ND<26.3 ND<26.3	ND<636 ND<636	ND<688		ND<24.7 ND<24.7	ND<53.6		ND<23.1	ND<21.3	ND<56.5	ND<27.5	ND<19.7	ND<21.0	ND<279	ND<467	ND<367	ND<20.0	ND<212	ND<22.8	1,000
2-Hexanone			ND<25.5			ND<26.3	ND<636	ND<688	ND<135	ND<24.7 ND<24.7	ND<53.6		ND<23.1		ND<56.5					ND<467	ND<367	ND<20.0	ND<212	ND<22.8	NA
												ND<25.1		ND<21.3				ND<21.0		ND<467	ND<367	ND<20.0	ND<212	ND<22.8	2,700
Carbon disulfide	ND<22.3	ND<27.6	ND<25.5	ND<21.2	ND<22.6	ND<26.3	ND<636	ND<688	ND<135	ND<24.7	ND<53.6	ND~23.1	ND<23.1	ND<21.3	ND<30.3	ND~21.3	ND~19.7	110 -21.0	112 -21.7		112 507	1.0 -20,0	.10 415	112 42.0	

- Concentrations are in μg/kg, or ppb.
 ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Soil cleanup objectives were obtained from the NYSDEC TAGM #4046, dated December 2000.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable NYSDEC Soil Cleanup Objectives.

TABLE 4 SOIL ANALYSIS FOR SEMI-VOLATILE ORGANIC COMPOUNDS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

COMPOUNDS C8'-10' C								
Units μg/kg ND <904 NA					e. * 1			NYSDEC Rec. Soil Cleanup Objective (PPB)
Benzyl alcohol ND< 864 ND<4845 ND<794 ND<887 ND<904 NA Bis (2-chloroethyl) ether ND<3345	Sample Collection Date:	11/02/01	11/01/01	11/01/01	11/02/01	11/01/01	11/01/01	
Bis (2-chloroethyl) ether ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA Bis (2-chloroisopropyl) ether ND <345	Units:	μg/kg						
Bis (2-chloroisopropyl) ether ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA 2-Chlorophenol ND <345	Benzyl alcohol	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	NA
2-Chlorophenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 800 1,3-Dichlorobenzene ND <345	Bis (2-chloroethyl) ether	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
1,3-Dichlorobenzene	Bis (2-chloroisopropyl) ether	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
1,4-Dichlorobenzene	2-Chlorophenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	800
1,2-Dichlorobenzene	1,3-Dichlorobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	1,600
Hexachloroethane	1,4-Dichlorobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	8,500
2-Methylphenol ND < 345 ND < 338 ND < 317 ND < 339 ND < 331 ND < 362 100,000 or 4-Methylphenol ND < 345	1,2-Dichlorobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	7,900
4-Methylphenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 900 N-Nitrosodimetylamine ND <345	Hexachloroethane	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
N-Nitrosodimetylamine ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA N-Nitroso-di-n-propylamine ND <345	2-Methylphenoi	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	100,000 or MDL
N-Nitroso-di-n-propylamine ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA Phenol ND <345	4-Methylphenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	900
Phenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 30 or M Benzoic acid ND< 864	N-Nitrosodimetylamine	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Benzoic acid ND< 864 ND <845 ND <794 ND <847 ND <904 2,700 Bis (2-chloroethoxy) methane ND <345	N-Nitroso-di-n-propylamine	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Bis (2-chloroethoxy) methane ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA 4-Chloroaniline ND <345	Phenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	30 or MDL
4-Chloroaniline ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 220 or M 4-Chloro-3-methylphenol ND <345	Benzoic acid	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	2,700
4-Chloro-3-methylphenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 240 or Nover 1 2,4-Dichlorophenol ND <345	Bis (2-chloroethoxy) methane	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
2,4-Dichlorophenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 400 2,6-Dichlorophenol ND <345	4-Chloroaniline	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	220 or MDL
2,6-Dichlorophenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA 2,4-Dimethylphenol ND <345	4-Chloro-3-methylphenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	240 or MDL
2,4-Dimethylphenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA Hexachlorobutadiene ND <345	2,4-Dichlorophenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	400
Hexachlorobutadiene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA Isophorone ND <345	2,6-Dichlorophenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Isophorone ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 4,400 2-methylnapthalene ND <345	2,4-Dimethylphenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
2-methylnapthalene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 36,40 Naphthalene ND <345	Hexachlorobutadiene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Naphthalene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 13,00 Nitrobenzene ND <345	Isophorone	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	4,400
Nitrobenzene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 200 or N 2-Nitrophenol ND <345	2-methylnapthalene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	36,400
2-Nitrophenol ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 330 or N 1,2,4-Trichlorobenzene ND <345	Naphthalene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	13,000
1,2,4-Trichlorobenzene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 3,400 2-Chloronaphthalene ND <345	Nitrobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	200 or MDL
2-Chloronaphthalene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA Acenaphthene ND <345	2-Nitrophenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	330 or MDL
Acenaphthene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 50,000 Acenapthylene ND <345	1,2,4-Trichlorobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	3,400
Acenapthylene ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 41,00 4-Chlorophenyl phenyl ether ND <345	2-Chloronaphthalene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
4-Chlorophenyl phenyl ether ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 NA	Acenaphthene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
	Acenapthylene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	41,000
	4-Chlorophenyl phenyl ether	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Dibenzofuran ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 6,20	Dibenzofuran	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	6,200
Diethyl phthalate ND <345 ND <338 ND <317 ND <339 ND <331 ND <362 7,10	Diethyl phthalate	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	7,100
Dimethyl phthalate	Dimethyl phthalate	ND< 864	ND <845	ND < 794	ND <847	ND <827	ND <904	2,000

SEMI-VOLATILE ORGANIC COMPOUNDS	BH-11 (8'-10')	GW-1 (8'-10')	GW-2 (8'-10')	GW-3 (10'-12')	GW-4 (6'-8')	GW-5 (8'-10')	NYSDEC Rec. Soil Cleanup Objective (PPB)
Sample Collection Date:	11/02/01	11/01/01	11/01/01	11/02/01	11/01/01	11/01/01	
•							
Units: 2,4-Dinitrophenol	μg/kg ND <345	μg/kg ND <338	μg/kg ND <317	μg/kg	μg/kg	μg/kg	μg/kg 200 or MDL
2,4-Dinitrophenol	_			ND <339	ND <331	ND <362	
2,4-Dinitrotoluene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA 1 000 00
	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	1,000.00
Fluorene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Hexachlorocyclopentadiene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA NA
2-Nitroanaline	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	430 or MDL
3-Nitroaniline	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	500 or MDL
4-Nitroaniline	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	NA
4-Nitrophenol	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <362	100 or MDL
2,4,6-Trichlorophenol	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA_
2,4,5-Trichlorophenol	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	100,00
4-Bromophenyl phenyl ether	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Di-n-butyl phthalate	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	8,100
4,6-Dinitro-2-methylphenol	ND< 864	ND <338	ND <317	ND <847	ND <827	ND <904	NA_
Fluoranthene	ND <345	ND <338	ND <317	ND <339	ND <331	748	50,000***
Hexachlorobenzene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	410
N-Nitrosodiphenylamine	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Pentachlorophenol	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	1,000 or MDL
Anthracene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Phenanthrene	ND <345	ND <338	ND <317	ND <339	ND <331	483	50,000***
Benzidine	ND< 864	ND <845	ND <794	ND <847	ND <827	ND <904	NA
Benzo (a) anthracene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	224 or MDL
Bis (2-etylhexyl) phthalate	674	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Butylbenzylphthalate	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Chrysene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	400
3,3'-Dichlorobenzidine	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	NA
Pyrene	ND <345	ND <338	ND <317	ND <339	ND <331	620	50,000***
Benzo (b) fluoranthene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	1,100
Benzo (k) fluoranthene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	1,100
Benzo (g,h,i) perylene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Benzo (a) pyrene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	61 or MDL
Dibenz (a,h) anthracene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	14 or MDL
Di-n-octylphthalate	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	50,000***
Indeno (1,2,3-cd) pyrene	ND <345	ND <338	ND <317	ND <339	ND <331	ND <362	3,200

- 1) Concentrations are in μg/kg, or ppb.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Soil cleanup objectives were obtained from the NYSDEC TAGM #4046, dated December 2000.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable NYSDEC Soil Cleanup Objectives.
- 6) MDL Method Detection Limit

TABLE 5 SOIL ANALYSIS FOR POLYCHLORINATED BIPHENYLS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

POLYCHLORINATED BIPHENYLS	BH-11 (8'-10')	BH-13 (2'-4')	GW-1 (8'-10') Soil	GW-2 (8'-10') Soil	GW-3 (10'-12') Soil	GW-4 (6'-8') Soil	GW-5 (8'-10') Soil	NYSDEC Rec. Soil Cleanup Objective (PPM)
Sample Collection Date:	11/02/01	11/02/01	11/01/01	11/01/01	11/01/01	11/01/01	11/01/01	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PCB 1016	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1221	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1232	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1242	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1248	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1254	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10
PCB 1260	ND<0.47	ND<0.50	ND<0.55	ND<0.45	ND<0.54	ND<0.56	ND<0.62	10

- 1) Concentrations are in µg/kg, or PPB.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Soil cleanup objectives were obtained from the NYSDEC TAGM #4046, dated December 2000.
- 5) Shaded areas indicate analyte detection, darker shaded areas indicate an exceedence of applicable NYSDEC Soil Cleanup Objectives.

TABLE 6 SOIL ANALYSIS FOR CHLORINATED HYDROCARBON PESTICIDES

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

CHLORINATED HYDROCARBON PESTICIDES	BH-11 (8'-10')	GW-1 (8'-10')	GW-2 (8'-10')	GW-3 (10'-12')	GW-4 (6'-8')	GW-5 (8'-10')	NYSDEC Rec. Soil Cleanup Objective (PPB)
Sample Collection Date:	11/02/01	11/01/01	11/01/01	11/02/01	11/01/01	11/01/01	
	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg	μg/kg
alpha-BHC	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	110
gamma-BHC (Lindane)	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	60
beta-BHC	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	200
Heptachlor	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	100
delta-BHC	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	300
Aldrin	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	41
Heptachlor Epoxide	ND <3.4	ND <3.4	ND <3 2	ND <3.2	ND <3.4	ND <3.6	20
Chlordane	ND <34	ND <34	ND <32	ND <32	ND <34	ND <36	540
Endosulfan I	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	900
4,4'-DDE	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	2,100
Dieldrin	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	44
Endrin	ND <4.8	ND <4.8	ND <4.4	ND <4.5	ND <4.7	ND <5.1	100
Endosulfan II	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	900
4,4'-DDD	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	2,900
Methoxychlor	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	***
4,4'-DDT	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	2,100
Endrin Aldehyde	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	NA
Endosulfan Sulfate	ND <3.4	ND <3.4	ND <3.2	ND <3.2	ND <3.4	ND <3.6	1,000
Toxaphene	ND <171	ND <172	ND <159	ND <162	ND <168	ND <181	NA

- 1) Concentrations are in µg/kg, or PPB.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Soil cleanup objectives were obtained from the NYSDEC TAGM #4046, dated December 2000.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable NYSDEC Soil Cleanup Objectives.

TABLE 7 SOIL ANALYSIS FOR HEAVY METALS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

HEAVYMETALS	BH-11 (8'-10')	GW-1 (8 ⁴ -10')	GW-2 (8'-10')	GW-3 (10'-12')	GW-4 (6'-8')	GW-5 (8'-10')	NYSDEC Rec. Soil Cleanup Objective (PPM)
Sample Collection Date:	11/02/01	11/01/01	11/01/01	11/02/01	11/02/01	11/01/01	
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg (PPM)
Antimony	<6.65	<6.83	<6.64	<5.66	<6.35	<7.46	SB
Arsenic	7.06	2.58	2.39	1.20	5.18	4.12	7.5 or SB
Beryllium	<0 554	<0.569	<0.553	<0.472	<0.528	<0.622	0.16 (HEAST) OR SB
Cadmium	1.32	1.02	0.572	<0 472	1.24	1.50	1 or SB
Chromium	20.2	18.7	8.82	8.43	21.6	23.2	10 or SB
Copper	30.9	27.1	12.1	8.54	23.8	25.4	25 or SB
Lead	12.7	33.7	9.50	3.02	11.1	20.6	SB****
Mercury	<0.106	<0.0928	<0.0859	<0 0837	<0.0948	<0.0876	0.1
Nickel	23.2	16.0	8.92	<3.77	24.0	27.4	13 or SB
Selenium	<0.554	<0.569	<0.553	<0.472	<0.528	<0.622	2 or SB
Silver	<1.11	<1.14	<1.11	<0.942	<1.06	<1.24	SB
Thallium	<0.665	<0.683	<0.664	<0.566	<0.635	<0.746	SB
Zinc	66.3	78.6	48.4	39.3	56.5	82.1	20 or SB

- 1) Concentrations are in µg/kg, or ppb.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Soil cleanup objectives were obtained from the NYSDEC TAGM #4046, dated December 2000.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable NYSDEC Soil Cleanup Objectives.
- 6) The location of GW-5 is not in the delineated area of concern. The site background levels will be based on the results obtained in this sample. USEPA HEAST Database
- **** Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4-61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200-500 ppm.

TABLE 8 GROUNDWATER ANALYSIS FOR VOLATILE ORGANIC COMPOUNDS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

VOLATILE ORGANIC COMPOUNDS	GW-L	GW-2	GW-3	GW-4	GW-5	NYSDEC Groundwater Standards
Sample Collection Date:	11/09/01	11/09/01	11/09/01	11/09/01	11/09/01	
Units:	μg/L	μg/L	μg/L	μg/L	μg/L	μg/L
Bromodichloromethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Bromomethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Bromoform	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Carbon tetrachloride	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
Chloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	50.0
Chloromethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
2-Chloroethyl vinyl ether	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Chloroform	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	7.0
Dibromochloromethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	50.0
1,1-Dichloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
1,2-Dichloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
1,1-Dichloroethene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
cis-1,2-Dichloroethene	481	14.1	4,860	4.280	10.6	5.0
trans-1,2-Dichloroethene	5.42	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
1,2-Dichloropropane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
cis-1,3-Dichloropropene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
trans-1,3-Dichloropropene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Methylene chloride	ND<12.5	ND<5.00	ND<2,500	ND<500.	ND<5.00	5.0
1,1,2,2-Tetrachloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
Tetrachloroethene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
1,1,1-Trichloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
1,1,2-Trichloroethane	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Trichloroethene	7.09	88.1	71,600	8,230	ND<2.00	5.0
Vinyl Chloride	291	ND<2.00	ND<1,000	707	ND<2.00	2.0
Benzene	ND<5.00	ND<2.00	ND<1,000	ND<200	7.66	0.70
Chlorobenzene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
Ethylbenzene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
Toluene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
m,p, - xylene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
o-xylene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	5.0
Styrene	ND<5.00	ND<2.00	ND<1,000	ND<200	ND<2.00	NA
Acetone	ND<25.00	ND<10.0	ND<5,000	ND<1,000	ND<10.00	50.0
Vinyl acetate	ND<12.50	ND<5.00	ND<2,500	ND<500	ND<5.00	NA
2-Butanone	ND<12.50	ND<5.00	ND<2,500	ND<500	ND<5.00	50.0
4-Methyl-2-pentanone	ND<12.50	ND<5.00	ND<2,500	ND<500	ND<5.00	50.0
2-Hexanone	ND<12.50	ND<5.00	ND<2,500	ND<500	ND<5.00	NA
Carbon disulfide	ND<12.50	ND<5.00	ND<2,500	ND<500	ND<5.00	50.0

- 1) Concentrations are in µg/l, or ppb.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Groundwater Quality Standards were obtained from the NYSDEC NYCRR Part 703.5 Table 1 Groundwater Standards/Criteria, dated August 1999.
- 5) Darker shaded areas indicate an exceedence of applicable standards.

TABLE 9 GROUNDWATER ANALYSIS FOR SEMI-VOLATILE ORGANIC COMPOUNDS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

SEMI-VOLATILE ORGANIC COMPOUNDS	GW-3	NYSDEC Groundwater Standards (PPB)
Sample Collection Date:	11/13/01	
Units:	μg/L	μg/L
Benzyl alcohol	ND <25.0	NA
Bis (2-chloroethyl) ether	ND <10.0	NA
Bis (2-chloroisopropyl) ether	ND <10.0	NA
2-Chlorophenol	ND <10.0	50.0
1,3-Dichlorobenzene	ND <10.0	5.00
1,4-Dichlorobenzene	ND <10.0	5.00
1,2-Dichlorobenzene	ND <10.0	4.70
Hexachloroethane	ND <10.0	NA
2-Methylphenol	ND <10.0	5.00
4-Methylphenol	ND <10.0	50.0
N-Nitrosodimetylamine	ND < 10.0	NA
N-Nitroso-di-n-propylamine	ND <10.0	NA
Phenol	ND < 10.0	1.00
Benzoic acid	ND <25.0	50.0
Bis (2-chloroethoxy) methane	ND <10.0	NA
4-Chloroaniline	ND <10.0	5.00
4-Chloro-3-methylphenol	ND <10.0	5.00
2,4-Dichlorophenol	ND <10.0	1.00
2,6-Dichlorophenol	ND <10.0	NA
2,4-Dimethylphenol	ND <10.0	NA
Hexachlorobutadiene	NID < 10.0	NA
Isophorone	ND <10.0	50.0
2-methylnapthalene	ND <10.0	50.0
Naphthalene	ND <10.0	10.0
Nitrobenzene	ND <10.0	5.00
2-Nitrophenol	ND <10.0	5.00
1,2,4-Trichlorobenzene	ND <10.0	5.00
2-Chloronaphthalene	ND <10.0	NA
Acenaphthene	ND <10.0	20.0
Acenapthylene	ND <10.0	21.0
4-Chlorophenyl phenyl ether	ND <10.0	NA
Dibenzofuran	ND <10.0	5.00
Diethyl phthalate	ND <10.0	50.0
Dimethyl phthalate	ND <25.0	50.0

SEMI-VOLATILE ORGANIC COMPOUNDS	GW-3	NYSDEC Groundwater Standards (PPB)
Sample Collection Date:	11/13/01	
Units:	μg/L	μg/L
2,4-Dinitrophenol	ND <10.0	5.00
2,4-Dinitrotoluene	ND <10.0	NA
2,6-Dinitrotoluene	ND <10.0	5.00
Fluorene	ND <10.0	50.0
Hexachlorocyclopentadiene	ND <10.0	NA
2-Nitroanaline	ND <25.0	5.00
3-Nitroaniline	ND <25.0	5.00
4-Nitroaniline	ND <25.0	NA
4-Nitrophenol	ND <25.0	5.00
2,4,6-Trichlorophenol	ND <10.0	NA
2,4,5-Trichlorophenol	ND <25.0	100.00
4-Bromophenyl phenyl ether	ND <10.0	NA
Di-n-butyl phthalate	ND <10.0	50.00
4,6-Dinitro-2-methylphenol	ND <25.0	NA
Fluoranthene	ND <10.0	50.00
Hexachlorobenzene	ND <10.0	0.35
N-Nitrosodiphenylamine	ND <10.0	NA
Pentachlorophenol	ND <25.0	1.00
Anthracene	ND <10.0	50 .
Phenanthrene	ND <10.0	50
Benzidine	ND <25.0	NA
Benzo (a) anthracene	ND <10.0	2.0
Bis (2-etylhexyl) phthalate	ND <10.0	50.0
Butylbenzylphthalate	ND <10.0	50.0
Chrysene	ND <10.0	0.00
3,3'-Dichlorobenzidine	ND <10.0	NA
Pyrene	ND <10.0	50.00
Benzo (b) fluoranthene	ND <10.0	0
Benzo (k) fluoranthene	ND <10.0	0.0
Benzo (g,h,i) perylene	ND <10.0	5.0
Benzo (a) pyrene	ND <10.0	0.002 (ND)??
Dibenz (a,h) anthracene	ND <10.0	50.00
Di-n-octylphthalate	ND <10.0	50.0
Indeno (1,2,3-cd) pyrene	ND <10.0	0.0

- 1) Concentrations are in $\mu g/kg$, or ppb.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Groundwater Quality Standards were obtained from the NYSDEC NYCRR Part 703.5 Table 1 Groundwater Standards/Criteria, dated August 1999.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable standards.

TABLE 10 GROUNDWATER ANALYSIS FOR POLYCHLORINATED BIPHENYLS

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

POLYCHLORINATED BIPHENYLS	GW-3	NYSDEC Groundwater Standards (PPB)
Sample Collection Date:	11/14/01	
Units:	μg/L	μg/L
PCB 1016	ND<1.00	0.10
PCB 1221	ND<1.00	0.10
PCB 1232	ND<1.00	0.10
PCB 1242	ND<1.00	0.10
PCB 1248	ND<1.00	0.10
PCB 1254	ND<1.00	0.10
PCB 1260	ND<1.00	0.10

- 1) Concentrations are in µg/L, or PPB.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Groundwater Quality Standards were obtained from the NYSDEC NYCRR Part 703.5 Table 1 Groundwater Standards/Criteria, dated August 1999.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable standards.

TABLE 11 GROUNDWATER ANALYSIS FOR CHLORINATED HYDROCARBON PESTICIDES

RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

CHLORINATED HYDROCARBON PESTICIDES	GW-3	NYSDEC Groundwater Standards (PPB)
Sample Collection Date:	11/13/01	
Units:	μg/L	μg/L
alpha-BHC	ND<0.10	ND (<0.05)
gamma-BHC (Lindane)	ND<0.10	ND (<0.05)
beta-BHC	ND<0.10	ND (<0.05)
Heptachlor	ND<0.10	ND (<0.01)
delta-BHC	ND<0.10	ND (<0.05)
Aldrin	ND<0.10	ND (<0.01)
Heptachlor Epoxide	ND<0.10	ND (<0.01)
Chlordane	ND<0.10	0.1
Endosulfan l	ND<0.10	0.1
4,4'-DDE	ND<0.20	ND (<0.01)
Dieldrin	ND<0.20	ND (<0.01)
Endrin	ND<0.20	ND (<0.01)
Endosulfan II	ND<0.20	0,1
4,4'-DDD ·	ND<0.20	ND (<0.01)
Methoxychlor	ND<0.10	35.0
4,4'-DDT	ND<0.20	ND (<0.01)
Endrin Aldehyde	ND<0.20	NA
Endosulfan Sulfate	ND<0.20	0.1
Endo Ketone	ND<0.10	NA
Toxaphene	ND<2.00	NA

- 1) Concentrations are in μg/kg, or ppb.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Groundwater Quality Standards were obtained from the NYSDEC NYCRR Part 703.5 Table 1 Groundwater Standards/Criteria, dated August 1999.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable standards.

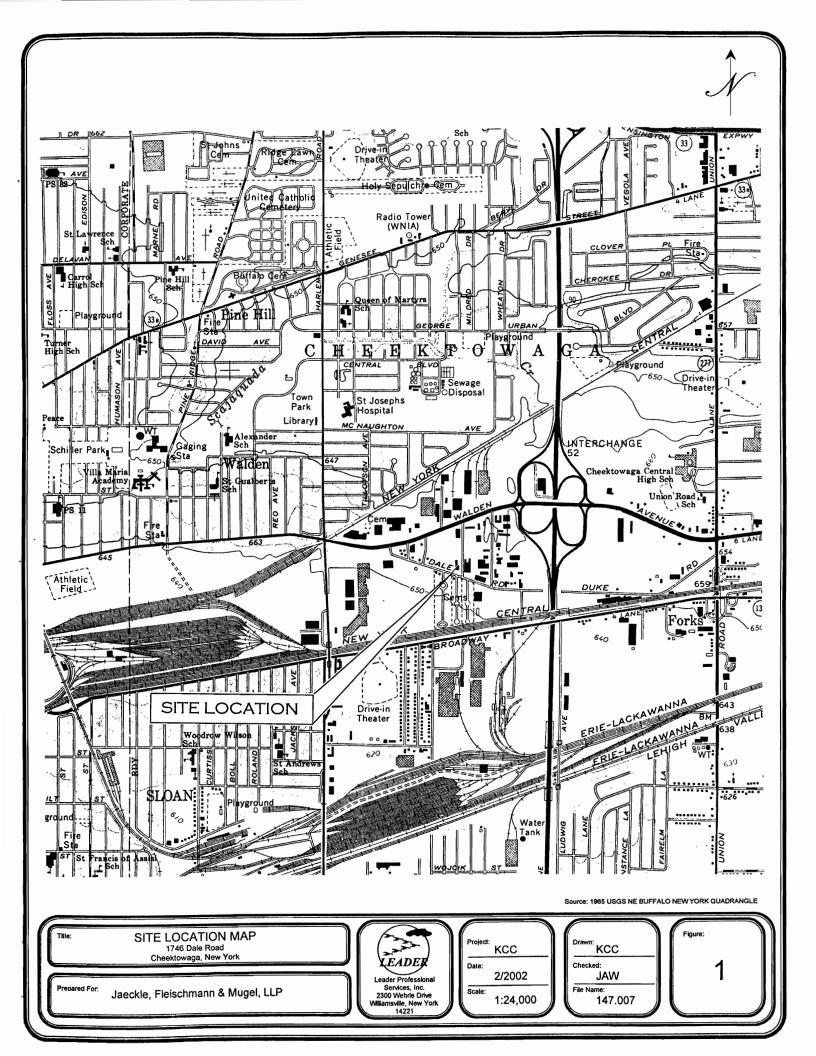
TABLE 12 GROUNDWATER ANALYSIS FOR HEAVY METALS

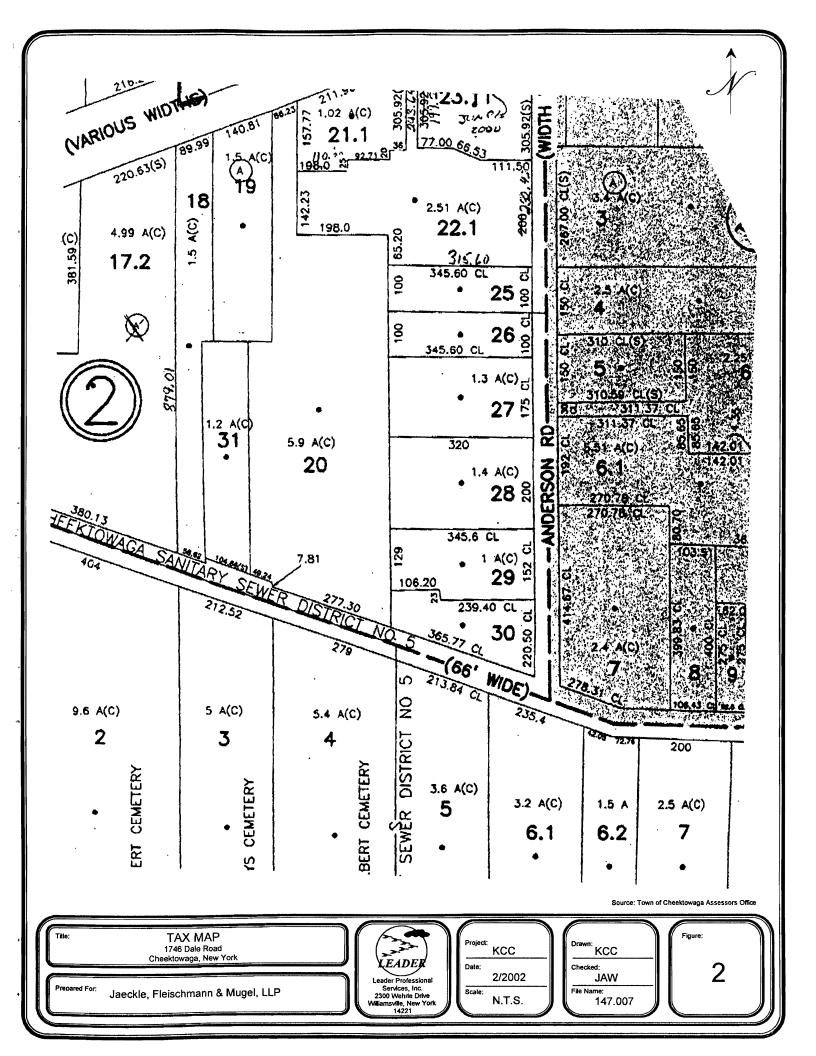
RoCo, Ltd. 1746 Dale Road, Cheektowaga, New York

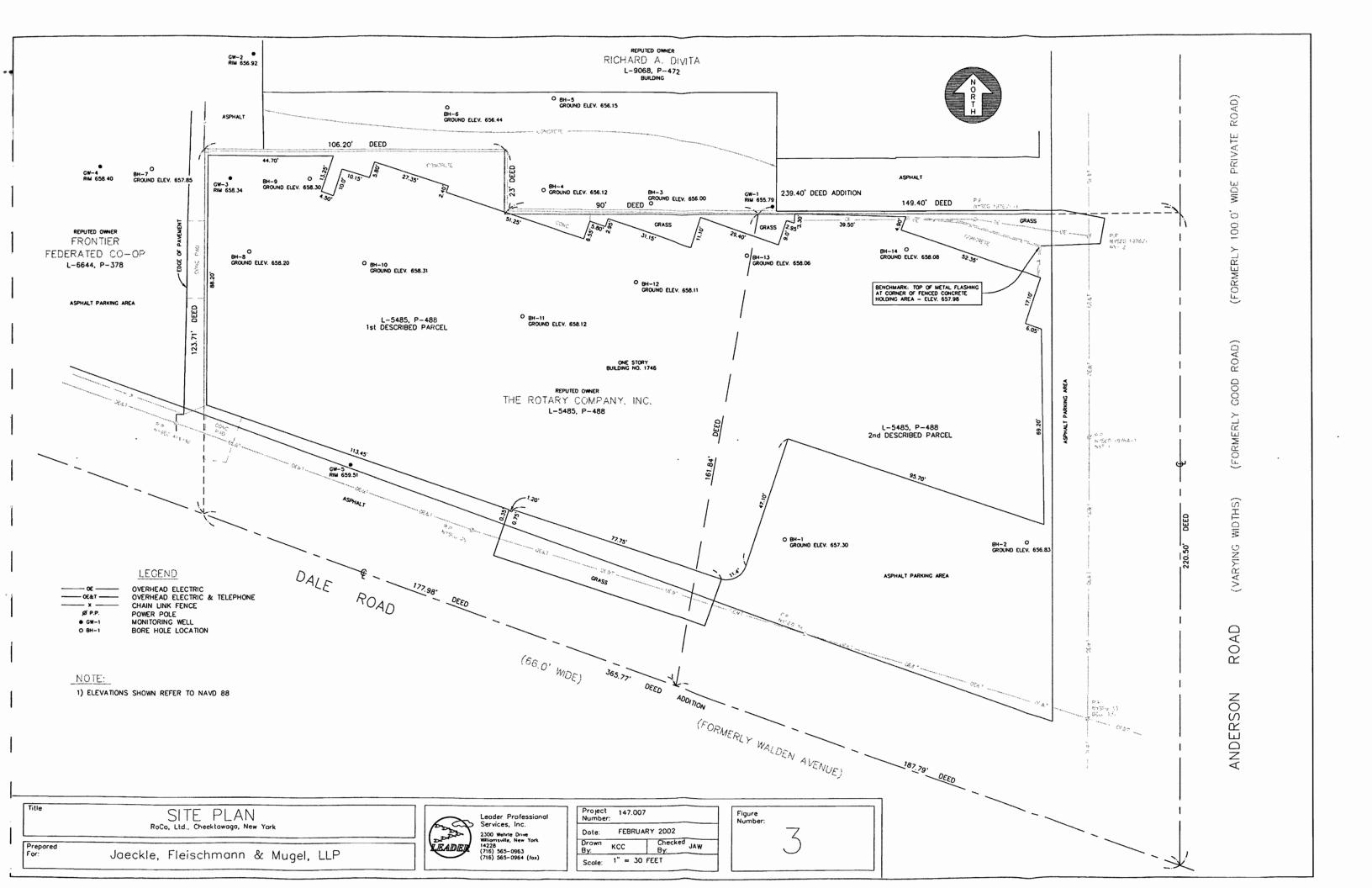
HEAVY METALS	GW-3 ×	NYSDEC 6 NYCRR Part 703.5 Water Quality Standards
Sample Collection Date:	11/13/01	
Units:	mg/L	mg/L (ppm)
Antimony	<0.060	0.003
Arsenic	0.048	0.025
Beryllium	<0.005	0.011
Cadmium	0.012	0.005
Chromium	0.516	0.050
Copper	0.434	0.200
Lead	0.135	0.025
Mercury	0.001	100.0
Nickel	0.158	0.100
Selenium	<0.005	0.010
Silver	<0.010	0.050
Thallium	0.024	NA
Zinc	1.91	NA

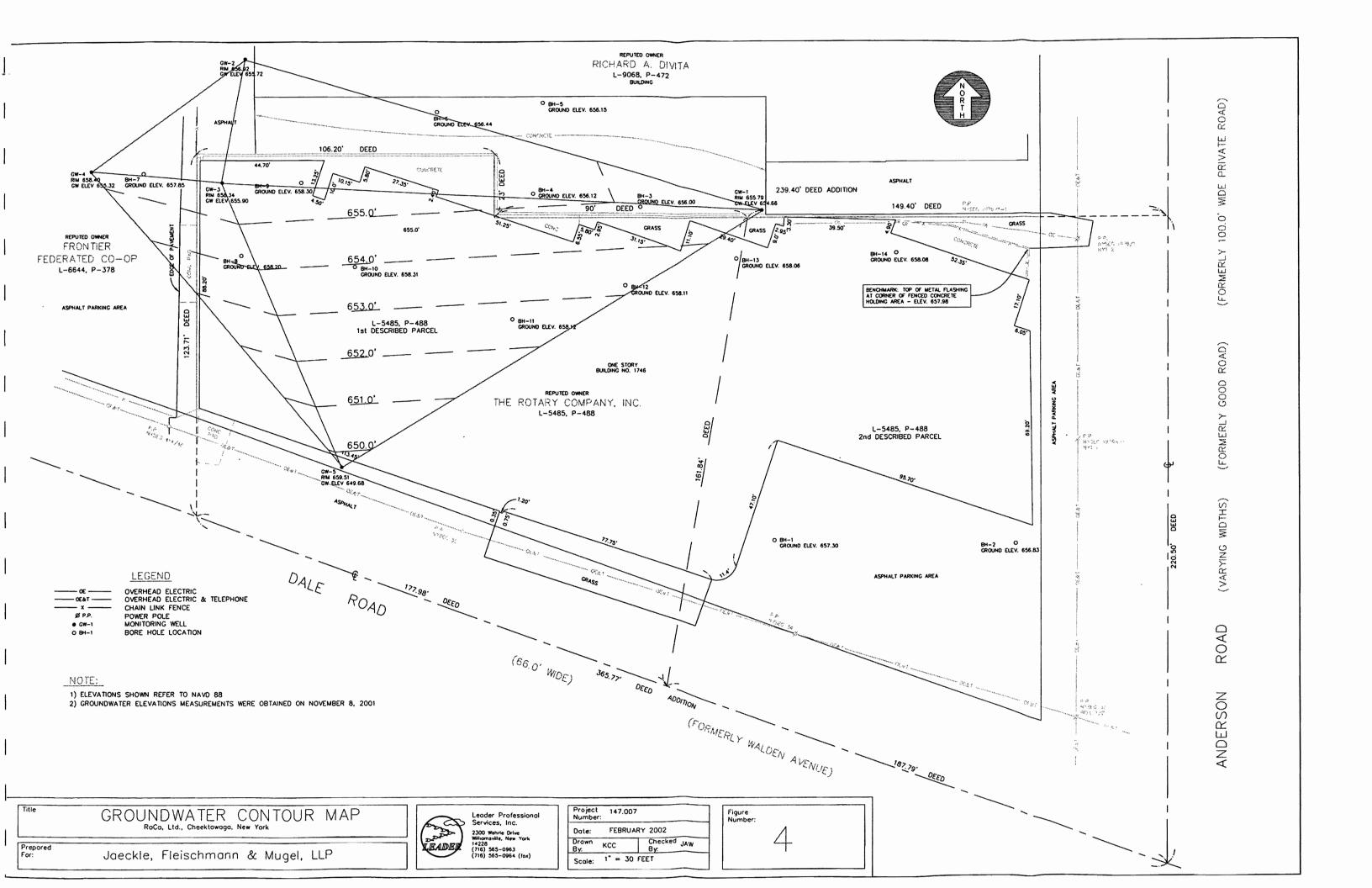
- 1) Concentrations are in mg/L, or PPM.
- 2) ND (Non-Detected above laboratory detection limit)
- 3) NA (Not Available)
- 4) NYSDEC Groundwater Quality Standards were obtained from the NYSDEC NYCRR Part 703.5 Table 1 Groundwater Standards/Criteria, dated August 1999.
- 5) Shaded areas indicate analyte detection; darker shaded areas indicate an exceedence of applicable standards.

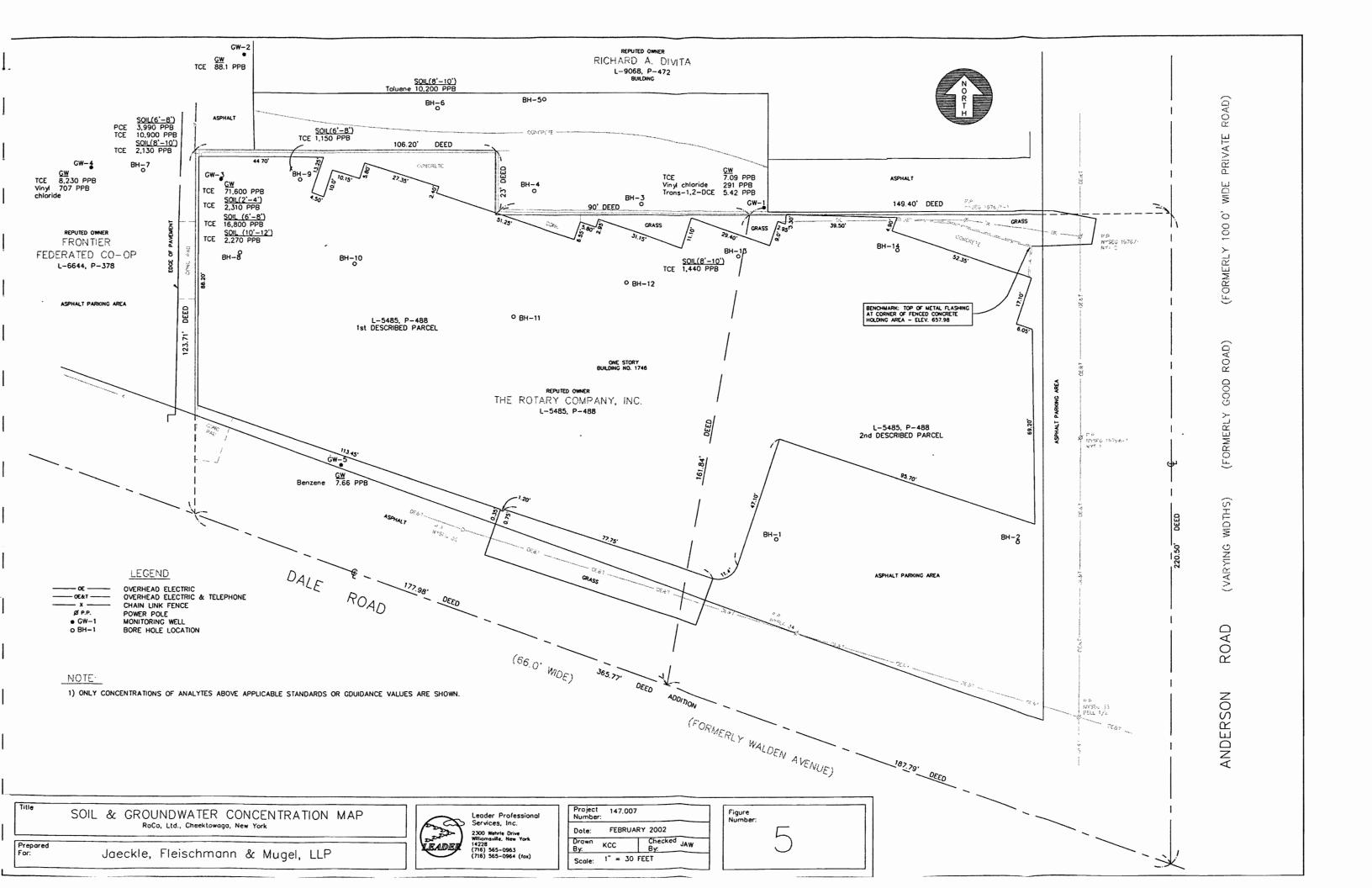
APPENDIX B: FIGURES

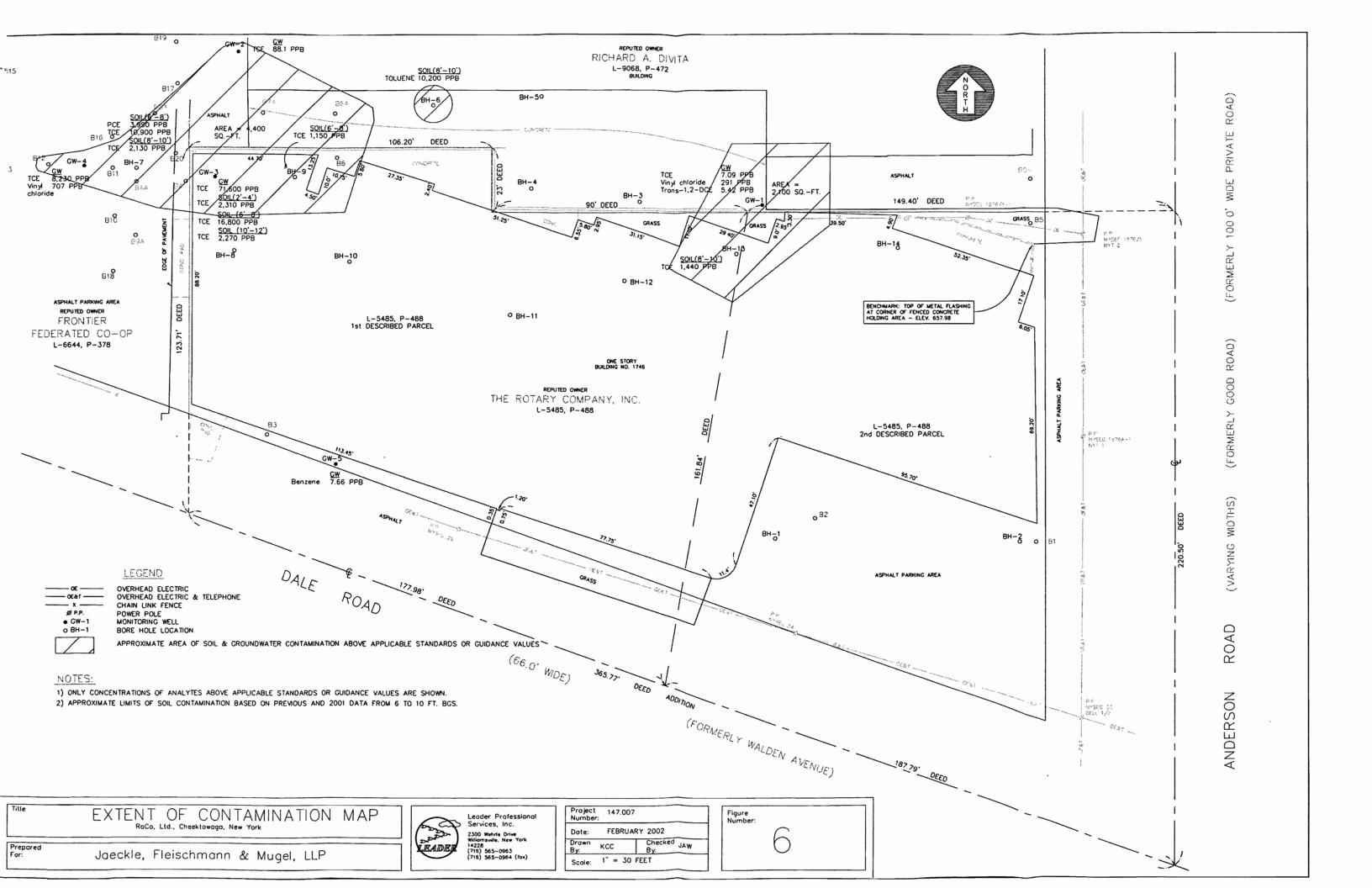












APPENDIX C: REMEDIAL COST ANALYSIS

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REMEDIAL SOIL VOLUME ESTIMATE FOR ROCO, LTD. SITE

ASSUMPTIONS:

- 1) AREA APPROXIMATED ON ATTACHED FIGURE
- 2) MAXIMUM DEPTH OF SOIL CONTAMINATION IS 16 FT. BGS
- 3) AVERAGE INTERVAL OF SOIL CONTAMINATION 9 FT.
- 4) UNIT WEIGHT ESTIMATED AT 1.3 TONS/CUBIC YARD

VOLUME ESTIMATE

DESCRIPTION	AREA SQFT.	APPROX. DEPTH FT.	ł	VOLUME CUBIC-YDS.	MASS TONS
EAST AREA	2,100	9	18,900	700	910
WEST AREA	4,400	9	39,600	1,467	1,907
TOTALS =	6,500	18	58,500	2,167	2,817

ALTERNATIVE 1 EXCAVATION AND REMOVAL

ROCO,LTD. SITE 1746 DALE ROAD, CHEEKTOWAGA, NEW YORK

DESCRIPTION	QUANTITY	UNIT	UNIT COST(1)	TOTAL COST
PREREMEDIAL STUDIES	5	Locations	\$1,000	\$5,000
REMEDIAL ACTION PLAN			•	
Scope of Work	60	Hours	\$70	\$4,200
Health and Safety Plan	24	Hours	\$70	\$1,680
NYSDEC Modifications	12	Hours	\$70	\$840
EXCAVATION AND REMOVAL				
Excavation Costs	2,167	Cubic Yards	\$20	\$43,333
Additional Handling Costs for Under Foundation	1,083	Cubic Yards	\$40	\$43,333
Groundwater Disposal/Treatment	131,274	Gals	\$0.15	\$19,691
Soil Disposal (Hazardous)	953	Tons	\$94	\$89,613
Soil Disposal (Non-Hazardous)	1,863	Tons	\$40	\$74,533
Transportation	2,817	Tons	\$10	\$28,167
Confirmatory Sampling	20	Sample	\$150	\$3,000
Closure Costs	2,817	Tons	\$15	\$42,250
Engineering Oversight	150	Hours	\$70	\$10,500
CLOSURE REPORT		900000000000000000000000000000000000000		
Report Preparation	50	Hours	\$70	\$3,500
TOTAL DIRECT COST (TDC)				\$369,641
INDIRECT COSTS				
Contingency - 10% of TDC				\$36,964
TOTAL COSTS				\$406,605

NOTES:

- 1) Labor & Equipment unit rate @ level D protection.
- 2) All TCE impacted soil considered hazardous waste
- 3) Soil porosity estimated to be 30%

ALTERNATIVE 2 INSITU BIOREMEDIAITON

ROCO,LTD. SITE 1746 DALE ROAD, CHEEKTOWAGA, NEW YORK

DESCRIPTION	QUANTITY	UNIT	UNIT COST(1)	TOTAL COST
PREREMEDIAL STUDIES				
Additional Delineation	5	Locations	\$1,000	\$5,000
Treatability Studies	1	Study	\$5,000	\$5,000
REMEDIAL ACTION PLAN				
Scope of Work	50	Hours	\$70	\$3,500
Health and Safety Plan	20	Hours	\$70	\$1,400
NYSDEC Modifications	12	Hours	\$70	\$840
INJECTION OF HRC				
HRC Material Costs (2nd application near source	5,000	Pounds	\$6	\$30,000
HRC Injection Costs Using Geoprobe	10	Days	\$2,000	\$20,000
Confirmatory Sampling/Monitoring	26	Sample	\$300	\$7,800
Engineering Oversight	115	Hours	\$70	\$8,050
CLOSURE REPORT				
Report Preparation	50	Hours	\$70	\$3,500
TOTAL DIRECT COST (TDC)				\$85,090
INDIRECT COSTS				
Contingency - 10% of TDC				\$8,509
TOTAL COSTS				\$93,599

NOTES:

- 1) Labor & Equipment unit rate @ level D protection.
- 2) All TCE impacted soil considered hazardous waste
- 3) Soil porosity estimated to be 30%

ALTERNATIVE 3 INSITU OXIDATION

ROCO,LTD. SITE 1746 DALE ROAD, CHEEKTOWAGA, NEW YORK

DESCRIPTION	QUANTITY	UNIT	UNIT COST(1)	TOTAL COST
PREREMEDIAL STUDIES				
Additional Delineation	5	Locations	\$1,000	\$5,000
Treatability Studies	1	Study	\$90,000	\$90,000
REMEDIAL ACTION PLAN				
Scope of Work	50	Hours	\$70	\$3,500
Health and Safety Plan	20	Hours	\$70	\$1,400
NYSDEC Modifications	12	Hours	\$70	\$840
INJECTION OF PERMANGANATE				
Permanganate Injection Costs	2	Injections	\$400,000	\$800,000
Confirmatory Sampling/Monitoring (included ab	NA	NA	NA	NA
Engineering Oversight (included above)	NA	NA	NA	NA
CLOSURE REPORT			1 8880000000000000000000000000000000000	
Report Preparation (included above)	NA	NA	NA	NA
TOTAL DIRECT COST (TDC)				\$900,740
INDIRECT COSTS				
Contingency (included above)				NA
TOTAL COSTS				\$900,740

NOTES:

- 1) Labor & Equipment unit rate @ level D protection.
- 2) All TCE impacted soil considered hazardous waste
- 3) Soil porosity estimated to be 30%

ALTERNATIVE 4 SVE/INSITU OXIDATION

ROCO,LTD. SITE 1746 DALE ROAD, CHEEKTOWAGA, NEW YORK

DESCRIPTION	QUANTITY	UNIT	UNIT COST(1)	TOTAL COST
PREREMEDIAL STUDIES				
Additional Delineation	5	Locations	\$1,000	\$5,000
Treatability Studies	1	Study	\$80,000	\$80,000
REMEDIAL ACTION PLAN				
Scope of Work	50	Hours	\$70	\$3,500
Health and Safety Plan	20	Hours	\$70	\$1,400
NYSDEC Modifications	12	Hours	\$70	\$840
SVE SYSTEM INSTALLATION				
System Design and Installation	1	SVE System	\$850,000	\$850,000
INJECTION OF PERMANGANATE				
Permanganate Injection Costs	2	Injections	\$175,000	\$350,000
Confirmatory Sampling/Monitoring (included ab	NA	NA	NA	NA
Engineering Oversight (included above)	NA	NA	NA	NA
CLOSURE REPORT				
Report Preparation (included above)	NA	NA	NA	NA
TOTAL DIRECT COST (TDC)				\$1,290,740
INDIRECT COSTS				
Contingency (included above)				NA
TOTAL COSTS				\$1,290,740

NOTES:

- 1) Labor & Equipment unit rate @ level D protection.
- 2) All TCE impacted soil considered hazardous waste
- 3) Soil porosity estimated to be 30%

APPENDIX D: PHOTOGRAPHS OF FIELD ACTIVITIES

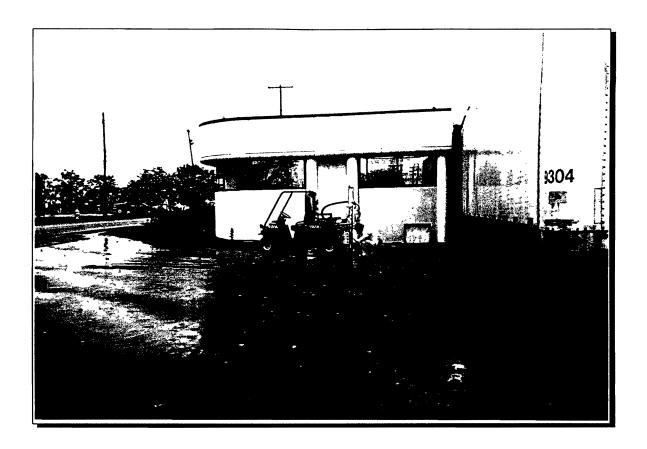


PHOTO 1: View of the Geoprobe unit completing boring hole 1 (BH-1) in the southeastern portion of the Site.

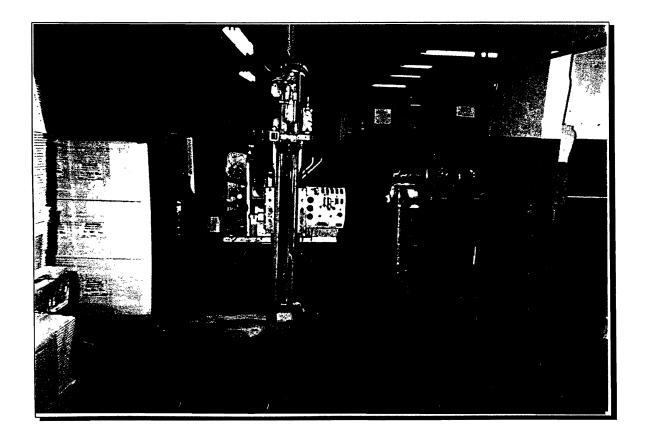


PHOTO 2: View of the Geoprobe unit completing boring hole 11 (BH-11) in the interior of the building.



PHOTO 3: View of the Geoprobe unit completing boring hole 9 (BH-9) in the interior of the building.

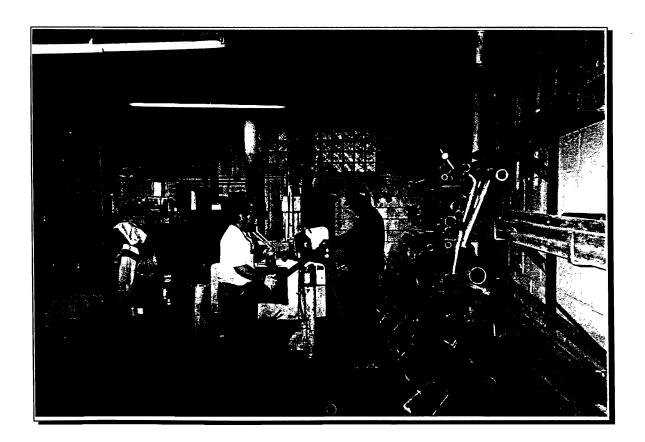


PHOTO 4: View of the Geoprobe unit completing monitoring well 3 (GW-3) in the interior of the building.

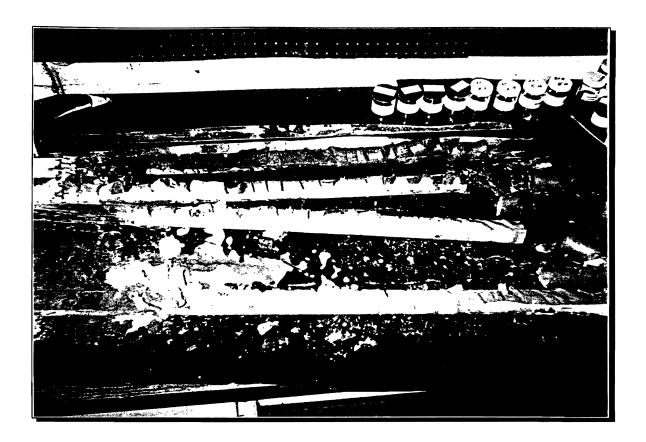


PHOTO 5: View of the acetate liners and four-foot long soil samples. Following review of the soil samples, the characteristics are then recorded on the boring log sheets.



PHOTO 6: View of the PID field screening of the soil samples to assess whether VOCs are present.

APPENDIX E: TEST BORING/MONITORING WELL LOGS



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG	OCTOBER 25, 2001		BH-1
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007	***************************************	
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING COMPANY: DRILLING METHOD:	***************************************	SCREEN DIAMETER: _ SCREEN LENGTH: _	
DRILLING METHOD:	***************************************	·	NA
DRILLING METHOD:	Geoprobe Mr. Dominic Pino/Mr. Philip Orsi	SCREEN LENGTH:	NA NA
DRILLING METHOD: DRILLER:	Geoprobe Mr. Dominic Pino/Mr. Philip Orsi 15 feet	SCREEN LENGTH: SCREEN TYPE:	NA NA
DRILLING METHOD: DRILLER: TOTAL DEPTH:	Geoprobe Mr. Dominic Pino/Mr. Philip Orsi 15 feet NA	SCREEN LENGTH: SCREEN TYPE: CASING DIAMETER:	NA NA NA

TEST BO	RING DESIG	NATION	: BH-1			
DEPTH (FEET)	PID READINGS (BACKGROUND=0.0 PPM)	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL
		S-1	NA	48-inches	Gray, GRAVEL and FMC SAND, dry.	
1					brown, damp.	
2						
3					[FILL] Olive-brown, FMC SAND and SILTY CLAY, damp.	
4		S-2	NA NA	48-inches	. olive	
5		3-2	14/	40-11101163	6116.	
6					reddish-brown with olive streaking, SILTY CLAY.	
					requisit blown war onto steeding, of ETT of CT.	
7						
8					wet.	
9		S-3	NA	48-inches		
10					damp.	
11					gray.	
12						
12		S-4	NA	36-inches		
13						
14					pink.	
15					[SILTY CLAY]	
10					Bottom of Hole at 15-feet	
16						
17						
18						
19						
			<u> </u>			



GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG	: OCTOBER 25, 2001		BH-2
IEDI DOIG. 13 LOC.	YULU 13. 20.		
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr. Dominic Pino/Mr. Philip Orsi	SCREEN TYPE:	NA
TOTAL DEPTH:	15-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL
		S-1	NA	48-inches	Gray, FMC SAND and GRAVEL, damp.	
1						
					black, GRAVEL, wet.	
2					[FILL] Pink, SILTY CLAY, damp.	
3					Plink, SILTY GLAY, damp.	
				1	·	
4						l
		S-2	NA	48-inches		
5						
6					olive streaking.	
7						
					pink.	
8						
	***************************************	S-3	NA	48-inches		
9					Black, GRAVEL AND FMC SAND, some Silty Clay, wet.	
10					IODANEL and EMO CANDA	
11					[GRAVEL and FMC SAND] Olive, FMC SAND, some Silty Clay, wet.	-
					Pink, SILTY CLAY, damp.	1
12					, m, s	
		S-4	NA	36-inches	[SILTY CLAY]	
13					Black, FMC SAND and GRAVEL, wet	
14					[FMC SAND and GRAVEL]	-
15					Pink, SILTY CLAY, damp. [SILTY CLAY]	
13	······································		-		Bottom of hole at 15-feet	1
16						
17						
18						
19						
19			1			1



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

CLIENT:	Jaeckle, Fleischmann & Mugel, LLP
LOCATION:	1746 Dale Road, Cheektowaga, New York
PROJECT NO.:	147.007
PROJECT MANAGER:	Ms. Karen C. Carlson

DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr. Dominic Pino/Mr. Philip Orsi	SCREEN TYPE:	NA
TOTAL DEPTH: _	18-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA
ROUND SURFACE ELEV:	NA	SAMPLING METHOD:	Macro core open sampling

(25 % W W		NATION					California di
DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION		WELI
(I LL I)	(BACKGROUND = 0.0 PFH)	S-1	NA		Light gray, GRAVEL, dry.	[FILL]	CONO
1	1					MC SAND and GRAVEL]	
]				black, some Gravel, wet.		
2]						
					olive-black.		
3					olive-gold, wet.		
4					onve-gold, wet.		
<u> </u>		S-2	NA	48-inches	some Silty Clay, damp.		
5						[FMC SAND]	
					Pink-Olive, SILTY CLAY, some FMC Sand, wet.		
6							
7							
8							
		S-3	NA	48-inches			
9							
10							
11	1						
11	1						
12	1						
		S-4	NA	48-inches			
13							
14							
15							
	1						
16						[SILTY CLAY]	
					Bottom of hole at 16-feet		
17							
18							
19	1						
] [



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

EST BORING LOG:	OCTOBER 25, 2001		BH-4
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr. Dominic Pino/Mr. Philip Orsi	SCREEN TYPE:	NA
TOTAL DEPTH:		CASING DIAMETER:	NA

TOP OF CASING ELEV: _	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	Macro core open sampling
A6-48-00		2. 2000 A. 10.2 St	

DEPTH	PID READINGS	SAMPLE	N-	REC.	DAMES E DECORPORTION	WELL
(FEET)	(BACKGROUND = 0.0 PPM)	NO. S-1	NA	(INCHES)	SAMPLE DESCRIPTION White, FILL, dry. [FILL]	CONS
1	1	3-1	INA.		Gray, GRAVEL and FMC SAND, wet.	
'	1				Stay, State and this state, not	l
2	81.5 PPM				black,	1
					gold with olive streaks, FMC SAND, damp.	
3	1					
					[GRAVEL and FMC SAND]	
44					Pink, SILTY CLAY, damp.	
		S-2	NA	48-inches		
5					olive streaks.	
6	-					
	-				pink, wet.	
7	1					
	1					
8					[SILTY CLAY]	
		S-3	NA	48-inches	Gray, GRAVEL and FMC SAND, wet. [GRAVEL and FMC SAND]	
9					Pink, SILTY CLAY, some FMC SAND, damp.	
10	-					
10	1					
11	-					
	1					
12	1				[SILTY CLAY]	
		S-4	NA	48-inches	Brown, GRAVEL and FMC SAND, damp.	
13						
14	-				[GRAVEL and FMC SAND]	
15	- 1				Pink, SILTY CLAY, some FMC SAND, damp.	
10	1				This, off to beet, some time of the camp.	
16	1				[SILTY CLAY]	
					Bottom of hole at 16-feet.	1
17]					
18						
	1					
19	1					



GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

rest boring log:	OCTOBER 25, 2001		BH-5
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION: _	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.: _	147.007		
PROJECT MANAGER: _	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING COMPANY: _ DRILLING METHOD: _		SCREEN DIAMETER: _ SCREEN LENGTH: _	
DRILLING METHOD:		-	NA
DRILLING METHOD:	Geoprobe Mr. Dominic Pino/Mr. Philip Orsi	SCREEN LENGTH:	NA NA
DRILLING METHOD: _ DRILLER: _	Geoprobe Mr. Dominic Pino/Mr. Philip Orsi 16-feet	SCREEN LENGTH: SCREEN TYPE:	NA NA

DEPTH (FEET)	PID READINGS	SAMPLE NO:	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL
		S-1	NA	48-inches	Gray, FILL, dry.	
1					Olive, FMC SAND and GRAVEL, damp.	
2					little Gravel.	
3					and SILTY CLAY.	
4						
5		S-2	NA	48-inches	olive-gold.	
6					pink.	
7						
8						
		S-3	NA	48-inches		
9					Olive, FMC SAND and GRAVEL, wet. [FMC SAND and GRAVEL] Reddish-brown, SILTY CLAY, damp.	
10					Neddisir-Brown, Ole 11 O.B. 1, dainp.	
11						
12						
13		S-4	NA	48-inches	[SILTY CLAY] Olive, FMC SAND and GRAVEL, wet. [FMC SAND and GRAVEL]	
14						
15					Reddish-brown, CLAY, damp.	
16					[CLAY] Bottom of hole at 16-feet.	
17						
18						
19						



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG:	OCTOBER 25, 2001		BH-6
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr. Dominic Pino	SCREEN TYPE:	NA
TOTAL DEPTH:	16-feet	CASING DIAMETER:	NA .
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	Macro core open sampling

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	CC
**(FE1)	(BACKGROUND = 0.0 PFM)	S-1	NA	48-inches	Gray, FILL, dry. [FILL]	المحاد
1]				Gray, FMC SAND and GRAVEL, damp.	ĺ
2					[FMC SAND and GRAVEL] Olive, FMC SAND, little Silty Clay, wet.	
3	-				Olive, FMC SAND, little Silty Clay, wet.	
	1				·	
4					SILTY CLAY, some FMC Sand, damp.	
		S-2	NA	48-inches		
5					reddish-brown.	
6						
7						
<u>8</u>		S-3	NA NA	49 inches	olive, FMC SAND, wet.	
9	9.3 PPM	3-3	NA	40-IIICHES	Olive, Fivio Salvo, wet.	
	33.4 PPM					
10	40.0 PPM				reddish-brown, SILTY CLAY, some FMC Sand.	
	25.0 PPM					
11	21.5 PPM 31.8 PPM				SILTY CLAY, damp	
12	3.5 PPM					
	0.011111	S-4	NA	0-inches	wet (no recovery).	
13]					
14						
15	1					
	1					
16					[FMC SAND and SILTY CLAY]	
47					Bottom of hole at 16-feet.	
17						
18						
]					
19						İ



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

Γ.	EST	B	0	RIN	\mathbf{G}	LOG	:: O	C	TO	BER	25.	, 2001	ľ
30	333,,480,44	22	4	,		920000	500	- 6	0000000	A. 400 a d	USB 1.2	500000 25 . 4/9/95	

BH-7

CLIENT: __Jaeckle, Fleischmann & Mugel, LLP

LOCATION: 1746 Dale Road, Cheektowaga, New York

PROJECT NO.: 147.007

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY: ZEBRA Envrionmental, Inc.

DRILLING METHOD: Geoprobe

DRILLER: Mr. Dominic Pino/Mr. Philip Orsi

TOTAL DEPTH: 16-feet

TOP OF CASING ELEV: NA

GROUNDWATER ELEV: NA_

GROUND SURFACE ELEV: NA

SCREEN DIAMETER:

SCREEN LENGTH: NA

SCREEN TYPE: NA

CASING DIAMETER: NA

CASING LENGTH: NA

CASING TYPE: NA

	DID DEADINGS	SAMPLE	N-	REC.		W
DEPTH (FEET)	PID READINGS (BACKGROUND = 0.0 PPM)	NO.	VALUE	(INCHES)	SAMPLE DESCRIPTION	CC
		S-1	NA	48-inches	Grayish-black, FILL, dry. [FILL]	
1					Black, FMC SAND, damp.	
2					olive, little Silty Clay, wet.	
	4.4.0004					
3	. 1.4 PPM				damp.	
	18.5 PPM 0.0 PPM				reddish-brown.	
4	U.U PPIVI	S-2	NA NA	48 inches	SILTY CLAY, damp.	
5		3-2	I NA	40-11101165	SILTY GEAT, damp.	
6						
7	12.5 PPM				reddish-brown.	
· · · · · ·	40.0 PPM					
8	47.1 PPM					
		S-3	NA	48-inches	gray.	
9	3.0 PPM					
	6.1 PPM					
10	7.8 PPM					
	0.0 PPM					
11					brown, FMC SAND.	
12						
		S-4	NA	48-inches	wet.	
13						
					reddish-brown, SILTY CLAY, damp.	
14					redular-viowii, aleri olexi, damp.	
15						
16					[FMC SAND and SILTY CLAY]	
		-			Bottom of hole at 16-feet.	
17						
18						
19						



TOTAL DEPTH: 16-feet

TOP OF CASING ELEV: NA

GROUNDWATER ELEV: NA GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG:	NOVEMBER 2, 2001		BH-8	
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP			
LOCATION:	1746 Dale Road, Cheektowaga, New York			
PROJECT NO.:	147.007			
PROJECT MANAGER:	Ms. Karen C. Carlson			
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA	
DRILLING METHOD:	Geoprobe	SCREEN LENGTH: _	NA	
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	NA	

CASING DIAMETER: NA

CASING LENGTH: NA CASING TYPE: NA

TEST BO	RING DESIG	NATION	: BH-8			
DEPTH	PID READINGS	SAMPLE	N-	REC.	SAMPLE DESCRIPTION	WELL
(FEET)	(BACKGROUND = 0.0 PPM)	NO. S-1	VALUE NA	(INCHES) 48-inches	SAMPLE DESCRIPTION Gray, FILL, damp.	CONST
1						
					TT 1.13	
2					[FILL] Olive, FMC SAND, some GRAVEL, little Silty Clay, wet.	
3						
4 '		S-2	NA	48-inches		
5		0.2		40-1101103	SILTY CLAY, dry	
6					reddish-gray.	
7					issual grey.	
8		S-3	NA	48-inches	olive, FMC SAND, some Silty Clay, wet.	
9		J-3	110	40-11101103	onto, i mo orato, como one, oray, non	
					reddish-brown, SILTY CLAY, some FMC SAND, damp	
10						
11						
					SILTY CLAY, damp.	
12		S-4	NA	40 inches	olive, FMC SAND, wet.	
13	1	5-4	NA	40-Inches	Olive, FINIC SAND, Wet.	
14						
15						
					reddish-gray, SILTY CLAY, little FMC Sand, damp.	
16					[FMC SAND and SILTY CLAY] Bottom of hole at 16-feet.	
17					DOLLOTTI OF HOTE AL 10-1661.	
18						
19						



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

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₽ .	,	POL 2-	C - 4	Freign-	14	-W	ngati kapi		e 63°	so sufficiently

BH-9

CLIENT: __Jaeckle, Fleischmann & Mugel, LLP

LOCATION: 1746 Dale Road, Cheektowaga, New York

PROJECT NO.: 147.007

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY: ZEBRA Envrionmental, Inc.

DRILLING METHOD: Geoprobe

DRILLER: Mr. Philip Orsi/ Mr. Christopher Donovan

TOTAL DEPTH: 16-feet

TOP OF CASING ELEV: NA

GROUNDWATER ELEV: NA

GROUND SURFACE ELEV: NA

SCREEN DIAMETER: NA

SCREEN LENGTH: NA

SCREEN TYPE: NA

CASING DIAMETER: NA

CASING LENGTH: NA

CASING TYPE: _

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	Topics (WELL CONST
·· (1 / · ·	(BACKGROOM) = 0.01440	S-1	NA	48-inches	Black, FMC SAND, damp.		
1							
2	-				red brick fragments. Light olive, FMC SAND, wet.	[FILL]	
	-				and the state of t		
3] .						
4					reddish-brown, SILTY CLAY, little FMC Sand, damp.		
		S-2	NA	48-inches			
5					light aline FAC CAND and		
6	9.8 PPM				light olive, FMC SAND, wet.		
	22.6 PPM				FMC SAND and SILTY CLAY, damp.		
7	22.0 PPM				and dish has use SILTY CLAY		
8	0.0 PPM 0.0 PPM				reddish-brown, SILTY CLAY.		
		S-3	NA	48-inches			
9					Light olive, FMC SAND, wet.		
10	4						
]						
11	4				reddish-brown, SILTY CLAY, damp.		
12	1				reddish brown, ofer r ob vr, damp.		
		S-4	NA	48-inches	light olive, FMC SAND, damp.		
13	-				wet.		
14	1						
]				LE LA CULTY CLAY desse		
15	-				reddish-brown, SILTY CLAY, damp.		
16	→					SAND and SILTY CLAY]	
4-7					Bottom of hole at 16-feet.		
17							
18]						
- 10							
19	4						



GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE
WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG:	NOVEMBER 2, 2001	经济多。强强	BH-10
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
· · · · · · · · · · · · · · · · · · ·			
DRILLING COMPANY:	ZEBRA Environmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr. Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	NA
TOTAL DEPTH:	16-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
CROHNOWATER ELEV	NΔ	CASING TYPE:	NΔ

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL CONST
1		S-1	NA	48-inches	Black, FILL, dry. [FILL]	
	1				Dark olive with black streaks, FMC SAND, little Silty Clay, damp.	
2						
3]				·	
4						
5]	S-2	NA	48-inches	dry reddish-brown, SILTY CLAY, damp.	
6]					
	1					
7	1					
8		S-3	NA	48-inches	pinkish silver-gray, little FMC Sand.	
9]			, , , , , , , , ,	3 - 7,	
10]					
11						
	1				olive-black, FMC SAND, some Silty Clay, wet. dark olive-black, SILTY CLAY.	
12		S-4	NA	48-inches	dark olive-black, SILTY CLAT dark olive, FMC SAND, some Silty Clay.	
13	-				damp.	
14	1				·	
15]					
16	-				[FMC SAND and SILTY CLAY]	
17					Bottom of hole at 16-feet.	
	1					
18	-					
19]					



GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG:	NOVEMBER 2, 2001		BH-11
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		-
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	NA
TOTAL DEPTH:	16-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA

DEPTH (FEET)	PID READINGS (BACKGROUND - 0.0 PPM)			REC. (INCHES)	SAMPLE DESCRIPTION	WEL CONS
		S-1	NA		Gray, FILL, dry. [FILL]	
1					Black, FMC SAND, damp.	
2						
					blackish-olive.	
3						
					reddish-brown, SILTY CLAY, little FMC Sand.	
4		S-2	NA	48-inches	SILTY CLAY.	
5		5-2	NA	40-Inches		
						
6						
7						
8						
		S-3	NA	48-inches		
9						
					olive, FMC SAND and SILTY CLAY.	
10					reddish-brown, SILTY CLAY.	
11					166661 51611, 61211 6211.	
12					olive, FMC SAND, some Silty Clay, little Gravel.	
40		S-4	NA	48-inches	reddish-brown, SILTY CLAY.	
13						
14						
15						
16					[FMC SAND and SILTY CLAY]	
10					Bottom of hole at 16-feet.	
17	j					
18						
19						



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

	TES	T BC	RING	LOG	NOVEME	BER	2, 200	01
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BH-12

CLIENT: Jaeckle, Fleischmann & Mugel, LLP LOCATION: 1746 Dale Road, Cheektowaga, New York

PROJECT NO.: 147.007

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY: ZEBRA Envrionmental, Inc. DRILLING METHOD: Geoprobe

DRILLER: Mr. Philip Orsi/Mr. Christopher Donovan TOTAL DEPTH: 16-feet

TOP OF CASING ELEV: NA GROUNDWATER ELEV: NA

GROUND SURFACE ELEV: NA

SCREEN DIAMETER: NA

SCREEN LENGTH:

SCREEN TYPE: _

CASING DIAMETER: NA

CASING LENGTH: NA CASING TYPE: NA

		NATION				I diber
DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	CONS
,, LL 1)	(BACKORCORD - DID FAI)	S-1	NA		Olive-black, FMC SAND, damp.	Joine
1						
2					OUT OU AV	
3					SILTY CLAY, some FMC Sand.	
					reddish-brown.	
4					· ·	
		S-2	NA	48-inches		
5						
					olivo EMC SAND wat	
6					olive, FMC SAND, wet. reddish-brown, SILTY CLAY, damp.	
7					Issued brown, sterr out the samp.	
8						
		S-3	NA	48-inches	and FMC SAND.	
9					olive, FMC SAND, little Silty Clay.	
10					reddish-brown, SILTY CLAY.	
11						
12	· · · · · · · · · · · · · · · · · · ·			E lankar	alice FMC CAND west	
13		S-4	NA	5-inches	olive, FMC SAND, wet	
13						
14						
					reddish-brown, SILTY CLAY, damp.	
15						
16					[FMC SAND and SILTY CLAY]	
10			-		Bottom of hole at 16-feet.	
17						
18						
19						
19						



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

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BH-13

A 100 A	and the transfer of the second	27 S. C.	
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	NA
TOTAL DEPTH:	16-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA
ROUND SURFACE ELEV:	NA	SAMPLING METHOD:	Macro core open sampling

DEPTH	RING DESIG	5.5.405/236	N-	REC.		WELL
(FEET)	PID READINGS	NO.	VALUE	(INCHES)	SAMPLE DESCRIPTION	CONST
		S-1	NA	48-inches	Gray, FiLL, dry. [FILL]	
1					Black, FMC SAND and SILTY CLAY, wet.	
2						
					and GRAVEL.	
3						
4					olive, SILTY CLAY, little FMC SAND, damp.	
		S-2	NA	48-inches	black, FMC SAND and GRAVEL, wet.	
5					reddish-brown with black streaks, SILTY CLAY, damp.	
6						
6						
7						
88		S-3	NA	48-inches	black, GRAVEL and FMC SAND, wet.	
9		3-3	INA	40-mones	reddish-gray with black streaks, SILTY CLAY, damp.	
10						
11						
12				F !!-	, , , , t (accords lost)	
13		S-4	NA	5-Inches	wet (sample lost).	
14					OH TV OLAY Have	
15					reddish-brown, SILTY CLAY, damp.	
16					[FMC SAND and SILTY CLAY and GRAVEL]	
17					Bottom of hole at 16-feet.	
17						
18						
40						
19						



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG: NOVEMBER 2, 2001

BH-14

CLIENT: _	Jaeckle, Fleischmann & Mugel, LLP
LOCATION:	1746 Dale Road, Cheektowaga, New York
ROJECT NO.: _	147.007

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	NA
DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	NA
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	NA
TOTAL DEPTH: _	16-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV: _	NA	CASING LENGTH: _	NA
GROUNDWATER ELEV: _	NA	CASING TYPE: _	NA
ROUND SURFACE ELEV: _	NA	SAMPLING METHOD:	Macro core open sampling

TEST BO	RING DESIG	NATION	: BH-1	4		
DEPTH (FEET)	PID READINGS (BACKGROUND = 0.0PPM)	SAMPLE	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL CONST.
(FEE1)	(BACKGROUND = 0.0PPM)	NO. S-1	NA		Gray, FILL, dry. [FILL]	CONST
1					Brownish-black, FMC SAND, damp.	1
					black.	
2						
					olive, little Gravel.	
3					reddish-brown, SILTY CLAY, some FMC Sand.	
4	-				reddish-brown, Sili Y CLAY, some FMC Sand.	
		S-2	NA	24-inches	wet (sample lost).	
5						
6						
7					damp.	
8						
	-	S-3	NA	48-inches	wet (sample lost).	
9						
10						
11						
12						
		S-4	NA	5-inches	olive, FMC SAND, wet	
13						
14						
					reddish-brown, SILTY CLAY, damp.	
15						
16					[FMC SAND and SILTY CLAY]	
10					Bottom of hole at 16-feet.	1
17						
18						
19						
			l			J



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG:	NOVEMBER 1, 2001		GW-1
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER	R: 2-inch

DRILLING METHOD:	Geoprobe	SCREEN LENGTH:	10-feet
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	PVC
TOTAL DEPTH:	15-feet	CASING DIAMETER:	NA
TOP OF CASING ELEV:	NA	CASING LENGTH:	NA
GROUNDWATER ELEV:	NA	CASING TYPE:	NA .
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	Macro core open sampling

15. 147MV-	RING DESIG		N-	3500		10.000
DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL CONST.
		S-1	NA		Gray, CEMENT, dry. [FILL]	
1					Reddish-brown, SILTY CLAY, damp.	
2						
3	•				olive-black, FMC SAND, some Silty Clay, damp.	
4				•		
5		S-2	NA	48-inches	reddish-brown, SILTY CLAY.	
					Isaaan sionii, ole ii ole ii:	
6						
7						
8		S-3	NA NA	48-inches	olive-black, and FMC SAND.	
9		0-3		40-11101103	reddish-gray, SILTY CLAY.	
40						
10						
11						
12						
12		S-4	NA	36-inches	some FMC SAND, wet.	
13						
14						
15					[FMC SAND and SILTY CLAY] Bottom of hole at 15-feet.	
16					3.10.0 31.10.0 31.10.10	
17]					
17						
18						
19						



2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

			EMBER	

Ca Vongen	NOVEMBER 1, 2001		GW-2
CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	_ SCREEN DIAMETER: _	2-inch
	Caanraha	SCREEN LENGTH:	10-feet
DRILLING METHOD:	Geoprobe	_ SCREEN LENGTH	10 1001
-	Mr.Philip Orsi/Mr. Christopher Donovan	SCREEN TYPE:	
-	Mr.Philip Orsi/Mr. Christopher Donovan	_	PVC
DRILLER:	Mr.Philip Orsi/Mr. Christopher Donovan 16-feet	SCREEN TYPE:	PVC NA
DRILLER: TOTAL DEPTH:	Mr.Philip Orsi/Mr. Christopher Donovan 16-feet NA	SCREEN TYPE: _ CASING DIAMETER: _	PVC NA NA

DEPTH (FEET)	PID READINGS (BACKGROUND - 0.0PPM)	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION	WELL CONS
4		S-1	NA		Gray, CEMENT, dry. [FILL] Olive, FMC SAND, wet.	
1					Olive, FINC SAND, Wet.	
2]					
3					reddish-brown, SILTY CLAY, damp.	
					brown.	
4		S-2	NA.	48-inches	·	
5		5-2	NA	46-inches	olive, FMC SAND, wet.	
6					and SILTY CLAY, damp brown, SILTY CLAY, some FMC Sand.	
7						
					SILTY CLAY.	
8		S-3	NA	48-inches	olive, FMC SAND, wet.	
9					grayish-brow, SILTY CLAY, damp.	
10						
	j					
11						
12	1					
		S-4	NA	36-inches	olive, FMC SAND, wet.	
13					reddish-gray, SILTY CLAY, damp.	
14]					
15	-					
]					
16			l	-	[FMC SAND and SILTY CLAY] Bottom of hole at 15-feet.	
17					Bottom of note at 10 100t.	
40]					
18						
19	1					



2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG: NOVEMBER 2, 2001

GW-3

CLIENT: Jaeckle, Fleischmann & Mugel, LLP
LOCATION: 1746 Dale Road, Cheektowaga, New York

PROJECT NO.: 147.007

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY: ZEBRA Envrionmental, Inc.

DRILLING METHOD: Geoprobe

DRILLER: Mr.Philip Orsi/Mr. Christopher Donovan

DRILLER: Mr. Philip Orsi/Mr. Christopher Donovan
TOTAL DEPTH: 20-feet
TOP OF CASING ELEV: NA
GROUNDWATER ELEV: NA

GROUND SURFACE ELEV: NA

SCREEN DIAMETER: 2-inch

SCREEN LENGTH: 10-feet

SCREEN TYPE: PVC
CASING DIAMETER: NA

CASING LENGTH: NA
CASING TYPE: NA

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N- VALUE	REC.	SAMPLE DESCRIPTION	WELL
M. C	3.9 PPM	S-1	NA	48-inches	Black, FMC SAND, some Gravel, damp.	
1	0.00 PPM				and SILTY CLAY.	
	0.00 PPM				light olive, FMC SAND, wet.	111
2	0.00 PPM	!				
	0.00 PPM					
3	3.0 PPM					
	50.1 PPM				brown, SILTY CLAY, little FMC Sand, damp.	111
4	96.5 PPM					1 1
	15.9 PPM	S-2	NA	48-inches	light olive, FMC SAND, wet.	111
5	21.2 PPM					
	23.6 PPM					111
6	28.8 PPM				and SILTY CLAY, damp.	111
	25.7 PPM				little FMC Sand.	
7	49.1 PPM					111
	88.0 PPM				reddish-brown, SILTY CLAY.	
8	204.0 PPM					
	13.3 PPM	S-3	NA	48-inches	light olive with milky white streaks, FMC SAND, wet.	
9	0.0 PPM					
	0.0 PPM					111
10	0.0 PPM					ΙЦ
	0.0 PPM					
11	445.0 PPM					
	445.0 PPM				reddish-brown, SILTY CLAY, damp.	
12	469.0 PPM					
	0.0 PPM	S-4	NA	48-inches	olive, FMC SAND, wet.	
13	0.0 PPM					
	0.0 PPM					
14	0.0 PPM		1			
	0.0 PPM				reddish-brown, SILTY CLAY, damp.	
15	85.9 PPM					
	354.0 PPM					
16	81.0 PPM					
	0.0 PPM	S-5	NA	48-inches		
17						
18						
19						
					[FMC SAND and SILTY CLAY]	



TOP OF CASING ELEV: NA

GROUNDWATER ELEV: NA GROUND SURFACE ELEV: NA

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE

WILLIAMSVILLE, NEW YORK 14221

						ER		

GW-4

CLIENT:	Jaeckle, Fleischmann & Mugel, LLP		
LOCATION:	1746 Dale Road, Cheektowaga, New York		
PROJECT NO.:	147.007		
PROJECT MANAGER:	Ms. Karen C. Carlson		
DRILLING COMPANY:	ZEBRA Envrionmental, Inc.	SCREEN DIAMETER:	2-inch
DRILLING COMPANY: DRILLING METHOD:		SCREEN DIAMETER: _ SCREEN LENGTH: _	
DRILLING METHOD:		-	10-feet

CASING LENGTH: NA

CASING TYPE: NA

DEPTH (FEET)	PID READINGS	SAMPLE NO.	N-	REC. (INCHES)	SAMPLE DESCRIPTION	CON
(FEEI)	(BACKGROUND = 0.0PPM)	S-1	NA	48-inches	Black, GRAVEL, damp. [FILL]	- CON
1					Olive, FMC SAND, wet.	
2					reddish-brown, SILTY CLAY, damp.	
3						
4						
4		S-2	NA	48-inches	olive, FMC SAND.	
5					wet.	
6					reddish-brown, SILTY CLAY, damp.	
0						
7						
8						
		S-3	NA	48-inches	olive, FMC SAND, wet.	
9						
10						
	1				reddish-brown, SILTY CLAY, damp.	
11]					
12						
_ ' -		S-4	NA	48-inches	olive, and FMC SAND, wet.	Y CLAY]
13					reddish-brown, SILTY CLAY, damp.	
14					readist-brown, SILTY CLAT, dailip.	
15						
16					[FMC SAND and SILT	Y CLAY]
					Bottom of hole at 16-feet.	
17						
18						
19						



2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

TEST BORING LOG: NOVEMBER 1, 2001

GW-5

CLIENT:	Jaeckle, Fleischmann & Mugel, LLP
LOCATION:	1746 Dale Road, Cheektowaga, New York

PROJECT NO.: 147.007

GROUND SURFACE ELEV: NA

PROJECT MANAGER: Ms. Karen C. Carlson

DRILLING COMPANY: ZEBRA Environmental, Inc. SC
DRILLING METHOD: Geoprobe

DRILLER: Mr.Philip Orsi/Mr. Christopher Donovan
TOTAL DEPTH: 16-feet
TOP OF CASING ELEV: NA
GROUNDWATER ELEV: NA

CASING DIAMETER: NA CASING LENGTH: NA

CASING TYPE: NA

DEPTH (FEET)	PID READINGS (BACKGROUND = B.DPPN)	SAMPLE NO.	N- VALUE	REC. (INCHES)	SAMPLE DESCRIPTION		WELI
1 2		S-1	NA		Gray, GRAVEL, dry. Olive-black, FMC SAND, little Silty Clay, damp.	[FILL]	
3.					reddish-brown, SILTY CLAY, damp.		
5		S-2	NA 	48-inches	olive-black, FMC SAND, some Silty Clay olive, FMC SAND reddish-brown, SILTY CLAY, damp.		
7							
9		S-3	NA	48-inches	olive-black, FMC SAND olive reddish-brown, SILTY CLAY.		
11					reddish-gray.		
13		S-4	NA	48-inches			
15						[FMC SAND and SILTY CLAY]	
17					Bottom of hole at 16-feet.		
18							

APPENDIX F: ANALYTICAL LABORATORY REPORTS



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services, Inc Client:

Lab Project No: Lab Sample No: 01-2677

Client Job Site:

Roco, Ltd

9749

Client Job No:

147.007

Soil

Field Location:

BH-1 (8'-10')

Date Sampled: Date Received:

Sample Type:

10/25/01 10/29/01

Field ID No:

N/A

Date Analyzed:

11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 8.91	Benzene	ND< 8.91
Bromomethane	ND< 8.91	Chlorobenzene	ND< 8.91
Bromoform	ND< 8.91	Ethylbenzene	ND< 8.91
Carbon tetrachloride	ND< 8.91	Toluene	ND< 8.91
Chloroethane	ND< 8.91	m,p - Xylene	ND< 8.91
Chloromethane	ND< 8.91	o - Xylene	ND< 8.91
2-Chloroethyl vinyl ether	ND< 8.91	Styrene	ND< 8.91
Chloroform	ND< 8.91	•	
Dibromochloromethane	ND< 8.91		
1,1-Dichloroethane	ND< 8.91		
1,2-Dichloroethane	ND< 8.91		
1,1-Dichloroethene	ND< 8.91		
cis-1,2-Dichloroethene	18.8		
trans-1,2-Dichloroethene	ND< 8.91	Ketones & Misc.	
1,2-Dichloropropane	ND< 8.91	Acetone	ND< 44.5
cis-1,3-Dichloropropene	ND< 8.91	Vinyl acetate	ND< 22.3
trans-1,3-Dichloropropene	ND< 8.91	2-Butanone	ND< 22.3
Methylene chloride	ND< 22.3	4-Methyl-2-pentanone	ND< 22.3
1,1,2,2-Tetrachloroethane	ND< 8.91	2-Hexanone	ND< 22.3
Tetrachloroethene	ND< 8.91	Carbon disulfide	ND< 22.3
1,1,1-Trichloroethane	ND< 8.91		
1,1,2-Trichloroethane	ND< 8.91		
Trichloroethene	118		
Vinyl Chloride	ND< 8.91		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services, Inc</u>

Lab Project No: Lab Sample No: 01-2677 9750

Client Job Site:

Roco, Ltd

Soil

Client Job No:

147.007

Date Sampled:

Sample Type:

10/25/01

Field Location:

BH-2 (8'-10')

Date Received: Date Analyzed: 10/29/01 11/01/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 11.0	Benzene	ND< 11.0
Bromomethane	ND< 11.0	Chlorobenzene	ND< 11.0
Bromoform	ND< 11.0	Ethylbenzene	ND< 11.0
Carbon tetrachloride	ND< 11.0	Toluene	ND< 11.0
Chloroethane	ND< 11.0	m,p - Xylene	ND< 11.0
Chloromethane	ND< 11.0	o - Xylene	ND< 11.0
2-Chloroethyl vinyl ether	ND< 11.0	Styrene	ND< 11.0
· Chloroform	ND< 11.0		
Dibromochloromethane	ND< 11.0		
1,1-Dichloroethane	ND< 11.0		
1,2-Dichloroethane	ND< 11.0		
1,1-Dichloroethene	ND< 11.0		
cis-1,2-Dichloroethene	ND< 11.0		
trans-1,2-Dichloroethene	ND< 11.0	Ketones & Misc.	
1,2-Dichloropropane	ND< 11.0	Acetone	ND< 55.2
cis-1,3-Dichloropropene	ND< 11.0	Vinyl acetate	ND< 27.6
trans-1,3-Dichloropropene	ND< 11.0	2-Butanone	ND< 27.6
Methylene chloride	ND< 27.6	4-Methyl-2-pentanone	ND< 27.6
1,1,2,2-Tetrachloroethane	ND< 11.0	2-Hexanone	ND< 27.6
Tetrachloroethene	ND< 11.0	Carbon disulfide	ND< 27.6
1,1,1-Trichloroethane	ND< 11.0		
1,1,2-Trichloroethane	ND< 11.0		
Trichloroethene	ND< 11.0		
Vinyl Chloride	ND< 11.0		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services, Inc. Client:

Lab Project No:

01-2677

Client Job Site:

Lab Sample No:

9751

Roco, Ltd

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

10/25/01

Field Location:

BH-3 (8'-10')

Date Received:

10/29/01

Field ID No:

N/A

Date Analyzed: 11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 10.2	Benzene	ND< 10.2
Bromomethane	ND< 10.2	Chlorobenzene	ND< 10.2
Bromoform	ND< 10.2	Ethylbenzene	ND< 10.2
Carbon tetrachloride	ND< 10.2	Toluene	ND< 10.2
Chloroethane	ND< 10.2	m,p - Xylene	20.4
Chloromethane	ND< 10.2	o - Xylene	ND< 10.2
2-Chloroethyl vinyl ether	ND< 10.2	Styrene	ND< 10.2
Chloroform	ND< 10.2		
Dibromochloromethane	ND< 10.2		
1,1-Dichloroethane	ND< 10.2		
1,2-Dichloroethane	ND< 10.2		
1,1-Dichloroethene	ND< 10.2		
cis-1,2-Dichloroethene	73.7		
trans-1,2-Dichloroethene	ND< 10.2	Ketones & Misc.	
1,2-Dichloropropane	ND< 10.2	Acetone	ND< 50.9
cis-1,3-Dichloropropene	ND< 10.2	Vinyl acetate	ND< 25.5
trans-1,3-Dichloropropene	ND< 10.2	2-Butanone	ND< 25.5
Methylene chloride	ND< 25.5	4-Methyl-2-pentanone	ND< 25.5
1,1,2,2-Tetrachloroethane	ND< 10.2	2-Hexanone	ND< 25.5
Tetrachloroethene	ND< 10.2	Carbon disulfide	ND< 25.5
1,1,1-Trichloroethane	ND< 10.2		
1,1,2-Trichloroethane	ND< 10.2		
Trichloroethene	18.1		
Vinyl Chloride	ND< 10.2		
A 1 C 184-0-1		FLADIDAL	

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: **Leader Professional Services, Inc** Lab Project No: Lab Sample No: 01-2677

Client Job Site:

Roco, Ltd

9752

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

10/25/01

Field Location:

BH-4 (0'-2')

Date Received: Date Analyzed: 10/29/01 11/01/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 8.48	Benzene	ND< 8.48
Bromomethane	ND< 8.48	Chlorobenzene	ND< 8.48
Bromoform	ND< 8.48	Ethylbenzene	ND< 8.48
Carbon tetrachloride	ND< 8.48	Toluene	ND< 8.48
Chloroethane	ND< 8.48	m,p - Xylene	ND< 8.48
Chloromethane	ND< 8.48	o - Xylene	ND< 8.48
2-Chloroethyl vinyl ether	ND< 8.48	Styrene	ND< 8.48
Chloroform	ND< 8.48		
Dibromochloromethane	ND< 8.48		
1,1-Dichloroethane	ND< 8.48		
1,2-Dichloroethane	ND< 8.48		
1,1-Dichloroethene	ND< 8.48		
cis-1,2-Dichloroethene	19.2		
trans-1,2-Dichloroethene	12.7	Ketones & Misc.	
1,2-Dichloropropane	ND< 8.48	Acetone	ND< 42.4
cis-1,3-Dichloropropene	ND< 8.48	Vinyl acetate	ND< 21.2
trans-1,3-Dichloropropene	ND< 8.48	2-Butanone	ND< 21.2
Methylene chloride	ND< 21.2	4-Methyl-2-pentanone	ND< 21.2
1,1,2,2-Tetrachloroethane	ND< 8.48	2-Hexanone	ND< 21.2
Tetrachloroethene	ND< 8.48	Carbon disulfide	ND< 21.2
1,1,1-Trichloroethane	ND< 8.48		
1,1,2-Trichloroethane	ND< 8.48		
Trichloroethene	ND< 8.48		
Vinyl Chloride	ND< 8.48		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services, Inc</u>

Lab Project No:

01-2677

Lab Sample No:

9753

Client Job Site:

Roco, Ltd

Soil

Client Job No:

147.007

Field Location:

BH-4 (8'-10')

Date Sampled: Date Received: 10/25/01 10/29/01

Field ID No:

N/A

Date Analyzed:

Sample Type:

11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 9.04	Benzene	ND< 9.04
Bromomethane	ND< 9.04	Chlorobenzene	ND< 9.04
Bromoform	ND< 9.04	Ethylbenzene	ND< 9.04
Carbon tetrachloride	ND< 9.04	Toluene	ND< 9.04
Chloroethane	ND< 9.04	m,p - Xylene	ND< 9.04
Chloromethane	ND< 9.04	o - Xylene	ND< 9.04
2-Chloroethyl vinyl ether	ND< 9.04	Styrene	ND< 9.04
Chloroform	ND< 9.04		
Dibromochloromethane	ND< 9.04		
1,1-Dichloroethane	ND< 9.04		
1,2-Dichloroethane	ND< 9.04		
1,1-Dichloroethene	ND< 9.04		
cis-1,2-Dichloroethene	17.6		
trans-1,2-Dichloroethene	ND< 9.04	Ketones & Misc.	
1,2-Dichloropropane	ND< 9.04	Acetone	ND< 45.2
cis-1,3-Dichloropropene	ND< 9.04	Vinyl acetate	ND< 22.6
trans-1,3-Dichloropropene	ND< 9.04	2-Butanone	ND< 22.6
Methylene chloride	ND< 22.6	4-Methyl-2-pentanone	ND< 22.6
1,1,2,2-Tetrachloroethane	ND< 9.04	2-Hexanone	ND< 22.6
Tetrachloroethene	ND< 9.04	Carbon disulfide	ND< 22.6
1,1,1-Trichloroethane	ND< 9.04		
1,1,2-Trichloroethane	ND< 9.04		
Trichloroethene	25.1		
Vinyl Chloride	ND< 9.04		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services, Inc Client:

Lab Project No: Lab Sample No: 01-2677 9754

Client Job Site:

Roco, Ltd

Client Job No:

147.007

Soil

Field Location:

BH-5 (8'-10')

Date Sampled: Date Received:

Sample Type:

10/25/01

Field ID No:

N/A

Date Analyzed:

10/29/01 11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 10.5	Benzene	ND< 10.5
Bromomethane	ND< 10.5	Chlorobenzene	ND< 10.5
Bromoform	ND< 10.5	Ethylbenzene	ND< 10.5
Carbon tetrachloride	ND< 10.5	Toluene	ND< 10.5
Chloroethane	ND< 10.5	m,p - Xylene	ND< 10.5
Chloromethane	ND< 10.5	o - Xylene	ND< 10.5
2-Chloroethyl vinyl ether	ND< 10.5	Styrene	ND< 10.5
Chloroform	ND< 10.5		
Dibromochloromethane	ND< 10.5		
1,1-Dichloroethane	ND< 10.5		
1,2-Dichloroethane	ND< 10.5		
1,1-Dichloroethene	ND< 10.5		
cis-1,2-Dichloroethene	29.1		
trans-1,2-Dichloroethene	ND< 10.5	Ketones & Misc.	
1,2-Dichloropropane	ND< 10.5	Acetone	ND< 52.5
cis-1,3-Dichloropropene	ND< 10.5	Vinyl acetate	ND< 26.3
trans-1,3-Dichloropropene	ND< 10.5	2-Butanone	ND< 26.3
Methylene chloride	ND< 26.3	4-Methyl-2-pentanone	ND< 26.3
1,1,2,2-Tetrachloroethane	ND< 10.5	2-Hexanone	ND< 26.3
Tetrachloroethene	ND< 10.5	Carbon disulfide	ND< 26.3
1,1,1-Trichloroethane	ND< 10.5		
1,1,2-Trichloroethane	ND< 10.5		
Trichloroethene	189		
Vinyl Chloride	ND< 10.5		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

| Client: Leader Professional Services, Inc

Lab Project No:

01-2677

Lab Sample No:

9755

Client Job Site: Roco, Ltd

Sample Type:

Soil

Client Job No: 147.007

Date Sampled:

10/25/01

Field Location:

l

BH-6 (8'-10')

Date Received:

10/29/01

Field ID No: N/A

Date Analyzed:

11/02/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 254	Benzene	ND< 254
Bromomethane	ND< 254	Chlorobenzene	ND< 254
Bromoform	ND< 254	Ethylbenzene	ND< 254
Carbon tetrachloride	ND< 254	Toluene	10,200
Chloroethane	ND< 254	m,p - Xylene	ND< 254
Chloromethane	ND< 254	o - Xylene	ND< 254
2-Chloroethyl vinyl ether	ND< 254	Styrene	ND< 254
Chloroform	ND< 254		
Dibromochloromethane	ND< 254		
1,1-Dichloroethane	ND< 254	•	
1,2-Dichloroethane	ND< 254		
1,1-Dichloroethene	ND< 254		
cis-1,2-Dichloroethene	545		
trans-1,2-Dichloroethene	ND< 254	Ketones & Misc.	
1,2-Dichloropropane	ND< 254	Acetone	ND< 1,270
cis-1,3-Dichloropropene	ND< 254	Vinyl acetate	ND< 636
trans-1,3-Dichloropropene	ND< 254	2-Butanone	ND< 636
Methylene chloride	ND< 636	4-Methyl-2-pentanone	ND< 636
1,1,2,2-Tetrachloroethane	ND< 254	2-Hexanone	ND< 636
Tetrachloroethene	ND< 254	Carbon disulfide	ND< 636
1,1,1-Trichloroethane	ND< 254		
1,1,2-Trichloroethane	ND< 254		
Trichloroethene	ND< 254		
Vinyl Chloride	ND< 254		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services, Inc.</u>

Lab Project No: Lab Sample No:

01-2677

9756

Client Job Site:

Roco, Ltd

Client Job No:

147.007

Sample Type:

Soil

Field Location:

BH-7 (6'-8')

Date Sampled: Date Received:

10/25/01 10/29/01

Field ID No:

N/A

Date Analyzed:

11/02/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 275	Benzene	ND< 275
Bromomethane	ND< 275	Chlorobenzene	ND< 275
Bromoform	ND< 275	Ethylbenzene	ND< 275
Carbon tetrachloride	ND< 275	Toluene	ND< 275
Chloroethane	ND< 275	m,p - Xylene	ND< 275
Chloromethane	ND< 275	o - Xylene	ND< 275
2-Chloroethyl vinyl ether	ND< 275	Styrene	ND< 275
· Chloroform	ND< 275		
Dibromochloromethane	ND< 275		
1,1-Dichloroethane	ND< 275		
1,2-Dichloroethane	ND< 275		
1,1-Dichloroethene	ND< 275		
cis-1,2-Dichloroethene	592		
trans-1,2-Dichloroethene	ND< 275	Ketones & Misc.	
1,2-Dichloropropane	ND< 275	Acetone	ND< 1,380
cis-1,3-Dichloropropene	ND< 275	Vinyl acetate	ND< 688
trans-1,3-Dichloropropene	ND< 275	2-Butanone	ND< 688
Methylene chloride	ND< 688	4-Methyl-2-pentanone	ND< 688
1,1,2,2-Tetrachloroethane	ND< 275	2-Hexanone	ND< 688
Tetrachloroethene	3,990	Carbon disulfide	ND< 688
1,1,1-Trichloroethane	ND< 275		
1,1,2-Trichloroethane	ND< 275		
Trichloroethene	10,900		
Vinyl Chloride	ND< 275		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services, Inc</u>

Lab Project No: Lab Sample No:

01-2677 9757

Client Job Site:

Roco, Ltd

Client Job No:

147.007

Soil

Field Location:

BH-7 (8'-10')

Field ID No:

N/A

Date Sampled: Date Received:

Sample Type:

10/25/01 10/29/01

Date Analyzed:

11/02/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	. VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 53.9	Benzene	ND< 53.9
Bromomethane	ND< 53.9	Chlorobenzene	ND< 53.9
Bromoform	ND< 53.9	Ethylbenzene	ND< 53.9
Carbon tetrachloride	ND< 53.9	Toluene	ND< 53.9
Chloroethane	ND< 53.9	m,p - Xylene	ND< 53.9
Chloromethane	ND< 53.9	o - Xylene	ND< 53.9
2-Chloroethyl vinyl ether	ND< 53.9	Styrene	ND< 53.9
Chloroform ·	ND< 53.9		
Dibromochloromethane	ND< 53.9		
1,1-Dichloroethane	ND< 53.9		
1,2-Dichloroethane	ND< 53.9		
1,1-Dichloroethene	ND< 53.9		
cis-1,2-Dichloroethene	325		
trans-1,2-Dichloroethene	ND< 53.9	Ketones & Misc.	
1,2-Dichloropropane	ND< 53.9	Acetone	ND< 269
cis-1,3-Dichloropropene	ND< 53.9	Vinyl acetate	ND< 135
trans-1,3-Dichloropropene	ND< 53.9	2-Butanone	ND< 135
Methylene chloride	ND< 135	4-Methyl-2-pentanone	ND< 135
1,1,2,2-Tetrachloroethane	ND< 53.9	2-Hexanone	ND< 135
Tetrachloroethene	ND< 53.9	Carbon disulfide	ND< 135
1,1,1-Trichloroethane	ND< 53.9		
1,1,2-Trichloroethane	ND< 53.9		
Trichloroethene	2,130		
Vinyl Chloride	ND< 53.9		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

| Client:

Leader Professional Services

Lab Project No: Lab Sample No: 01-2757

Client Job Site:

RoCo, Ltd.

10004

Client Job No:

147.007

Sample Type:

Soil

Date Sampled: Date Received: 11/02/01 11/06/01

Field Location:

BH-8 (8'-10')

Date Analyzed:

11/12/01

→ Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 9.86	Benzene	ND< 9.86
Bromomethane	ND< 9.86	Chlorobenzene	ND< 9.86
Bromoform	ND< 9.86	Ethylbenzene	ND< 9.86
Carbon tetrachloride	ND< 9.86	Toluene	ND< 9.86
Chloroethane	ND< 9.86	m,p - Xylene	11.1
Chloromethane	ND< 9.86	o - Xylene	ND< 9.86
2-Chloroethyl vinyl ether	ND< 9.86	Styrene	ND< 9.86
Chloroform	ND< 9.86 ·		
Dibromochloromethane	ND< 9.86	•	
1,1-Dichloroethane	ND< 9.86		
1,2-Dichloroethane	ND< 9.86		
1,1-Dichloroethene	ND< 9.86		
cis-1,2-Dichloroethene	ND< 9.86		
trans-1,2-Dichloroethene	ND< 9.86	Ketones & Misc.	
1,2-Dichloropropane	ND< 9.86	Acetone	ND< 49.3
cis-1,3-Dichloropropene	ND< 9.86	Vinyl acetate	ND< 24.7
trans-1,3-Dichloropropene	ND< 9.86	2-Butanone	ND< 24.7
Methylene chloride	ND< 24.7	4-Methyl-2-pentanone	ND< 24.7
1,1,2,2-Tetrachloroethane	ND< 9.86	2-Hexanone	ND< 24.7
Tetrachloroethene	ND< 9.86	Carbon disulfide	ND< 24.7
1,1,1-Trichloroethane	ND< 9.86		
1,1,2-Trichloroethane	ND< 9.86		
Trichloroethene	65.8		
Vinyl Chloride	ND< 9.86		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By _

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client:

Leader Professional Services

Lab Project No: Lab Sample No: 01-2757

Client Job Site:

RoCo, Ltd.

10005

Client Job No:

147.007

Sample Type:

Soil

Field Location:

BH-9 (6'-8')

Date Sampled: Date Received:

11/02/01 11/06/01

Field ID No:

N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 21.4	Benzene	ND< 21.4
Bromomethane	ND< 21.4	Chlorobenzene	ND< 21.4
Bromoform	ND< 21.4	Ethylbenzene	ND< 21.4
Carbon tetrachloride	ND< 21.4	Toluene	ND< 21.4
Chloroethane	ND< 21.4	m,p - Xylene	ND< 21.4
Chloromethane	ND< 21.4	o - Xylene	ND< 21.4
2-Chloroethyl vinyl ether	ND< 21.4	Styrene	ND< 21.4
Chloroform	ND< 21.4		
Dibromochloromethane	ND< 21.4		
1,1-Dichloroethane	ND< 21.4		
1,2-Dichloroethane	ND< 21.4		
1,1-Dichloroethene	ND< 21.4		
cis-1,2-Dichloroethene	127		
trans-1,2-Dichloroethene	ND< 21.4	Ketones & Misc.	
1,2-Dichloropropane	ND< 21.4	Acetone	ND< 107
cis-1,3-Dichloropropene	ND< 21.4	Vinyl acetate	ND< 53.6
trans-1,3-Dichloropropene	ND< 21.4	2-Butanone	ND< 53.6
Methylene chloride	ND< 53.6	4-Methyl-2-pentanone	ND< 53.6
1,1,2,2-Tetrachloroethane	ND< 21.4	2-Hexanone	ND< 53.6
Tetrachloroethene	ND< 21.4	Carbon disulfide	ND< 53.6
1,1,1-Trichloroethane	ND< 21.4		
1,1,2-Trichloroethane	ND< 21.4		
Trichloroethene	1,150		
Vinyl Chloride	ND< 21.4		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757 10006

Client Job Site:

RoCo, Ltd.

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

11/02/01

Field Location:

BH-10 (8'-10')

Date Received: Date Analyzed:

11/06/01 11/12/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 10.1	Benzene	ND< 10.1
Bromomethane	ND< 10.1	Chlorobenzene	ND< 10.1
Bromoform	ND< 10.1	Ethylbenzene	ND< 10.1
Carbon tetrachloride	ND< 10.1	Toluene	ND< 10.1
Chloroethane	ND< 10.1	m,p - Xylene	ND< 10.1
Chloromethane	ND< 10.1	o - Xylene	ND< 10.1
2-Chloroethyl vinyl ether	ND< 10.1	Styrene	ND< 10.1
Chloroform	ND< 10.1		
Dibromochloromethane	ND< 10.1		
1,1-Dichloroethane	ND< 10.1		
1,2-Dichloroethane	ND< 10.1		
1,1-Dichloroethene	ND< 10.1		
cis-1,2-Dichloroethene	16.6		
trans-1,2-Dichloroethene	ND< 10.1	Ketones & Misc.	
1,2-Dichloropropane	ND< 10.1	Acetone	ND< 50.3
cis-1,3-Dichloropropene	ND< 10.1	Vinyl acetate	ND< 25.1
trans-1,3-Dichloropropene	ND< 10.1	2-Butanone	ND< 25.1
Methylene chloride	ND< 25.1	4-Methyl-2-pentanone	ND< 25.1
1,1,2,2-Tetrachloroethane	ND< 10.1	2-Hexanone	ND< 25.1
Tetrachloroethene	ND< 10.1	Carbon disulfide	ND< 25.1
1,1,1-Trichloroethane	ND< 10.1		
1,1,2-Trichloroethane	ND< 10.1		
Trichloroethene	89.9		
Vinyl Chloride	ND< 10.1		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757 10007

Client Job Site:

RoCo, Ltd.

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

11/02/01

Field Location:

BH-11 (8'-10')

Date Received: Date Analyzed:

11/06/01 11/12/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 9.24	Benzene	ND< 9.24
Bromomethane	ND< 9.24	Chlorobenzene	ND< 9.24
Bromoform	ND< 9.24	Ethylbenzene	ND< 9.24
Carbon tetrachloride	12.4	Toluene	23.8
Chloroethane	ND< 9.24	m,p - Xylene	23.6
Chloromethane	ND< 9.24	o - Xylene	ND< 9.24
2-Chloroethyl vinyl ether	ND< 9.24	Styrene	ND< 9.24
Chloroform	ND< 9.24		
Dibromochloromethane	ND< 9.24		
1,1-Dichloroethane	ND< 9.24		
1,2-Dichloroethane	ND< 9.24		
1,1-Dichloroethene	ND< 9.24		
cis-1,2-Dichloroethene	12.8		
trans-1,2-Dichloroethene	ND< 9.24	Ketones & Misc.	
1,2-Dichloropropane	ND< 9.24	Acetone	ND< 46.2
cis-1,3-Dichloropropene	ND< 9.24	Vinyl acetate	ND< 23.1
trans-1,3-Dichloropropene	ND< 9.24	2-Butanone	ND< 23.1
Methylene chloride	ND< 23.1	4-Methyl-2-pentanone	ND< 23.1
1,1,2,2-Tetrachloroethane	ND< 9.24	2-Hexanone	ND< 23.1
Tetrachloroethene	ND< 9.24	Carbon disulfide	ND< 23.1
1,1,1-Trichloroethane	ND< 9.24		
1,1,2-Trichloroethane	ND< 9.24		
Trichloroethene	116		
Vinyl Chloride	ND< 9.24		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757 10008

Client Job Site:

RoCo, Ltd.

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

11/02/01

Field Location:

BH-12 (8'-10')

Date Received: Date Analyzed:

11/06/01 11/12/01

Field ID No:

N/A

VOLATILE HALOCARBONS VOLATILE AROMATICS RESULTS (ug/Kg) RESULTS (ug/Kg) Bromodichloromethane ND< 8.51 Benzene ND< 8.51 Bromomethane ND< 8.51 Chlorobenzene ND< 8.51 Ethylbenzene ND< 8.51 Bromoform ND< 8.51 Toluene Carbon tetrachloride ND< 8.51 ND< 8.51 m,p - Xylene ND< 8.51 Chloroethane ND< 8.51 Chloromethane ND< 8.51 o - Xylene ND< 8.51 2-Chloroethyl vinyl ether ND< 8.51 Styrene ND< 8.51 ND< 8.51 Chloroform Dibromochloromethane ND< 8.51 ND< 8.51 1,1-Dichloroethane ND< 8.51 1,2-Dichloroethane ND< 8.51 1,1-Dichloroethene cis-1,2-Dichloroethene ND< 8.51 trans-1,2-Dichloroethene ND< 8.51 Ketones & Misc. ND< 8.51 Acetone ND< 42.6 1,2-Dichloropropane Vinyl acetate ND< 21.3 cis-1,3-Dichloropropene ND< 8.51 2-Butanone ND< 21.3 ND< 8.51 trans-1,3-Dichloropropene Methylene chloride ND< 21.3 4-Methyl-2-pentanone ND< 21.3 2-Hexanone ND< 21.3 1,1,2,2-Tetrachloroethane ND< 8.51 Carbon disulfide Tetrachloroethene ND< 8.51 ND< 21.3 1,1,1-Trichloroethane ND< 8.51 1,1,2-Trichloroethane ND< 8.51

Analytical Method:

Trichloroethene

Vinyl Chloride

EPA 8260

67.5

ND< 8.51

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No:

01-2757 10009

Client Job Site:

RoCo, Ltd.

Client Job No:

147.007

Date Sampled:

Sample Type:

Date Received:

11/02/01

Soil

Field Location:

BH-13 (8'-10')

Date Analyzed:

11/06/01 11/13/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 22.6	Benzene	ND< 22.6
Bromomethane	ND< 22.6	Chlorobenzene	ND< 22.6
Bromoform	ND< 22.6	Ethylbenzene	ND< 22.6
Carbon tetrachloride	ND< 22.6	Toluene	ND< 22.6
Chloroethane	ND< 22.6	m,p - Xylene	ND< 22.6
Chloromethane	ND< 22.6	o - Xylene	ND< 22.6
2-Chloroethyl vinyl ether	ND< 22.6	Styrene	ND< 22.6
Chloroform	ND< 22.6		
Dibromochloromethane	ND< 22.6		
1,1-Dichloroethane	ND< 22.6	•	
1,2-Dichloroethane	ND< 22.6		
1,1-Dichloroethene	ND< 22.6		
cis-1,2-Dichloroethene	423		
trans-1,2-Dichloroethene	ND< 22.6	Ketones & Misc.	
1,2-Dichloropropane	ND< 22.6	Acetone	ND< 113
cis-1,3-Dichloropropene	ND< 22.6	Vinyl acetate	ND< 56.5
trans-1,3-Dichloropropene	ND< 22.6	2-Butanone	ND< 56.5
Methylene chloride	ND< 56.5	4-Methyl-2-pentanone	ND< 56.5
1,1,2,2-Tetrachloroethane	ND< 22.6	2-Hexanone	ND< 56.5
Tetrachloroethene	ND< 22.6	Carbon disulfide	ND< 56.5
1,1,1-Trichloroethane	ND< 22.6		
1,1,2-Trichloroethane	ND< 22.6		
Trichloroethene	1,440		
Vinyl Chloride	ND< 22.6		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services Client:

Lab Project No: Lab Sample No: 01-2757

RoCo, Ltd.

10011

Client Job Site:

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

11/02/01

Field Location: Field ID No:

BH-14 (8'-10')

Date Received:

11/06/01

N/A

Date Analyzed: 11/12/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 11.0	Benzene	ND< 11.0
Bromomethane	ND< 11.0	Chlorobenzene	ND< 11.0
Bromoform	ND< 11.0	Ethylbenzene	ND< 11.0
Carbon tetrachloride	ND< 11.0	Toluene	ND< 11.0
Chloroethane	ND< 11.0	m,p - Xylene	ND< 11.0
Chloromethane	ND< 11.0	o - Xylene	ND< 11.0
2-Chloroethyl vinyl ether	ND< 11.0	Styrene	ND< 11.0
Chloroform	ND< 11.0	•	
Dibromochloromethane	ND< 11.0		
1,1-Dichloroethane	ND< 11.0		
1,2-Dichloroethane	ND< 11.0		
1,1-Dichloroethene	ND< 11.0		
cis-1,2-Dichloroethene	107		
trans-1,2-Dichloroethene	ND< 11.0	Ketones & Misc.	
1,2-Dichloropropane	ND< 11.0	Acetone	ND< 55.0
cis-1,3-Dichloropropene	ND< 11.0	Vinyl acetate	ND< 27.5
trans-1,3-Dichloropropene	ND< 11.0	2-Butanone	ND< 27.5
Methylene chloride	ND< 27.5	. 4-Methyl-2-pentanone	ND< 27.5
1,1,2,2-Tetrachloroethane	ND< 11.0	2-Hexanone	ND< 27.5
Tetrachloroethene	ND< 11.0	Carbon disulfide	ND< 27.5
1,1,1-Trichloroethane	ND< 11.0		
1,1,2-Trichloroethane	ND< 11.0		
Trichloroethene	628		
Vinyl Chloride	ND< 11.0		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

| Client: **Leader Professional Services** Lab Project No: Lab Sample No: 01-2757

RoCo, Ltd.

10016

Sample Type:

Soil

Client Job No:

Client Job Site:

147.007

N/A

Date Sampled:

11/01/01

Field Location:

GW-2 (8'-10')

Date Received:

11/06/01

Field ID No:

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 8.40	Benzene	ND< 8.40
Bromomethane	ND< 8.40	Chlorobenzene	ND< 8.40
Bromoform	ND< 8.40	Ethylbenzene	ND< 8.40
Carbon tetrachloride	ND< 8.40	Toluene	ND< 8.40
Chloroethane .	ND< 8.40	m,p - Xylene	ND< 8.40
Chloromethane	ND< 8.40	o - Xylene	ND< 8.40
2-Chloroethyl vinyl ether	ND< 8.40	Styrene	ND< 8.40
Chloroform	ND< 8.40		
Dibromochloromethane	ND< 8.40		
1,1-Dichloroethane	ND< 8.40		
1,2-Dichloroethane	ND< 8.40		
1,1-Dichloroethene	ND< 8.40		
cis-1,2-Dichloroethene	ND< 8.40		
trans-1,2-Dichloroethene	ND< 8.40	Ketones & Misc.	
1,2-Dichloropropane	ND< 8.40	Acetone	ND< 42.0
cis-1,3-Dichloropropene	ND< 8.40	Vinyl acetate	ND< 21.0
trans-1,3-Dichloropropene	ND< 8.40	2-Butanone	ND< 21.0
Methylene chloride	ND< 21.0	4-Methyl-2-pentanone	ND< 21.0
1,1,2,2-Tetrachloroethane	ND< 8.40	2-Hexanone	ND< 21.0
Tetrachloroethene	ND< 8.40	Carbon disulfide	ND< 21.0
1,1,1-Trichloroethane	ND< 8.40		
1,1,2-Trichloroethane	ND< 8.40		
Trichloroethene	ND< 8.40		
Vinyl Chloride	ND< 8.40		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services Client:

Lab Project No: Lab Sample No: 01-2757

Client Job Site:

RoCo, Ltd.

10012

Client Job No:

Soil

147.007

Date Sampled:

Sample Type:

11/01/01

Field Location:

GW-1 (8'-10')

Date Received:

11/06/01

Field ID No:

N/A

Date Analyzed: 11/12/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 7.88	Benzene	ND< 7.88
Bromomethane	ND< 7.88	Chlorobenzene	ND< 7.88
Bromoform	ND< 7.88	Ethylbenzene	14.4
Carbon tetrachloride	ND< 7.88	Toluene	46.4
Chloroethane	ND< 7.88	m,p - Xylene	42.0
Chloromethane	ND< 7.88	o - Xylene	15.3
2-Chloroethyl vinyl ether	ND< 7.88	Styrene	ND< 7.88
Chloroform	ND< 7.88		
Dibromochloromethane	ND< 7.88		
1,1-Dichloroethane	ND< 7.88		
1,2-Dichloroethane	ND< 7.88		
1,1-Dichloroethene	ND< 7.88		
cis-1,2-Dichloroethene	76.4		
trans-1,2-Dichloroethene	ND< 7.88	Ketones & Misc.	
1,2-Dichloropropane	ND< 7.88	Acetone	ND< 39.4
cis-1,3-Dichloropropene	ND< 7.88	Vinyl acetate	ND< 19.7
trans-1,3-Dichloropropene	ND< 7.88	2-Butanone	ND< 19.7
Methylene chloride	ND< 19.7	4-Methyl-2-pentanone	ND< 19.7
1,1,2,2-Tetrachloroethane	ND< 7.88	2-Hexanone	ND< 19.7
Tetrachloroethene	ND< 7.88	Carbon disulfide	ND< 19.7
1,1,1-Trichloroethane	ND< 7.88		
1,1,2-Trichloroethane	ND< 7.88		
Trichloroethene	82.0		
Vinyl Chloride	ND< 7.88		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client:

Leader Professional Services

Lab Project No:

01-2757

Client Job Site:

RoCo, Ltd.

Lab Sample No:

10013

Client Job No:

4 4 7 0 0 7

Sample Type:

Soil

147.007

Date Sampled:

11/02/01

Field Location:

GW-3 (2'-4')

Date Received: Date Analyzed:

11/06/01 11/13/01

Field ID No:

N/A

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 112	Benzene	ND< 112
Bromomethane	ND< 112	· Chlorobenzene	ND< 112
Bromoform	ND< 112	Ethylbenzene	ND< 112
Carbon tetrachloride	ND< 112	Toluene	ND< 112
Chloroethane	ND< 112	m,p - Xylene	ND< 112
Chloromethane	ND< 112	o - Xylene	ND< 112
2-Chloroethyl vinyl ether	ND< 112	Styrene	ND< 112
Chloroform	ND< 112		
Dibromochloromethane	ND< 112		
1,1-Dichloroethane	ND< 112		
1,2-Dichloroethane	ND< 112		
1,1-Dichloroethene	ND< 112		
cis-1,2-Dichloroethene	ND< 112		
trans-1,2-Dichloroethene	ND< 112	Ketones & Misc.	
1,2-Dichloropropane	ND< 112	Acetone	ND< 558
cis-1,3-Dichloropropene	ND< 112	Vinyl acetate	ND< 279
trans-1,3-Dichloropropene	ND< 112	2-Butanone	ND< 279
Methylene chloride	ND< 279	4-Methyl-2-pentanone	ND< 279
1,1,2,2-Tetrachloroethane	ND< 112	2-Hexanone	ND< 279
Tetrachloroethene	ND< 112	Carbon disulfide	ND< 279
1,1,1-Trichloroethane	ND< 112		
1,1,2-Trichloroethane	ND< 112		
Trichloroethene	2,310		
Vinyl Chloride	ND< 112		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services Client:

Lab Project No: Lab Sample No: 01-2757

RoCo, Ltd.

10014

Soil

Client Job No:

Client Job Site:

147.007

Date Sampled:

Sample Type:

11/02/01

Field Location:

GW-3 (6'-8')

Date Received:

11/06/01

Field ID No:

N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Ko
Bromodichloromethane	ND< 187	Benzene	ND< 187
Bromomethane	ND< 187	Chlorobenzene	ND< 187
Bromoform	ND< 187	Ethylbenzene	ND< 187
Carbon tetrachloride	ND< 187	Toluene	ND< 187
Chloroethane	ND< 187	m,p - Xylene	ND< 187
Chloromethane	ND< 187	o - Xylene	ND< 187
2-Chloroethyl vinyl ether	ND< 187	Styrene	ND< 187
Chloroform	ND< 187		
Dibromochloromethane	ND< 187		
1,1-Dichloroethane	ND< 187		
1,2-Dichloroethane	ND< 187		
1,1-Dichloroethene	ND< 187		
cis-1,2-Dichloroethene	ND< 187		
trans-1,2-Dichloroethene	ND< 187	Ketones & Misc.	
1,2-Dichloropropane	ND< 187	Acetone	ND< 934
cis-1,3-Dichloropropene	ND< 187	Vinyl acetate	ND< 467
trans-1,3-Dichloropropene	ND< 187	2-Butanone	ND< 467
Methylene chloride	ND< 467	4-Methyl-2-pentanone	ND< 467
1,1,2,2-Tetrachloroethane	ND< 187	2-Hexanone	ND< 467
Tetrachloroethene	ND< 187	Carbon disulfide	ND< 467
1,1,1-Trichloroethane	ND< 187		
1,1,2-Trichloroethane	ND< 187		
Trichloroethene	16,800		
Vinyl Chloride	ND< 187		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No:

01-2757

Client Job Site:

RoCo, Ltd.

Lab Sample No: 10015

Client Job No:

147.007

Soil

Field Location:

GW-3 (10-12')

Date Sampled: Date Received: 11/02/01 11/06/01

Field ID No:

N/A

Date Analyzed:

Sample Type:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/K
Bromodichloromethane	ND< 147	Benzene	ND< 147
Bromomethane	ND< 147	Chlorobenzene	ND< 147
Bromoform	ND< 147	Ethylbenzene	ND< 147
Carbon tetrachloride	ND< 147	Toluene	ND< 147
Chloroethane	ND< 147	m,p - Xylene	ND< 147
Chloromethane	ND< 147	o - Xylene	ND< 147
2-Chloroethyl vinyl ether	ND< 147	Styrene	ND< 147
Chloroform	ND< 147		
Dibromochloromethane	ND< 147		
1,1-Dichloroethane	ND< 147		
1,2-Dichloroethane	ND< 147		
1,1-Dichloroethene	ND< 147		
cis-1,2-Dichloroethene	ND< 147		
trans-1,2-Dichloroethene	ND< 147	Ketones & Misc.	
1,2-Dichloropropane	ND< 147	Acetone	ND< 735
cis-1,3-Dichloropropene	ND< 147	Vinyl acetate	ND< 367
trans-1,3-Dichloropropene	ND< 147	2-Butanone	ND< 367
Methylene chloride	ND< 367	4-Methyl-2-pentanone	ND< 367
1,1,2,2-Tetrachloroethane	ND< 147	. 2-Hexanone	ND< 367
Tetrachloroethene	ND< 147	Carbon disulfide	ND< 367
1,1,1-Trichloroethane	ND< 147		
1,1,2-Trichloroethane	ND< 147		
Trichloroethene	2,270		
Vinyl Chloride	ND< 147		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757 10017

Client Job Site:

RoCo, Ltd.

_

Client Job No:

147.007

Soil

Field Location:

GW-3 (16'-18')

Date Sampled: Date Received:

Sample Type:

11/02/01 11/06/01

Field ID No:

N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/K
Bromodichloromethane	ND< 8.02	Benzene	ND< 8.02
Bromomethane	ND< 8.02	Chlorobenzene	ND< 8.02
Bromoform	ND< 8.02	Ethylbenzene	ND< 8.02
Carbon tetrachloride	ND< 8.02	Toluene	ND< 8.02
Chloroethane	ND< 8.02	m,p - Xylene	ND< 8.02
Chloromethane	ND< 8.02	o - Xylene	ND< 8.02
2-Chloroethyl vinyl ether	ND< 8.02	Styrene	ND< 8.02
Chloroform	ND< 8.02		
Dibromochloromethane	ND< 8.02	·	
1,1-Dichloroethane	ND< 8.02		
1,2-Dichloroethane	ND< 8.02		
1,1-Dichloroethene	ND< 8.02		
cis-1,2-Dichloroethene	53.6		
trans-1,2-Dichloroethene	ND< 8.02	Ketones & Misc.	
1,2-Dichloropropane	ND< 8.02	Acetone	ND< 40.1
cis-1,3-Dichloropropene	ND< 8.02	Vinyl acetate	ND< 20.0
trans-1,3-Dichloropropene	ND< 8.02	2-Butanone	ND< 20.0
Methylene chloride	ND< 20.0	4-Methyl-2-pentanone	ND< 20.0
1,1,2,2-Tetrachloroethane	ND< 8.02	2-Hexanone	ND< 20.0
Tetrachloroethene	ND< 8.02	Carbon disulfide	ND< 20.0
1,1,1-Trichloroethane	ND< 8.02		
1,1,2-Trichloroethane	ND< 8.02		
Trichloroethene	90.0		
Vinyl Chloride	ND< 8.02		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

Laboratory Director

012757W4.XLS

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Leader Professional Services Client:

Lab Project No: Lab Sample No: 01-2757

Client Job Site:

RoCo, Ltd.

10018

Sample Type:

Soil

Client Job No:

147.007

Date Sampled:

11/01/01 11/06/01

Field Location: Field ID No:

GW-4 (6'-8')

Date Received:

N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg
Bromodichloromethane	ND< 84.6	Benzene	ND< 84.6
Bromomethane	ND< 84.6	Chlorobenzene	ND< 84.6
Bromoform	ND< 84.6	Ethylbenzene	ND< 84.6
Carbon tetrachloride	ND< 84.6	Toluene	ND< 84.6
Chloroethane	ND< 84.6	m,p - Xylene	ND< 84.6
Chloromethane	ND< 84.6	o - Xylene	ND< 84.6
2-Chloroethyl vinyl ether	ND< 84.6	Styrene	ND< 84.6
Chloroform	ND< 84.6		
Dibromochloromethane	ND< 84.6		
1,1-Dichloroethane	ND< 84.6		
1,2-Dichloroethane	ND< 84.6		
1,1-Dichloroethene	ND< 84.6		
cis-1,2-Dichloroethene	ND< 84.6		
trans-1,2-Dichloroethene	ND< 84.6	Ketones & Misc.	
1,2-Dichloropropane	ND< 84.6	Acetone	ND< 423
cis-1,3-Dichloropropene	ND< 84.6	Vinyl acetate	ND< 212
trans-1,3-Dichloropropene	ND< 84.6	2-Butanone	ND< 212
Methylene chloride	ND< 212	4-Methyl-2-pentanone	ND< 212
1,1,2,2-Tetrachloroethane	ND< 84.6	2-Hexanone	ND< 212
Tetrachloroethene	ND< 84.6	Carbon disulfide	ND< 212
1,1,1-Trichloroethane	ND< 84.6		
1,1,2-Trichloroethane	ND< 84.6		
Trichloroethene	681		
Vinyl Chloride	ND< 84.6		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757 10019

Client Job Site:

RoCo, Ltd.

Client Job No:

147.007

Sample Type:

Field Location:

GW-5 (8'-10')

Date Sampled: Date Received:

11/01/01 11/06/01

Soil

Field ID No:

N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Ko
Bromodichloromethane	ND< 9.13	Benzene	ND< 9.13
Bromomethane	ND< 9.13	Chlorobenzene	ND< 9.13
Bromoform	ND< 9.13	Ethylbenzene	ND< 9.13
Carbon tetrachloride	ND< 9.13	Toluene	ND< 9.13
Chloroethane	ND< 9.13	m,p - Xylene	ND< 9.13
Chloromethane	ND< 9.13	o - Xylene	ND< 9.13
2-Chloroethyl vinyl ether	ND< 9.13	Styrene	ND< 9.13
Chloroform	ND< 9.13		
Dibromochloromethane	ND< 9.13		•
1,1-Dichloroethane	ND< 9.13		
1,2-Dichloroethane	ND< 9.13		
1,1-Dichloroethene	ND< 9.13		
cis-1,2-Dichloroethene	ND< 9.13		
trans-1,2-Dichloroethene	ND< 9.13	Ketones & Misc.	
1,2-Dichloropropane	ND< 9.13	Acetone	ND< 45.6
cis-1,3-Dichloropropene	ND< 9.13	Vinyl acetate	ND< 22.8
trans-1,3-Dichloropropene	ND< 9.13	2-Butanone	ND< 22.8
Methylene chloride	ND< 22.8	4-Methyl-2-pentanone	ND< 22.8
1,1,2,2-Tetrachloroethane	ND< 9.13	2-Hexanone	ND< 22.8
Tetrachloroethene	ND< 9.13	Carbon disulfide	ND< 22.8
1,1,1-Trichloroethane	ND< 9.13		
1,1,2-Trichloroethane	ND< 9.13		
Trichloroethene	12.7		
Vinyl Chloride	ND< 9.13		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By



SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Leader Professional Services, Inc Lab Project No.: Client:

01-2757

Client Job Site:

RoCo, Ltd

Lab Sample No.: 10007

Sample Type:

Soil

Client Job No.:

147-007

Sample Date:

11/02/2001

Field Location:

BH-11 (8'-10')

Date Received:

11/06/2001 11/13/2001

Field ID No.:

N/A

Date Analyzed:

COMPOUND	RESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	ND< 864	2,4-Dinitrophenol	ND< 345
Bis (2-chloroethyl) ether	ND< 345	2,4-Dinitrotoluene	ND< 345
Bis (2-chloroisopropyl) ether	ND< 345	2,6-Dinitrotoluene	ND< 345
2-Chlorophenol	ND< 345	Fluorene	ND< 345
1,3-Dichlorobenzene	ND< 345	Hexachlorocyclopentadiene	ND< 345
1,4-Dichlorobenzene	ND< 345	2-Nitroaniline	ND< 864
1,2-Dichlorobenzene	ND< 345	3-Nitroaniline	ND< 864
Hexachloroethane	ND< 345	4-Nitroaniline	ND< 864
2-Methylphenol	ND< 345	4-Nitrophenol	ND< 864
4-Methylphenol	ND< 345	2,4,6-Trichlorophenol	ND< 345
N-Nitrosodimethylamine	ND< 345	2,4,5-Trichlorophenol	ND< 864
N-Nitroso-di-n-propylamine	ND< 345	4-Bromophenyl phenyl ether	ND< 345
Phenol	ND< 345	Di-n-butyl phthalate	ND< 345
Benzoic acid	ND< 864	4,6-Dinitro-2-methylphenol	ND< 864
Bis (2-chloroethoxy) methane	ND< 345	Fluoranthene	ND< 345
4-Chloroaniline	ND< 345	Hexachlorobenzene	ND< 345
4-Chloro-3-methylphenol	ND< 345	N-Nitrosodiphenylamine	ND< 345
2,4-Dichlorophenol	ND< 345	Pentachlorophenol	ND< 864
2,6-Dichlorophenol	ND< 345	Anthracene	ND< 345
2,4-Dimethylphenol	ND< 345	Phenanthrene	ND< 345
Hexachlorobutadiene	ND< 345	Benzidine	ND< 864
Isophorone	ND< 345	Benzo (a) anthracene	ND< 345
2-Methylnapthalene	ND< 345	Bis (2-ethylhexyl) phthalate	674
Naphthalene	ND< 345	Butylbenzylphthalate	ND< 345
Nitrobenzene	ND< 345	Chrysene	ND< 345
2-Nitrophenol	ND< 345	3,3'-Dichlorobenzidine	ND< 345
1,2,4-Trichlorobenzene	ND< 345	Pyrene	ND< 345
2-Chloronaphthalene	ND< 345	Benzo (b) fluoranthene	ND< 345
Acenaphthene	ND< 345	Benzo (k) fluoranthene	ND< 345
Acenapthylene	ND< 345	Benzo (g,h,i) perylene	ND< 345
4-Chlorophenyl phenyl ether	ND< 345	Benzo (a) pyrene	ND< 345
Dibenzofuran	ND< 345	Dibenz (a,h) anthracene	ND< 345
Diethyl phthalate	ND< 345	Di-n-octylphthalate	ND< 345
Dimethyl phthalate	ND< 864	Indeno (1,2,3-cd) pyrene	ND< 345
Analytical Method: EDA 9270			EL AR ID No. 10069

Analytical Method: EPA 8270 ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:



179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client:

Leader Professional Services, In: Lab Project No.:

Client Job Site:

RoCo, Ltd

Lab Sample No.:

01-2757

Sample Type:

10012 Soil

Client Job No.:

147-007

Sample Date:

11/01/2001

Field Location:

GW-1 (8'-10')

Date Received:

11/06/2001

Field ID No.:

N/A

Date Analyzed: 11/13/2001

COMPOUND	RESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
			ND . coo
Benzyl alcohol	ND< 845	2,4-Dinitrophenol	ND< 338
Bis (2-chloroethyl) ether	ND< 338	2,4-Dinitrotoluene	ND< 338
Bis (2-chloroisopropyi) ether	ND< 338	2,6-Dinitrotoluene	ND< 338
2-Chlorophenol	ND< 338	Fluorene	ND< 338
1,3-Dichlorobenzene	ND< 338	Hexachlorocyclopentadiene	ND< 338
1,4-Dichlorobenzene	ND< 338	2-Nitroaniline	ND< 845
1,2-Dichlorobenzene	ND< 338	3-Nitroaniline	ND< 845
Hexachloroethane	ND< 338	4-Nitroaniline	ND< 845
2-Methylphenol	ND< 338	4-Nitrophenol	ND< 845
4-Methylphenol	ND< 338	2,4,6-Trichlorophenol	ND< 338
N-Nitrosodimethylamine	ND< 338	2,4,5-Trichlorophenol	ND< 845
N-Nitroso-di-n-propylamine	ND< 338	4-Bromophenyl phenyl ether	ND< 338
Phenol	ND< 338	Di-n-butyl phthalate	ND< 338
Benzoic acid	ND< 845	4,6-Dinitro-2-methylphenol	ND< 845
Bis (2-chloroethoxy) methane	ND< 338	Fluoranthene	ND< 338
4-Chloroaniline	ND< 338	Hexachlorobenzene	ND< 338
4-Chloro-3-methylphenol	ND< 338	N-Nitrosodiphenylamine	ND< 338
2,4-Dichlorophenol	ND< 338	Pentachlorophenol	ND< 845
2,6-Dichlorophenol	ND< 338	Anthracene	ND< 338
2,4-Dimethylphenol	ND< 338	Phenanthrene	ND< 338
Hexachlorobutadiene	ND< 338	Benzidine	ND< 845
Isophorone	ND< 338	Benzo (a) anthracene	ND< 338
2-Methylnapthalene	ND< 338	Bis (2-ethylhexyl) phthalate	ND< 338
Naphthalene	ND< 338	Butylbenzylphthalate	ND< 338
Nitrobenzene	ND< 338	Chrysene	ND< 338
2-Nitrophenol	ND< 338	3,3'-Dichlorobenzidine	ND< 338
1,2,4-Trichlorobenzene	ND< 338	Pyrene	ND< 338
2-Chloronaphthalene	ND< 338	Benzo (b) fluoranthene	ND< 338
Acenaphthene	ND< 338	Benzo (k) fluoranthene	ND< 338
Acenapthylene	ND< 338	Benzo (g,h,i) perylene	ND< 338
4-Chlorophenyl phenyl ether	ND< 338	Benzo (a) pyrene	ND< 338
Dibenzofuran	ND< 338	Dibenz (a,h) anthracene	ND< 338
Diethyl phthalate	ND< 338	Di-n-octylphthalate	ND< 338
Dimethyl phthalate	ND< 845	Indeno (1,2,3-cd) pyrene	ND< 338
Analytical Method: EPA 8270			ELAP ID No: 10958

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:



179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client: <u>Lea</u>

Leader Professional Services, Inc Lab Project No.:

Client Job Site: RoCo, Ltd

Lab Project No.: 01-2757 Lab Sample No.: 10016

Sample Type:

Soil

Client Job No.: Field Location:

147-007 GW-2 (8'-10') Sample Date: Date Received:

11/01/2001 11/06/2001

ND< 317

Field ID No.:	N/A		Date Analyzed:	11/13/2001
COMPOUND	RI	ESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	N	ID< 794	2,4-Dinitrophenol	ND< 317
Bis (2-chloroethyl) e	ther N	ID< 317	2,4-Dinitrotoluene	ND< 317
Bis (2-chloroisoprop	yl) ether N	ID< 317	2,6-Dinitrotoluene	ND< 317
2-Chlorophenol	 N	ID< 317	Fluorene	ND< 317

Delizyi alconol	110 - 754	12, + Diritiophenoi	110 - 317	1
Bis (2-chloroethyl) ether	ND< 317	2,4-Dinitrotoluene	ND< 317	
Bis (2-chloroisopropyl) ether	ND< 317	2,6-Dinitrotoluene	ND< 317	
2-Chlorophenol	ND< 317	Fluorene	ND< 317	
1,3-Dichlorobenzene	ND< 317	Hexachlorocyclopentadiene	ND< 317	
1,4-Dichlorobenzene	ND< 317	2-Nitroaniline	ND< 794	
1,2-Dichlorobenzene	ND< 317	3-Nitroaniline	ND< 794	
Hexachloroethane	ND< 317	4-Nitroaniline	ND< 794	
2-Methylphenol	ND< 317	4-Nitrophenol	ND< 794	
4-Methylphenol	ND< 317	2,4,6-Trichlorophenol	ND< 317	Ī
N-Nitrosodimethylamine	ND< 317	2,4,5-Trichlorophenol	ND< 794	1
N-Nitroso-di-n-propylamine	ND< 317	4-Bromophenyl phenyl ether	ND< 317	
Phenol	ND< 317	Di-n-butyl phthalate	ND< 317	
Benzoic acid	ND< 794	4,6-Dinitro-2-methylphenol	ND< 794	
Bis (2-chloroethoxy) methane	ND< 317	Fluoranthene	ND< 317	
4-Chloroaniline	ND< 317	Hexachlorobenzene	ND< 317	
4-Chloro-3-methylphenol	ND< 317	N-Nitrosodiphenylamine	ND< 317	
2,4-Dichlorophenol	ND< 317	Pentachlorophenol	ND< 794	
2.6-Dichlorophenol	ND< 317	Anthracene	ND< 317	- 1
2,4-Dimethylphenol	ND< 317	Phenanthrene	ND< 317	
Hexachlorobutadiene	ND< 317	Benzidine	ND< 794	
Isophorone	ND< 317	Benzo (a) anthracene	ND< 317	- 1
2-Methylnapthalene	ND< 317	Bis (2-ethylhexyl) phthalate	ND< 317	
Naphthalene	ND< 317	Butylbenzylphthalate	ND< 317	
Nitrobenzene	ND< 317	Chrysene	ND< 317	
2-Nitrophenol	ND< 317	3,3'-Dichlorobenzidine	ND< 317	1
1,2,4-Trichlorobenzene	ND< 317	Pyrene	ND< 317	
2-Chloronaphthalene	ND< 317	Benzo (b) fluoranthene	ND< 317	ŀ
Acenaphthene	ND< 317	Benzo (k) fluoranthene	ND< 317	
Acenapthylene	ND< 317	Benzo (g,h,i) perylene	ND< 317	
4-Chlorophenyl phenyl ether	ND< 317	Benzo (a) pyrene	ND< 317	
Dibenzofuran	ND< 317	Dibenz (a,h) anthracene	ND< 317	
Diethyl phthalate	ND< 317	Di-n-octylphthalate	ND< 317	
les is it is a second	ND . 704	1, 1, 4,00	ND - 047	1

Analytical Method: EPA 8270 ELAP ID No: 10958

Indeno (1,2,3-cd) pyrene

Comments:

ND denotes Not Detected

ND< 794

Approved By:

Dimethyl phthalate



179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client:

Leader Professional Services, In: Lab Project No.:

Client Job Site: RoCo, Ltd Lab Sample No.:

01-2757 10015

Soil

Sample Type:

Client Job No.: Field Location: 147-007 GW-3 (10'-12') Sample Date: Date Received: 11/02/2001 11/06/2001

Field ID No.:

N/A

Date Analyzed:

11/13/2001

COMPOUND	RESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
		0.45: 11.1	ND - 000
Benzyl alcohol	ND< 847	2,4-Dinitrophenol	ND< 339
Bis (2-chloroethyl) ether	ND< 339	2,4-Dinitrotoluene	ND< 339
Bis (2-chloroisopropyl) ether	ND< 339	2,6-Dinitrotoluene	ND< 339
2-Chlorophenol	ND< 339	Fluorene	ND< 339
1,3-Dichlorobenzene	ND< 339	Hexachlorocyclopentadiene	ND< 339
1,4-Dichlorobenzene	ND< 339	2-Nitroaniline	ND< 847
1,2-Dichlorobenzene	ND< 339	3-Nitroaniline	ND< 847
Hexachloroethane	ND< 339	4-Nitroaniline	ND< 847
2-Methylphenol	ND< 339	4-Nitrophenol	ND< 847
4-Methylphenol	ND< 339	2,4,6-Trichlorophenol	ND< 339
N-Nitrosodimethylamine	ND< 339	2,4,5-Trichlorophenol	ND< 847
N-Nitroso-di-n-propylamine	ND< 339	4-Bromophenyl phenyl ether	ND< 339
Phenol	ND< 339	Di-n-butyl phthalate	ND< 339
Benzoic acid	ND< 847	4,6-Dinitro-2-methylphenol	ND< 847
Bis (2-chloroethoxy) methane	ND< 339	Fluoranthene	ND< 339
4-Chloroaniline	ND< 339	Hexachlorobenzene	ND< 339
4-Chloro-3-methylphenol	ND< 339	N-Nitrosodiphenylamine	ND< 339
2,4-Dichlorophenol	ND< 339	Pentachlorophenol	ND< 847
2,6-Dichlorophenol	ND< 339	Anthracene	ND< 339
2,4-Dimethylphenol	ND< 339	Phenanthrene	ND< 339
Hexachlorobutadiene	ND< 339	Benzidine	ND< 847
Isophorone	ND< 339	Benzo (a) anthracene	ND< 339
2-Methylnapthalene	ND< 339	Bis (2-ethylhexyl) phthalate	ND< 339
Naphthalene	ND< 339	Butylbenzylphthalate	ND< 339
Nitrobenzene	ND< 339	Chrysene	ND< 339
2-Nitrophenol	ND< 339	3,3'-Dichlorobenzidine	ND< 339
1,2,4-Trichlorobenzene	ND< 339	Pyrene	ND< 339
2-Chloronaphthalene	ND< 339	Benzo (b) fluoranthene	ND< 339
Acenaphthene	ND< 339	Benzo (k) fluoranthene	ND< 339
Acenapthylene	ND< 339	Benzo (g,h,i) perylene	ND< 339
4-Chlorophenyl phenyl ether	ND< 339	Benzo (a) pyrene	ND< 339
Dibenzofuran	ND< 339	Dibenz (a,h) anthracene	ND< 339
Diethyl phthalate	ND< 339	Di-n-octylphthalate	ND< 339
Dimethyl phthalate	ND< 847	Indeno (1,2,3-cd) pyrene	ND< 339
A1-4:			FLAD ID No. 400F0

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:



179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client:

Leader Professional Services, Inc Lab Project No.:

01-2757

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10018

Sample Type:

Soil

Client Job No.: Field Location: 147-007

Sample Date: Date Received: 11/01/2001 11/06/2001

Field ID No.:

GW-4 (6'-8')

Date Analyzed:

11/13/2001

N/A

COMPOUND	RESULT (ug/	(Kg) COMPOUND	RESULT (ug/Kg)
Dammid alaahal	ND - 807	2 4 Dinitrank and	ND 4 224
Benzyl alcohol	ND< 827 ND< 331	2,4-Dinitrophenol 2,4-Dinitrotoluene	ND< 331 ND< 331
Bis (2-chloroethyl) ether	ND< 331	1 '	ND< 331
Bis (2-chloroisopropyl) ether		2,6-Dinitrotoluene Fluorene	ND< 331 ND< 331
2-Chlorophenol	ND< 331		· · · · · · · · · · · · · · · · · · ·
1,3-Dichlorobenzene	ND< 331	Hexachlorocyclopentadiene	ND< 331
1,4-Dichlorobenzene	ND< 331	2-Nitroaniline	ND< 827
1,2-Dichlorobenzene	ND< 331	3-Nitroaniline	ND< 827
Hexachloroethane	ND< 331	4-Nitroaniline	ND< 827
2-Methylphenol	ND< 331	4-Nitrophenol	ND< 827
4-Methylphenol	ND< 331	2,4,6-Trichlorophenol	ND< 331
N-Nitrosodimethylamine	ND< 331	2,4,5-Trichlorophenol	ND< 827
N-Nitroso-di-n-propylamine	ND< 331	4-Bromophenyl phenyl ether	ND< 331
Phenol	ND< 331	Di-n-butyl phthalate	ND< 331
Benzoic acid	ND< 827	4,6-Dinitro-2-methylphenol	ND< 827
Bis (2-chloroethoxy) methane	ND< 331	Fluoranthene	ND< 331
4-Chloroaniline	ND< 331	Hexachlorobenzene	ND< 331
4-Chloro-3-methylphenol	ND< 331	N-Nitrosodiphenylamine	ND< 331
2,4-Dichlorophenol	ND< 331	Pentachlorophenol	ND< 827
2,6-Dichlorophenol	ND< 331	Anthracene	ND< 331
2,4-Dimethylphenol	ND< 331	Phenanthrene	ND< 331
Hexachlorobutadiene	ND< 331	Benzidine	ND< 827
Isophorone	ND< 331	Benzo (a) anthracene	ND< 331
2-Methylnapthalene	ND< 331	Bis (2-ethylhexyl) phthalate	ND< 331
Naphthalene	ND< 331	Butylbenzylphthalate	ND< 331
Nitrobenzene	ND< 331	Chrysene	ND< 331
2-Nitrophenol	ND< 331	3,3'-Dichlorobenzidine	ND< 331
1,2,4-Trichlorobenzene	ND< 331	Pyrene	ND< 331
2-Chloronaphthalene	ND< 331	Benzo (b) fluoranthene	ND< 331
Acenaphthene	ND< 331	Benzo (k) fluoranthene	ND< 331
Acenapthylene	ND< 331	Benzo (g,h,i) perylene	ND< 331
4-Chlorophenyl phenyl ether	ND< 331	Benzo (a) pyrene	ND< 331
Dibenzofuran	ND< 331	Dibenz (a,h) anthracene	ND< 331
Diethyl phthalate	ND< 331	Di-n-octylphthalate	ND< 331
Dimethyl phthalate	ND< 827	Indeno (1,2,3-cd) pyrene	ND< 331
Analytical Method: EPA 8270			ELAP ID No: 10958

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:



179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client:

Leader Professional Services, In: Lab Project No.:

Client Job Site:

RoCo, Ltd

01-2757

Lab Sample No.: Sample Type:

10019 Soil

Client Job No.:

147-007

Sample Date:

11/01/2001

Field Location:

GW-5 (8'-10')

Date Received:

11/06/2001

Field ID No.:

N/A

Date Analyzed:

11/13/2001

COMPOUND	RESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
Donard alaskal	ND< 904	2.4 Dinitronhanal	ND 4 262
Benzyl alcohol		2,4-Dinitrophenol	ND< 362
Bis (2-chloroethyl) ether	ND< 362	2,4-Dinitrotoluene	ND< 362
Bis (2-chloroisopropyl) ether	ND< 362	2,6-Dinitrotoluene	ND< 362
2-Chlorophenol	ND< 362	Fluorene	ND< 362
1,3-Dichlorobenzene	ND< 362	Hexachlorocyclopentadiene	ND< 362
1,4-Dichlorobenzene	ND< 362	2-Nitroaniline	ND< 904
1,2-Dichlorobenzene	ND< 362	3-Nitroaniline	ND< 904
Hexachloroethane	ND< 362	4-Nitroaniline	ND< 904
2-Methylphenol	ND< 362	4-Nitrophenol	ND< 904
4-Methylphenol	ND< 362	2,4,6-Trichlorophenol	ND< 362
N-Nitrosodimethylamine	ND< 362	2,4,5-Trichlorophenol	ND< 904
N-Nitroso-di-n-propylamine	ND< 362	4-Bromophenyl phenyl ether	ND< 362
Phenol	ND< 362	Di-n-butyl phthalate	ND< 362
Benzoic acid	ND< 904	4,6-Dinitro-2-methylphenol	ND< 904
Bis (2-chloroethoxy) methane	ND< 362	Fluoranthene	748
4-Chloroaniline	ND< 362	Hexachlorobenzene	ND< 362
4-Chloro-3-methylphenol	ND< 362	N-Nitrosodiphenylamine	ND< 362
2,4-Dichlorophenol	ND< 362	Pentachlorophenol	ND< 904
2,6-Dichlorophenol	ND< 362	Anthracene .	ND< 362
2,4-Dirnethylphenol	ND< 362	Phenanthrene	483
Hexachlorobutadiene	ND< 362	Benzidine	ND< 904
Isophorone	ND< 362	Benzo (a) anthracene	ND< 362
2-Methylnapthalene	ND< 362	Bis (2-ethylhexyl) phthalate	ND< 362
Naphthalene	ND< 362	Butylbenzylphthalate	ND< 362
Nitrobenzene	ND< 362	Chrysene	ND< 362
2-Nitrophenol	ND< 362	3,3'-Dichlorobenzidine	ND< 362
1,2,4-Trichlorobenzene	ND< 362	Pyrene	620
2-Chloronaphthalene	ND< 362	Benzo (b) fluoranthene	ND< 362
Acenaphthene	ND< 362	Benzo (k) fluoranthene	ND< 362
Acenapthylene	ND< 362	Benzo (g,h,i) perylene	ND< 362
4-Chlorophenyl phenyl ether	ND< 362	Benzo (a) pyrene	ND< 362
Dibenzofuran	ND< 362	Dibenz (a,h) anthracene	ND< 362
Diethyl phthalate	ND< 362	Di-n-octylphthalate	ND< 362
Dimethyl phthalate	ND< 904	Indeno (1,2,3-cd) pyrene	ND< 362
Analytical Mothod: EDA 9270			ELAB ID No. 10059

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:

Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client: <u>Leader Professional Services, Inc.</u> Lab Project No.:

Lab Project No.: Lab Sample No.: 01-2757 10007

Client Job Site:

RoCo, Ltd

Sample Type:

Soil

Client Job No.:

147.007

Date Sampled:

11/02/01

Field Location:

BH-11 (8'-10')

Date Received:

11/06/01

Field ID No:

N/A

Date Analyzed:

11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.47
PCB 1221	ND	0.47
PCB 1232	ND	0.47
PCB 1242	ND	0.47
PCB 1248	ND	0.47
PCB 1254	ND	0.47
PCB 1260	ND	0.47

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By:

Laboratory Director

File ID: 012757P1.XLS

Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client: <u>Leader Professional Services, Inc.</u> Lab Project No.:

Lab Project No.: Lab Sample No.: 01-2757 10010

Client Job Site:

RoCo, Ltd

Client Job No.:

147.007

Sample Type:

Soil

Field Location:

BH-13 (2'-4')

Date Sampled: Date Received:

11/02/01 11/06/01

Field ID No:

N/A

Date Analyzed:

11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.50
PCB 1221	ND	0.50
PCB 1232	ND	0.50
PCB 1242	ND	0.50
PCB 1248	ND	0.50
PCB 1254	ND	0.50
PCB 1260	ND	0.50

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By:

✓aboratory Director

File ID: 012757p2.xls



Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client:

<u>Leader Professional Services, Inc.</u> Lab Project No.:

Lab Project No.: Lab Sample No.: 01-2757 10012

Client Job Site:

RoCo, Ltd

Sample Type:

Soil

Client Job No.:

147.007

Date Sampled:

11/01/01

Field Location:

GW-1 (8'-10')

Date Received:

11/06/01

Field ID No:

N/A

Date Analyzed:

11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.55
PCB 1221	ND	0.55
PCB 1232	ND	0.55 ·
PCB 1242	ND	0.55
PCB 1248	ND	0.55
PCB 1254	ND	0.55
PCB 1260	ND	0.55

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By:

Laberatory Director

File ID: 012757P3.XLS



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Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client: Leader Professional Services, Inc Lab Project No.: 01-2757
Lab Sample No.: 10016

Client Job Site: RoCo, Ltd

Sample Type: Soil Client Job No.: 147.007

 Date Sampled:
 11/01/01

 Field Location:
 GW-2 (8'-10')
 Date Received:
 11/06/01

Field ID No: N/A Date Analyzed: 11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.45
PCB 1221	ND	0.45
PCB 1232	ND	0.45
PCB 1242	ND	0.45
PCB 1248	ND	0.45
PCB 1254	ND	0.45
PCB 1260	ND	0.45

Analytical Method: EPA 8082 ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: Laboratory Director

File ID: 012757P5.XLS

Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client: <u>Leader Professional Services, Inc.</u> Lab Project No.:

Lab Sample No.:

01-2757 10015

Client Job Site:

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RoCo, Ltd

Sample Type:

Soil

Client Job No.:

147.007

Date Sampled:

11/01/01

Field Location:

GW-3 (10'-12')

Date Received:

11/06/01

Field ID No:

N/A

Date Analyzed:

11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.54
PCB 1221	ND	0.54
PCB 1232	ND	0.54
PCB 1242	ND	0.54
PCB 1248	ND	0.54
PCB 1254	, ND	0.54
PCB 1260	ND	0.54

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By: _

Laboratory Director

File ID: 012757P4.XLS



Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client: Leader Professional Services, Inc Lab Project No.: 01-2757
Lab Sample No.: 10018

Client Job Site: RoCo, Ltd Sample Type: Soil

Client Job No.: 147.007

 Date Sampled:
 11/01/01

 Field Location:
 GW-4 (6'-8')
 Date Received:
 11/06/01

Field ID No: N/A Date Analyzed: 11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.56
PCB 1221	ND	0.56
PCB 1232	⁻ ND	0.56
PCB 1242	ND	0.56
PCB 1248	ND	0.56
PCB 1254	ND	0.56
PCB 1260	ND	0.56

Analytical Method: EPA 8082 ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: _______Laboratory Director

File ID: 012757P6.XLS



Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

<u>Leader Professional Services, Inc.</u> Lab Project No.: Client:

Lab Sample No.:

01-2757 10019

Client Job Site:

RoCo, Ltd

Soil

Client Job No.:

147.007

Sample Type:

Field Location:

GW-5 (8'-10')

Date Sampled: Date Received: 11/01/01 11/06/01

Field ID No:

N/A

Date Analyzed:

11/13/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.62
PCB 1221	ND	0.62
PCB 1232	ND	0.62
PCB 1242	ND	0.62
PCB 1248	ND	0.62
PCB 1254	ND	0.62
PCB 1260	ND	0.62

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By:

File ID: 012757P7.XLS



Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client:	Leader Professional Service, Inc	Lab Project No:	01-2757
		Lab Sample No:	10007
Client Job Site:	RoCo, Ltd	Sample Type:	Soil
Client Job No:	147-007	Date Sampled:	11/2/01
Field Location:	BH-11 (8'-10')	Date Received:	11/6/01
Field ID No:	N/A	Date Analyzed:	11/13/01

Parameter	Result (ug/Kg)	
alpha-BHC	ND<	3.4
gamma-BHC	ND<	3.4
beta-BHC	ND<	3.4
Heptachlor	ND<	3.4
delta-BHC	ND<	3.4
Aldrin	ND<	3.4
Heptachlor Epoxide	ND<	3.4
Chlordane	ND<	34
Endosulfan I	ND<	3.4
4,4'-DDE	ND<	3.4
Dieldrin	ND<	3.4
Endrin	ND<	4.8
Endosulfan II	ND<	3.4
4,4'-DDD	ND<	3.4
Methoxychlor	ND<	3.4
4,4'-DDT	ND<	3.4
Endrin Aldehyde	ND<	3.4
Endosulfan Sulfate	ND<	3.4
Toxaphene	ND<	171
Analytical Method: EPA 8081	ELAP ID: 10958	

Comments:

ND denotes not detected

Approved By:

Laboratory Director

File ID: 012757Q1.XLS



Environmental 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client:	Leader Professional Service, Inc	Lab Project No:	01-2757
		Lab Sample No:	10012
Client Job Site:	RoCo, Ltd	Sample Type:	Soil
Client Job No:	147-007	Date Sampled:	11/1/01
Field Location:	GW-1 (8'-10')	Date Received:	11/6/01
Field ID No:	N/A	Date Analyzed:	11/13/01

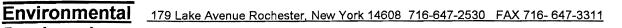
Parameter	Result (ug/Kg)	
alpha-BHC	ND<	3.4
gamma-BHC	ND<	3.4
beta-BHC	ND<	3.4
Heptachlor	ND<	3.4
delta-BHC	ND<	3.4
Aldrin	ND<	3.4
Heptachlor Epoxide	ND<	3.4
Chlordane	. ND<	34
Endosulfan I	ND<	3.4
4,4'-DDE	ND<	3.4
Dieldrin	ND<	3.4
Endrin	ND<	4.8
Endosulfan II	ND<	3.4
4,4'-DDD	ND<	3.4
Methoxychlor	ND<	3.4
4,4'-DDT	ND<	3.4
Endrin Aldehyde	ND<	3.4
Endosulfan Sulfate	ND<	3.4
Toxaphene	ND<	172

Analytical Method: EPA 8081 ELAP ID: 10958

Comments:

ND denotes not detected

Approved By:





Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client:	Leader Professional Service, Inc	Lab Project No:	01-2757
		Lab Sample No:	10016
Client Job Site:	RoCo, Ltd	Sample Type:	Soil
Client Job No:	147-007	Date Sampled:	11/1/01
Field Location:	GW-2 (8'-10')	Date Received:	11/6/01
Field ID No:	N/A	Date Analyzed:	11/13/01

Parameter	Result (ug/Kg)	
alpha-BHC	ND<	3.2
gamma-BHC	ND<	3.2
beta-BHC	ND<	3.2
Heptachlor	ND<	3.2
delta-BHC	ND<	3.2
Aldrin	ND<	3.2
Heptachlor Epoxide	ND<	3.2
Chlordane	ND<	32
Endosulfan I	ND<	3.2
4,4'-DDE	ND<	3.2
Dieldrin	ND<	3.2
Endrin	ND<	4.4
Endosulfan II	ND<	3.2
4,4'-DDD	ND<	3.2
Methoxychlor	ND<	3.2
4,4'-DDT	ND<	3.2
Endrin Aldehyde	ND<	3.2
Endosulfan Sulfate	ND<	3.2
Toxaphene	ND<	159

Analytical Method: EPA 8081 ELAP ID: 10958

Comments: ND denotes not detected

Approved By: ________Laboratory Director

File ID: 012757Q4.XLS



Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client:	Leader Professional Service, Inc	Lab Project No:	01-2757
		Lab Sample No:	10015
Client Job Site:	RoCo, Ltd	Sample Type:	Soil
Client Job No:	147-007	Date Sampled:	11/2/01
Field Location:	GW-3 (10'-12')	Date Received:	11/6/01
Field ID No:	N/A	Date Analyzed:	11/13/01

Parameter	Result (ug/Kg)	
alpha-BHC	ND<	3.2
gamma-BHC	ND<	3.2
beta-BHC	ND<	3.2
Heptachlor	ND<	3.2
delta-BHC	ND<	3.2
Aldrin	ND<	3.2
Heptachlor Epoxide	ND<	3.2
Chlordane	ND<	32
Endosulfan I	ND<	3.2
4,4'-DDE	ND<	3.2
Dieldrin	ND<	3.2
Endrin	ND<	4.5
Endosulfan II	ND<	3.2
4,4'-DDD	ND<	3.2
Methoxychlor	ND<	3.2
4,4'-DDT	ND<	3.2
Endrin Aldehyde	ND<	3.2
Endosulfan Sulfate	ND<	3.2
Toxaphene	ND<	162

Analytical Method: EPA 8081 ELAP ID: 10958

Comments:

ND denotes not detected

Approved By:

Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Leader Professional Service, Inc	Lab Project No:	01-2757
	Lab Sample No:	10018
RoCo, Ltd	Sample Type:	Soil
•		
147-007	Date Sampled:	11/1/01
GW-4 (6'-8')	Date Received:	11/6/01
N/A	Date Analyzed:	11/13/01
	RoCo, Ltd 147-007 GW-4 (6'-8')	RoCo, Ltd Lab Sample No: Sample Type: 147-007 Date Sampled: GW-4 (6'-8') Date Received:

Parameter	(u	Result (ug/Kg)	
alpha-BHC	ND<	3.4	
gamma-BHC	ND<	3.4	
beta-BHC	ND<	3.4	
Heptachlor	ND<	3.4	
delta-BHC	ND<	3.4	
Aldrin	ND<	3.4	
Heptachlor Epoxide	ND<	3.4	
Chlordane	ND<	34	
Endosulfan I	ND<	3.4	
4,4'-DDE	ND<	3.4	
Dieldrin	ND<	3.4	
Endrin	ND<	4.7	
Endosulfan II	ND<	3.4	
4,4'-DDD	ND<	3.4	
Methoxychlor	ND<	3.4	
4,4'-DDT	ND<	3.4	
Endrin Aldehyde	ND<	3.4	
Endosulfan Sulfate	ND<	3.4	
Toxaphene	ND<	168	

Analytical Method: EPA 8081 ELAP ID: 10958

Comments: ND denotes not detected

Approved By: Laboratory Director

File ID: 012757Q5.XLS



Environmental 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client:	Leader Professional Service, Inc	Lab Project No:	01-2757
		Lab Sample No:	10019
Client Job Site:	RoCo, Ltd	Sample Type:	Soil
Client Job No:	147-007	Date Sampled:	11/1/01
Field Location:	GW-5 (8'-10')	Date Received:	11/6/01
Field ID No:	N/A	Date Analyzed:	11/13/01

Parameter		Result (ug/Kg)	
alpha-BHC	ND<	3.6	
gamma-BHC	ND<	3.6	
beta-BHC	ND<	3.6	
Heptachlor	ND<	3.6	
delta-BHC	ND<	3.6	
Aldrin	ND<	3.6	
Heptachlor Epoxide	ND<	3.6	
Chlordane	ND<	36	
Endosulfan I	ND<	3.6	
4,4'-DDE	ND<	3.6	
Dieldrin	ND<	3.6	
Endrin	ND<	5.1	
Endosulfan II	ND<	3.6	
4,4'-DDD	ND<	3.6	
Methoxychlor	ND<	3.6	
4,4'-DDT	ND<	3.6	
Endrin Aldehyde	ND<	3.6	
Endosulfan Sulfate	ND<	3.6	
Toxaphene	ND<	181	

Analytical Method: EPA 8081

ELAP ID: 10958

Comments:

ND denotes not detected

Approved By:



179 Lake Avenue, Rochester, NY 14608 (716) 647-2530 FAX (716) 647-3311

Client:

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Leader Professional Services, Inc.

Lab Project No. 01-2757 Lab Sample No. 10007

Client Job Site:

RoCo, Ltd.

Sample Type: Soil

Client Job No.:

147.007

Field Location:

BH-11 (8'-10')

Date Sampled: 11/02/2001 **Date Received: 11/06/2001**

Field ID No.:

N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Antimony	11/09/2001	SW846 6010	<6.65
Arsenic	11/09/2001	SW846 6010	7.06
Beryllium	11/09/2001	SW846 6010	<0.554
Cadmium	11/09/2001	SW846 6010	1.32
Chromium	11/09/2001	SW846 6010	20.2
Copper	11/09/2001	SW846 6010	30.9
Lead	11/09/2001	SW846 6010	12.7
Mercury	11/13/2001	SW846 7471	<0.106
Nickel	11/09/2001	SW846 6010	23.2
Selenium	11/09/2001	SW846 6010	<0.554
Silver	11/09/2001	SW846 6010	<1.11
Thallium	11/09/2001	SW846 6010	<0.665
Zinc	11/09/2001	SW846 6010	66.3

ELAP ID No.:10958

Comments:

Approved By:

Laboratory Director

File ID: 012757



179 Lake Avenue, Rochester, NY 14608 (716) 647-2530 FAX (716) 647-3311

Client:

Leader Professional Services, Inc.

Lab Project No. 01-2757 Lab Sample No. 10012

RoCo, Ltd.

Sample Type: Soil

Client Job No.:

Client Job Site:

147.007

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Field Location:

GW-1 (8'-10')

Date Sampled: 11/01/2001 **Date Received:** 11/06/2001

Field ID No.:

N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Antimony	11/09/2001	SW846 6010	<6.83
Arsenic	11/09/2001	SW846 6010	2.58
Beryllium	11/09/2001	SW846 6010	<0.569
Cadmium	11/09/2001	SW846 6010	1.02
Chromium	11/09/2001	SW846 6010	18.7
Copper	11/09/2001	SW846 6010	27.1
Lead	11/09/2001	SW846 6010	33.7
Mercury	11/13/2001	SW846 7471	<0.0928
Nickel	11/09/2001	SW846 6010	16.0
Selenium	11/09/2001	SW846 6010	<0.569
Silver	11/09/2001	SW846 6010	<1.14
Thallium	11/09/2001	SW846 6010	<0.683
Zinc	11/09/2001	SW846 6010	78.6

ELAP ID No.:10958

Comments:

Approved By:

Laboratory Director

File ID: 012757



Client:

Leader Professional Services, Inc.

Lab Project No. 01-2757 Lab Sample No. 10016

Sample Type: Soil

Client Job Site:

RoCo, Ltd.

Client Job No.:

147.007

Field Location:

GW-2 (8'-10')

Field ID No.:

N/A

Date Sampled: 11/01/2001 Date Received: 11/06/2001

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
ļ	<u> </u>		
Antimony	11/09/2001	SW846 6010	<6.64
Arsenic	11/09/2001	SW846 6010	2.39
Beryllium	11/09/2001	SW846 6010	<0.553
Cadmium	11/09/2001	SW846 6010	0.572
Chromium	11/09/2001	SW846 6010	8.82
Copper	11/09/2001	SW846 6010	12.1
Lead	11/09/2001	SW846 6010	9.50
Mercury	11/13/2001	SW846 7471	<0.0859
Nickel	11/09/2001	SW846 6010	8.92
Selenium	11/09/2001	SW846 6010	<0.553
Silver	11/09/2001	SW846 6010	<1.11
Thallium	11/09/2001	SW846 6010	<0.664
Zinc	11/09/2001	SW846 6010	48.4

ELAP ID No.:10958

Comments:

Approved By:

Laboratory Director



Client:

Leader Professional Services, Inc.

Lab Project No. 01-2757 Lab Sample No. 10015

Client Job Site:

RoCo, Ltd.

Sample Type: Soil

Client Job No.:

147.007

Field Location:

GW-3 (10'-12')

Date Sampled: 11/02/2001 **Date Received:** 11/06/2001

Field ID No.:

N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Antimony	11/09/2001	SW846 6010	<5.66
Arsenic	11/09/2001	SW846 6010	1.20
Beryllium	11/09/2001	SW846 6010	<0.472
Cadmium	11/09/2001	SW846 6010	<0.472
Chromium	11/09/2001	SW846 6010	8.43
Copper	11/09/2001	SW846 6010	8.54
Lead	11/09/2001	SW846 6010	3.02
Mercury	11/13/2001	SW846 7471	<0.0837
Nickel	11/09/2001	SW846 6010	<3.77
Selenium	11/09/2001	SW846 6010	<0.472
Silver	11/09/2001	SW846 6010	<0.942
Thallium	11/09/2001	SW846 6010	<0.566
Zinc	11/09/2001	SW846 6010	39.3

ELAP ID No.:10958

Comments:

Approved By: _

Laboratory Director



Client:

Leader Professional Services, Inc.

Lab Project No. 01-2757 Lab Sample No. 10018

Client Job Site:

RoCo, Ltd.

Sample Type: Soil

Client Job No.:

147.007

Date Sampled: 11/02/2001 Date Received: 11/06/2001

Field Location:

GW-4 (6'-8')

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Antimony	11/09/2001 ·	SW846 6010	<6.35
Arsenic	11/09/2001	SW846 6010	5.18
Beryllium	11/09/2001	SW846 6010	<0.528
Cadmium	11/09/2001	SW846 6010	1.24
Chromium	11/09/2001	SW846 6010	21.6
Copper	11/09/2001	SW846 6010	23.8
Lead	11/09/2001	SW846 6010	11.1
Mercury	11/13/2001	SW846 7471	<0.0948
Nickel	11/09/2001	SW846 6010	24.0
Selenium	11/09/2001	SW846 6010	<0.528
Silver	11/09/2001	SW846 6010	<1.06
Thallium	11/09/2001	SW846 6010	<0.635
Zinc	11/09/2001	SW846 6010	56.5
			ELAP ID No.:10958

Comments:

Approved By: _

Laboratory Director



Client: Leader Professional Services, Inc. Lab Project No. 01-2757

Client Job Site: RoCo, Ltd.

Sample Type: Soil Client Job No.: 147.007

 Field Location:
 GW-5 (8'-10')
 Date Sampled: 11/01/2001

 Date Received: 11/06/2001

Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Antimony	11/09/2001	SW846 6010	<7.46
Arsenic	11/09/2001	SW846 6010	4.12
Beryllium	11/09/2001	SW846 6010	<0.622
Cadmium	11/09/2001	SW846 6010	1.50
Chromium	11/09/2001	SW846 6010	23.2
Copper	11/09/2001	SW846 6010	25.4
Lead	11/09/2001	SW846 6010	20.6
Mercury	11/13/2001	SW846 7471	<0.0876
Nickel	11/09/2001	SW846 6010	27.4
Selenium	11/09/2001	SW846 6010	<0.622
Silver	11/09/2001	SW846 6010	<1.24
Thallium	11/09/2001	SW846 6010	<0.746
Zinc	11/09/2001	SW846 6010	82.1

ELAP ID No.:10958

Comments:

Approved By:

Laberatory Director



Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc.

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10228

Client Job No.:

147.007

Sample Type:

Water

Field Location:

GW-1

Date Sampled:

11/09/01

Field ID No.:

N/A

Date Received: Date Analyzed:

11/12/01 11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 5.00	Benzene	ND< 5.00
Bromomethane	ND< 5.00	Chlorobenzene	ND< 5.00
Bromoform	ND< 5.00	Ethylbenzene	ND< 5.00
Carbon tetrachloride	ND< 5.00	Toluene	ND< 5.00
Chloroethane	ND< 5.00	m,p - Xylene	ND< 5.00
Chloromethane	ND< 5.00	o - Xylene	ND< 5.00
2-Chloroethyl vinyl ether	ND< 5.00	Styrene	ND< 5.00
Chloroform	ND< 5.00		
Dibromochloromethane	ND< 5.00		
1,1-Dichloroethane	ND< 5.00		
1,2-Dichloroethane	ND< 5.00		
1,1-Dichloroethene	ND< 5.00		
cis-1,2-Dichloroethene	481	Ketones & Misc.	
trans-1,2-Dichloroethene	5.42	Acetone	ND< 25.0
1,2-Dichloropropane	ND< 5.00	Vinyl acetate	ND< 12.5
cis-1,3-Dichloropropene	ND< 5.00	2-Butanone	ND< 12.5
trans-1,3-Dichloropropen	ND< 5.00	4-Methyl-2-pentanone	ND< 12.5
Methylene chloride	ND< 12.5	2-Hexanone	ND< 12.5
1,1,2,2-Tetrachloroethan	ND< 5.00	Carbon disulfide	ND< 12.5
Tetrachloroethene	ND< 5.00		
1,1,1-Trichloroethane	ND< 5.00		
1,1,2-Trichloroethane	ND< 5.00		
Trichloroethene	7.09		
Vinyl Chloride	291		

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Client: <u>Leader Professional Services, Inc</u> Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10229

Client Job No.:

147.007

Sample Type:

Water

Field Location:

GW-2

Date Sampled: Date Received:

11/09/01 11/12/01

Field ID No.:

N/A

Date Analyzed:

11/14/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	ND< 2.00		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00 .		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	14.1	Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	88.1		
Vinyl Chloride	ND< 2.00		
A and Paral Market De Pr	DA 0000	FLADIDAI	

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Leader Professional Services, Inc Client:

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10230

Client Job No.:

147.007

Sample Type:

Water

Field Location:

GW-3

Date Sampled: Date Received: 11/09/01 11/12/01

Field ID No.:

N/A

Date Analyzed:

11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 1,000	Benzene	ND< 1,000
Bromomethane	ND< 1,000	Chlorobenzene	ND< 1,000
Bromoform	ND< 1,000	Ethylbenzene	ND< 1,000
Carbon tetrachloride	ND< 1,000	Toluene	ND< 1,000
Chloroethane	ND< 1,000	m,p - Xylene	ND< 1,000
Chloromethane	ND< 1,000	o - Xylene	ND< 1,000
2-Chloroethyl vinyl ether	ND< 1,000	Styrene	ND< 1,000
Chloroform	ND< 1,000		
Dibromochloromethane	ND< 1,000		
1,1-Dichloroethane	ND< 1,000		
1,2-Dichloroethane	ND< 1,000		
1,1-Dichloroethene	ND< 1,000		
cis-1,2-Dichloroethene	4,860	Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 1,000	Acetone	ND< 5,000
1,2-Dichloropropane	ND< 1,000	Vinyl acetate	ND< 2,500
cis-1,3-Dichloropropene	ND< 1,000	2-Butanone	ND< 2,500
trans-1,3-Dichloropropen	ND< 1,000	4-Methyl-2-pentanone	ND< 2,500
Methylene chloride	ND< 2,500	2-Hexanone	ND< 2,500
1,1,2,2-Tetrachloroethan	ND< 1,000	Carbon disulfide	ND< 2,500
Tetrachloroethene	ND< 1,000		
1,1,1-Trichloroethane	ND< 1,000		
1,1,2-Trichloroethane	ND< 1,000		
Trichloroethene	71,600		
Vinyl Chloride	ND< 1,000		
Analytical Method: E	PA 8260	ELAP ID No	· 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc.

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10231

Client Job No.:

147.007

Sample Type:

Water

Field Location:

GW-4

Date Sampled: Date Received:

11/09/01 11/12/01

Field ID No.:

N/A

Date Analyzed:

11/15/01

VOL	ATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
	Bromodichloromethane	ND< 200	Benzene	ND< 200
	Bromomethane	ND< 200	Chlorobenzene	ND< 200
	Bromoform	ND< 200	Ethylbenzene	ND< 200
	Carbon tetrachloride	ND< 200	Toluene	ND< 200
	Chloroethane	ND< 200	m,p - Xylene	ND< 200
	Chloromethane	ND< 200	o - Xylene	ND< 200
	2-Chloroethyl vinyl ether	ND< 200	Styrene	ND< 200
	Chloroform	ND< 200		
	Dibromochloromethane	ND< 200		
	1,1-Dichloroethane	ND< 200		
	1,2-Dichloroethane	ND< 200		
	1,1-Dichloroethene	ND< 200		
	cis-1,2-Dichloroethene	4,280	Ketones & Misc.	
	trans-1,2-Dichloroethene	ND< 200	Acetone	ND< 1,000
	1,2-Dichloropropane	ND< 200	Vinyl acetate	ND< 500
	cis-1,3-Dichloropropene	ND< 200	2-Butanone	ND< 500
	trans-1,3-Dichloropropen	ND< 200	4-Methyl-2-pentanone	ND< 500
	Methylene chloride	ND< 500	2-Hexanone	ND< 500
	1,1,2,2-Tetrachloroethan	ND< 200	Carbon disulfide	ND< 500
	Tetrachloroethene	ND< 200		
	1,1,1-Trichloroethane	ND< 200		
	1,1,2-Trichloroethane	ND< 200		
	Trichloroethene	8,230		
	Vinyl Chloride	707		

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc.

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10232

Client Job No.:

147.007

Sample Type:

Water

Field Location:

GW-5

Date Sampled: Date Received:

11/09/01 11/12/01

Field ID No.:

N/A

Date Analyzed:

11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00	Benzene	7.66
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	ND< 2.00		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	10.6	. Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	ND< 2.00		
Vinyl Chloride	ND< 2.00		

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR WATERS

Leader Professional Services, Inc Client:

RoCo, Ltd Client Job Site:

Client Job No.: 147.007

Field Location: GW-3 Field ID No.: N/A

Lab Project No.:

Lab Sample No.: 10310 Sample Type: Water

01-2849

Sample Date: 11/13/01

Date Received: 11/15/01 Date Analyzed: 11/20/01

COMPOUND	RESULT (ug/l)	COMPOUND	RESULT (ug/l)
Dd -laskal	ND - 25 0	2.4 Dinitranhan-l	ND- 40.0
Benzyl alcohol	ND< 25.0	2,4-Dinitrophenol	ND< 10.0
Bis (2-chloroethyl) ether	ND< 10.0	2,4-Dinitrotoluene	ND< 10.0
Bis (2-chloroisopropyl) ether	ND< 10.0	2,6-Dinitrotoluene	ND< 10.0
2-Chlorophenol	ND< 10.0	Fluorene	ND< 10.0
1,3-Dichlorobenzene	ND< 10.0	Hexachlorocyclopentadiene	ND< 10.0
1,4-Dichlorobenzene	ND< 10.0	2-Nitroaniline	ND< 25.0
1,2-Dichlorobenzene	ND< 10.0	3-Nitroaniline	ND< 25.0
Hexachloroethane	ND< 10.0	4-Nitroaniline	ND< 25.0
2-Methylphenol	ND< 10.0	4-Nitrophenol	ND< 25.0
4-Methylphenol	ND< 10.0	2,4,6-Trichlorophenol	ND< 10.0
N-Nitrosodimethylamine	ND< 10.0	2,4,5-Trichlorophenol	ND< 25.0
N-Nitroso-di-n-propylamine	ND< 10.0	4-Bromophenyl phenyl ether	ND< 10.0
Phenol	ND< 10.0	Di-n-butyl phthalate	ND< 10.0
Benzoic acid	ND< 25.0	4,6-Dinitro-2-methylphenol	ND< 25.0
Bis (2-chloroethoxy) methane	ND< 10.0	Fluoranthene	ND< 10.0
4-Chloroaniline	ND< 10.0	Hexachlorobenzene	ND< 10.0
4-Chloro-3-methylphenol	ND< 10.0	N-Nitrosodiphenylamine	ND< 10.0
2,4-Dichlorophenol	ND< 10.0	Pentachlorophenol	ND< 25.0
2,6-Dichlorophenol	ND< 10.0	Anthracene	ND< 10.0
2,4-Dimethylphenol	ND< 10.0	Phenanthrene	ND< 10.0
Hexachlorobutadiene	ND< 10.0	Benzidine	ND< 25.0
Isophorone	ND< 10.0	Benzo (a) anthracene	ND< 10.0
2-Methylnapthalene	ND< 10.0	Bis (2-ethylhexyl) phthalate	ND< 10.0
Naphthalene	ND< 10.0	Butylbenzylphthalate	ND< 10.0
Nitrobenzene	ND< 10.0	Chrysene	ND< 10.0
2-Nitrophenol	ND< 10.0	3,3'-Dichlorobenzidine	ND< 10.0
1,2,4-Trichlorobenzene	ND< 10.0	Pyrene ,	ND< 10.0
2-Chloronaphthalene	ND< 10.0	Benzo (b) fluoranthene	ND< 10.0
Acenaphthene	ND< 10.0	Benzo (k) fluoranthene	ND< 10.0
Acenapthylene	ND< 10.0	Benzo (g,h,i) perylene	ND< 10.0
4-Chlorophenyl phenyl ether	ND< 10.0	Benzo (a) pyrene	ND< 10.0
Dibenzofuran	ND< 10.0	Dibenz (a,h) anthracene	ND< 10.0
Diethyl phthalate	ND< 10.0	Di-n-octylphthalate	ND< 10.0
Dimethyl phthalate	ND< 25.0	Indeno (1,2,3-cd) pyrene	ND< 10.0
Analytical Method: EPA 8270		L	ELAP ID No: 10958

Analytical Method: EPA 8270 ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By: Laboratory Director



Laboratory Analysis For Polychlorinated Biphenyls in Water

Client: <u>Leader Professional Services, Inc</u> Lab Project No: 01-2849

Lab Sample No: 10310

Client Job Site: RoCo, Ltd Sample Type: Water

Client Job No.: 147.007

Field Location: GW-3 Date Sampled: 11/14/01 Date Received: 11/15/01

Field ID No.: N/A Date Analyzed: 11/20/01

Polychlorinated Biphenyl	Result (ug/L)	Reporting Limit (ug/L)
PCB 1016	ND	1.00
PCB 1221	ND	1.00
PCB 1232	ND	1.00
PCB 1242	ND	1.00
PCB 1248	ND	1.00
PCB 1254	ND	1.00
PCB 1260	ND	1.00

Analytical Method: EPA 8082 ELAP ID: 10958

Comments: ND denotes Not Detected.

Approved By:

Laboratory Director

File ID: 012849P1.XLS



Pesticides in Water

Client: <u>Leader Professional Services, Inc</u> Lab Project No: 01-2849

Lab Sample No: 10310

Client Job Site: RoCo, Ltd

Sample Type: Water

Client Job No: N/A

Date Sampled: 11/13/01

Field Location: GW-3 Date Received: 11/15/01

Field ID No: N/A Date Analyzed: 11/26/01

Parameter	Result	Reporting Limit
Parameter	(ug/L)	(ug/L)
alpha-BHC	ND	0.10
gamma-BHC	ND	0.10
beta-BHC	ND	0.10
Heptachlor	ND	0.10
delta-BHC	ND	0.10
Aldrin	ND	0.10
Heptachlor Epoxide	ND	0.10
Chlordane	ND	0.10
Endosulfan I	ND	0.10
4,4'-DDE	ND	0.20
Dieldrin	ND	0.20
Endrin	ND	0.20
Endosulfan II	ND	0.20
4,4'-DDD	ND	0.20
Methoxychlor	ND	0.10
4,4'-DDT	ND	0.20
Endrin Aldehyde	ND	0.20
Endosulfan Sulfate	ND	0.20
Endrin Ketone	ND	0.10
Toxaphene	ND	2.00

Analytical Method: EPA 8081 ELAP ID: 10958

Comments: ND denotes Not Detected

Approved By: Laboratory Director

File ID: 012849Q1.XLS



Client:

Leader Professional Services, Inc.

Lab Project No.: 01-2849 Lab Sample No.: 10310

Client Job Site:

RoCo, Ltd.

Sample Type:

Groundwater

Client Job No.:

147.007

Date Sampled:

11/13/2001

Field Location:

GW-3

Date Received: 1

11/15/2001

Field ID No.:

N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/L)			
Antimony	11/21/2001	EPA 6010	<0.060			
Arsenic	11/20/2001	EPA 6010	0.048			
Beryllium	11/20/2001	EPA 6010	<0.005			
Cadmium	11/20/2001	EPA 6010	0.012			
Chromium	11/20/2001	EPA 6010	0.516			
Copper	11/20/2001	EPA 6010	0.434			
Lead	11/20/2001	EPA 6010	0.135			
Mercury	11/21/2001	EPA 7470	0.0005			
Nickel	11/20/2001	EPA 6010	0.158			
Selenium	11/20/2001	EPA 6010	<0.005			
Silver	11/20/2001	EPA 6010	<0.010			
Thallium	11/21/2001	EPA 6010	0.024			
Zinc	11/20/2001	EPA 6010	1.91			
Zinc	11/20/2001	EPA 6010	1.91 FLAP ID No :1095			

ELAP ID No.:10958

Comments:

Approved By:

Laberatory Director



Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: <u>Leader Professional Services</u>

Lab Project No: Lab Sample No: 01-2757

Method Blank

Client Job Site:

RoCo, Ltd.

Sample Type:

Client Job No:

147.007

Soil

Field Location:

Date Sampled: Date Received:

N/A N/A

Field ID No:

N/A N/A

Date Analyzed:

11/12/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 5.00	Benzene	ND< 5.00
Bromomethane	ND< 5.00	Chlorobenzene	ND< 5.00
Bromoform	ND< 5.00	Ethylbenzene	ND< 5.00
Carbon tetrachloride	ND< 5.00	Toluene	ND< 5.00
Chloroethane	ND< 5.00	m,p - Xylene	ND< 5.00
Chloromethane	ND< 5.00	o - Xylene	ND< 5.00
2-Chloroethyl vinyl ether	ND< 5.00	Styrene	ND< 5.00
Chloroform	ND< 5.00		
Dibromochloromethane	ND< 5.00		•
1,1-Dichloroethane	ND< 5.00		
1,2-Dichloroethane	ND< 5.00		
1,1-Dichloroethene	ND< 5.00		
cis-1,2-Dichloroethene	ND< 5.00		
trans-1,2-Dichloroethene	ND< 5.00	Ketones & Misc.	
1,2-Dichloropropane	ND< 5.00	Acetone	ND< 25.0
cis-1,3-Dichloropropene	ND< 5.00	Vinyl acetate	ND< 12.5
trans-1,3-Dichloropropene	ND< 5.00	2-Butanone	ND< 12.5
Methylene chloride	ND< 12.5	4-Methyl-2-pentanone	ND< 12.5
1,1,2,2-Tetrachloroethane	ND< 5.00	2-Hexanone	ND< 12.5
Tetrachloroethene	ND< 5.00	Carbon disulfide	ND< 12.5
1,1,1-Trichloroethane	ND< 5.00		
1,1,2-Trichloroethane	ND< 5.00		
Trichloroethene	ND< 5.00		
Vinyl Chloride	ND< 5.00		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge

Client: Leader Professional Services

Lab Project No: Lab Sample No: 01-2757

Client Job Site:

RoCo, Ltd.

Sample Type:

Method Blank

Client Job No:

147.007

Date Sampled:

Soil

Field Location:

N/A

Date Received:

N/A N/A

Field ID No: N/A

Date Analyzed:

11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 5.00	Benzene	ND< 5.00
Bromomethane	ND< 5.00	Chlorobenzene	ND< 5.00
Bromoform	ND< 5.00	Ethylbenzene	ND< 5.00
Carbon tetrachloride	ND< 5.00	Toluene	ND< 5.00
Chloroethane	ND< 5.00	m,p - Xylene	ND< 5.00
Chloromethane	ND< 5.00	o - Xylene	ND< 5.00
2-Chloroethyl vinyl ether	ND< 5.00	Styrene	ND< 5.00
. Chloroform	ND< 5.00		
Dibromochloromethane	ND< 5.00		
1,1-Dichloroethane	ND< 5.00		
1,2-Dichloroethane	ND< 5.00		
1,1-Dichloroethene	ND< 5.00		
cis-1,2-Dichloroethene	ND< 5.00		
trans-1,2-Dichloroethene	ND< 5.00	Ketones & Misc.	
1,2-Dichloropropane	ND< 5.00	Acetone	ND< 25.0
cis-1,3-Dichloropropene	ND< 5.00	Vinyl acetate	ND< 12.5
trans-1,3-Dichloropropene	ND< 5.00	2-Butanone	ND< 12.5
Methylene chloride	ND< 12.5	4-Methyl-2-pentanone	ND< 12.5
1,1,2,2-Tetrachloroethane	ND< 5.00	2-Hexanone	ND< 12.5
Tetrachloroethene	ND< 5.00	· Carbon disulfide	ND< 12.5
1,1,1-Trichloroethane	ND< 5.00		
1,1,2-Trichloroethane	ND< 5.00		
Trichloroethene	ND< 5.00		
Vinyl Chloride	ND< 5.00		

Analytical Method:

EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By

PARADIGM

ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

VOLATILES
LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM
Soil Method

	T	Percent Recovery					
Lab Sample ID	Field Location	1,1-Dichloro ethene	Trichloro ethene	Benzene	Toluene	Chloro benzene	
LCS	N/A	89	97	102	111	98	
10015MS	GW-3 (10'-12')	82	NC	101	115	100	
10015MSD	GW-3 (10'-12')	78	NC	96	110	99	
				_			
		-					

Comments: NC denotes Not Calculated. Analyte present at high concentration in sample.

VOLATILES
LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM
Soil Method

	·	Percent Recovery					
Lab Sample ID	Field Location	1,1-Dichloro ethene	Trichloro ethene	Benzene	Toluene	Chloro benzene	
LCS	N/A	98.7	100	99.9	115	100	
9756 MS	BH-7 (6'-8')	91.4	NC	100	123	95.4	
9756 MSD	BH-7 (6'-8')	90.5	NC	97.9	128	93.4	
			•				

Comments: NC denotes Non Calculatable. Analyte present in sample at high concentration.



ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Leader Professional Services, In: Lab Project No.: Client:

01-2757

Client Job Site:

RoCo, Ltd

Lab Sample No.:

Method Blank

Sample Type:

Soil

Client Job No.: Field Location: 147-007

Sample Date: Date Received: N/A N/A

Field ID No.:

N/A N/A

Date Analyzed:

11/12/2001

Benzyl alcohol ND< 714 2,4-Dinitrophenol ND 286 Bis (2-chloroethyl) ether ND 286 2,4-Dinitrotoluene ND 2,4-Dinitroto	COMPOUND	RESULT (ug/	Kg) COMPOUND	RESULT (ug/Kg)
Bis (2-chloroethyl) ether	Daniel electrol	ND = 71.4	2.4 Dinitranhanal	ND - 206
Bis (2-chlorospropyl) ether			, . ,	
2-Chlorophenol ND			1 7	
1,3-Dichlorobenzene ND< 286			1 '	
1,4-Dichlorobenzene ND< 286	, · · · · · · · · · · · · · · · · · · ·			
1,2-Dichlorobenzene ND< 286				
Hexachloroethane				
2-Methylphenol ND< 286	1 .			**= * * *
4-Methylphenol ND< 286				
N-Nitrosodimethylamine ND 286 2,4,5-Trichlorophenol ND 714 N-Nitroso-di-n-propylamine ND 286 4-Bromophenyl phenyl ether ND 286 Phenol ND 286 Di-n-butyl phthalate ND 286 Benzoic acid ND 714 4,6-Dinitro-2-methylphenol ND 714 Bis (2-chloroethoxy) methane ND 286 Fluoranthene ND 286 4-Chloroaniline ND 286 Hexachlorobenzene ND 286 4-Chloro-3-methylphenol ND 286 Hexachlorobenzene ND 286 4-Chloro-3-methylphenol ND 286 Pentachlorophenol ND 286 2,4-Dichlorophenol ND 286 Pentachlorophenol ND 286 2,4-Dimethylphenol ND 286 Anthracene ND 286 1,2-Dimethylphenol ND 286 Benzidine ND 286 1,2-Mathylphenol ND 286 Benzidine ND			1 '	
N-Nitroso-di-n-propylamine ND 286 4-Bromophenyl phenyl ether ND 286 Phenol ND 286 Di-n-butyl phthalate ND 286 Benzoic acid ND 714 4,6-Dinitro-2-methylphenol ND 714 Bis (2-chloroethoxy) methane ND 286 Fluoranthene ND 286 4-Chloroanilline ND 286 Hexachlorobenzene ND 286 4-Chloro-3-methylphenol ND 286 Hexachlorobenzene ND 286 2,4-Dichlorophenol ND 286 Pentachlorophenol ND 286 2,4-Dimethylphenol ND 286 Anthracene ND 286 2,4-Dimethylphenol ND 286 Phenanthrene ND 286 4-Exachlorobutadiene ND 286 Benzidine ND 286 4-Exachlorobutadiene ND 286 Benzidine ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND			1 ' '	
Phenol ND< 286 Di-n-butyl phthalate ND< 286 Benzoic acid ND< 714	-			
Benzoic acid ND 714 4,6-Dinitro-2-methylphenol ND 714 Bis (2-chloroethoxy) methane ND 286 Fluoranthene ND 286 4-Chloro-3-methylphenol ND 286 Hexachlorobenzene ND 286 2,4-Dichlorophenol ND 286 Pentachlorophenol ND 714 2,6-Dichlorophenol ND 286 Pentachlorophenol ND 714 2,6-Dichlorophenol ND 286 Anthracene ND 286 2,4-Dimethylphenol ND 286 Phenanthrene ND 286 2,4-Dimethylphenol ND 286 Benzoldine ND 286 Hexachlorobutadiene ND 286 Benzoldine ND 714 Isophorone ND 286 Benzoldine ND 714 Isophorone ND 286 Benzoldine ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286				
Bis (2-chloroethoxy) methane ND 286 Fluoranthene ND 286 4-Chloro-aniline ND 286 Hexachlorobenzene ND 286 4-Chloro-3-methylphenol ND 286 N-Nitrosodiphenylamine ND 286 2,4-Dichlorophenol ND 286 Pentachlorophenol ND 714 2,6-Dichlorophenol ND 286 Anthracene ND 286 2,4-Dimethylphenol ND 286 Phenanthrene ND 286 Hexachlorobutadiene ND 286 Benzidine ND 286 Hexachlorobutadiene ND 286 Benzidine ND 286 Hexachlorobutadiene ND 286 Benzidine ND 286 2-Methylnapthalene ND 286 Benzidine ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286 Nitrobenzene ND 286 Butylbenzylphthalate ND 286				**= ==*
4-Chloroaniline ND< 286				
4-Chloro-3-methylphenol ND 286 N-Nitrosodiphenylamine ND 286 2,4-Dichlorophenol ND 286 Pentachlorophenol ND 714 2,6-Dichlorophenol ND 286 Anthracene ND 286 2,4-Dimethylphenol ND 286 Phenanthrene ND 286 4-Exachlorobutadiene ND 286 Benzidine ND 286 Hexachlorobutadiene ND 286 Benzidine ND 714 Isophorone ND 286 Benzidine ND 714 Isophorone ND 286 Benzo (a) anthracene ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286 Naphthalene ND 286 Butylbenzylphthalate ND 286 Nbritrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 Pyrene ND 286 2-Chloronaphthale			1, 140,4,111,10110	
2,4-Dichlorophenol ND 286 Pentachlorophenol ND 714 2,6-Dichlorophenol ND 286 Anthracene ND 286 2,4-Dimethylphenol ND 286 Phenanthrene ND 286 Hexachlorobutadiene ND 286 Benzoldine ND 714 Isophorone ND 286 Benzola (a) anthracene ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286 Naphthalene ND 286 Butylbenzylphthalate ND 286 Nitrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 3,3'-Dichlorobenzidine ND 286 1,2,4-Trichlorobenzene ND 286 Pyrene ND 286 2-Chloronaphthalene ND 286 Benzo (b) fluoranthene ND 286 Acenaphthene ND 286 Benzo (g,h,i) perylene ND 286				
2,6-Dichlorophenol ND< 286				
2,4-Dimethylphenol ND< 286	2,4-Dichlorophenol	ND< 286	Pentachlorophenol	ND< 714
Hexachlorobutadiene ND 286 Benzidine ND< 714 Isophorone ND 286 Benzo (a) anthracene ND< 286	2,6-Dichlorophenol	ND< 286	Anthracene	ND< 286
Isophorone ND 286 Benzo (a) anthracene ND 286 2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286 Naphthalene ND 286 Butylbenzylphthalate ND 286 Nitrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 Tolchlorobenzidine ND 286 1,2,4-Trichlorobenzene ND 286 Pyrene ND 286 2-Chloronaphthalene ND 286 Benzo (b) fluoranthene ND 286 Acenaphthene ND 286 Benzo (k) fluoranthene ND 286 Acenapthylene ND 286 Benzo (g,h,i) perylene ND 286 4-Chlorophenyl phenyl ether ND 286 Benzo (a) pyrene ND 286 Dibenzofuran ND 286 Dibenz (a,h) anthracene ND 286 Dlethyl phthalate ND 286 Di-n-octylphthalate ND 286	2,4-Dimethylphenol	ND< 286	Phenanthrene	ND< 286
2-Methylnapthalene ND 286 Bis (2-ethylhexyl) phthalate ND 286 Naphthalene ND 286 Butylbenzylphthalate ND 286 Nitrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 3,3'-Dichlorobenzidine ND 286 1,2,4-Trichlorobenzene ND 286 Pyrene ND 286 2-Chloronaphthalene ND 286 Benzo (b) fluoranthene ND 286 Acenaphthene ND 286 Benzo (g,h,i) perylene ND 286 Acenapthylene ND 286 Benzo (g,h,i) perylene ND 286 4-Chlorophenyl phenyl ether ND 286 Benzo (a) pyrene ND 286 Dibenzofuran ND 286 Dibenz (a,h) anthracene ND 286 Dlethyl phthalate ND 286 Di-n-octylphthalate ND 286	Hexachlorobutadiene	ND< 286	Benzidine	ND< 714
Naphthalene ND 286 Butylbenzylphthalate ND 286 Nitrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 3,3'-Dichlorobenzidine ND 286 1,2,4-Trichlorobenzene ND 286 Pyrene ND 286 2-Chloronaphthalene ND 286 Benzo (b) fluoranthene ND 286 Acenaphthene ND 286 Benzo (k) fluoranthene ND 286 Acenapthylene ND 286 Benzo (g,h,i) perylene ND 286 4-Chlorophenyl phenyl ether ND 286 Benzo (a) pyrene ND 286 Dibenzofuran ND 286 Dibenz (a,h) anthracene ND 286 Dlethyl phthalate ND 286 Di-n-octylphthalate ND 286	Isophorone	ND< 286		ND< 286
Nitrobenzene ND 286 Chrysene ND 286 2-Nitrophenol ND 286 3,3'-Dichlorobenzidine ND 286 1,2,4-Trichlorobenzene ND 286 Pyrene ND 286 2-Chloronaphthalene ND 286 Benzo (b) fluoranthene ND 286 Acenaphthene ND 286 Benzo (k) fluoranthene ND 286 Acenapthylene ND 286 Benzo (g,h,i) perylene ND 286 4-Chlorophenyl phenyl ether ND 286 Benzo (a) pyrene ND 286 Dibenzofuran ND 286 Dibenz (a,h) anthracene ND 286 Dlethyl phthalate ND 286 Di-n-octylphthalate ND 286	2-Methylnapthalene	ND< 286	Bis (2-ethylhexyl) phthalate	ND< 286
2-Nitrophenol ND< 286	Naphthalene	ND< 286	Butylbenzylphthalate	ND< 286
1,2,4-Trichlorobenzene ND< 286	Nitrobenzene	ND< 286	Chrysene	ND< 286
2-Chloronaphthalene ND< 286 Benzo (b) fluoranthene ND< 286 Acenaphthene ND< 286 Benzo (k) fluoranthene ND< 286 Acenapthylene ND< 286 Benzo (g,h,i) perylene ND< 286 4-Chlorophenyl phenyl ether ND< 286 Benzo (a) pyrene ND< 286 Dibenzofuran ND< 286 Dibenzo (a,h) anthracene ND< 286 Diethyl phthalate ND< 286 Di-n-octylphthalate ND< 286	2-Nitrophenol	ND< 286	3,3'-Dichlorobenzidine	ND< 286
Acenaphthene ND 286 Benzo (k) fluoranthene ND 286 Acenapthylene ND 286 Benzo (g,h,i) perylene ND 286 4-Chlorophenyl phenyl ether ND 286 Benzo (a) pyrene ND 286 Dibenzofuran ND 286 Dibenz (a,h) anthracene ND 286 Dlethyl phthalate ND 286 Di-n-octylphthalate ND 286	1,2,4-Trichlorobenzene	ND< 286	Pyrene	ND< 286
AcenapthyleneND286Benzo (g,h,i) peryleneND2864-Chlorophenyl phenyl etherND286Benzo (a) pyreneND286DibenzofuranND286Dibenz (a,h) anthraceneND286Dlethyl phthalateND286Di-n-octylphthalateND286	2-Chloronaphthalene	ND< 286	Benzo (b) fluoranthene	ND< 286
AcenapthyleneND286Benzo (g,h,i) peryleneND2864-Chlorophenyl phenyl etherND286Benzo (a) pyreneND286DibenzofuranND286Dibenz (a,h) anthraceneND286Dlethyl phthalateND286Di-n-octylphthalateND286	Acenaphthene	ND< 286	Benzo (k) fluoranthene	ND< 286
4-Chlorophenyl phenyl etherND286Benzo (a) pyreneND286DibenzofuranND286Dibenz (a,h) anthraceneND286Diethyl phthalateND286Di-n-octylphthalateND286		ND< 286		ND< 286
Dibenzofuran ND< 286 Dibenz (a,h) anthracene ND< 286 Diethyl phthalate ND< 286 Di-n-octylphthalate ND< 286		ND< 286		ND< 286
Dlethyl phthalate ND< 286 Di-n-octylphthalate ND< 286		ND< 286		ND< 286
	Diethyl phthalate	ND< 286		ND< 286
The second control of	Dimethyl phthalate	ND< 714	Indeno (1,2,3-cd) pyrene	ND< 286

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

SEMI-VOLATILES LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM Soil Method

Percent Recovery

		Percent Recovery									
				Base-Ne	eutrals				Acids		
Field Location	Pyrene	1,4- Dichoro benzene	N-Nitroso-di-n- propylamine	1,2,4- Trichlo benzene	Acenaph thene	2,4- Dinitro toluene	2-Chloro phenol	Phenol	4-Chloro 3- methyl phenol	4-Nitro	Penta chloro phenol
N/A	85	71	72	76	77	70	71	70	76	67	62
GW-3 (10'-12')	91	75	79	78	82	77	78	75	86	76	59
GW-3 (10'-12')	73	63	64	66	67	58	63	61	70	54	43
							-				
				-							
	N/A GW-3 (10'-12')	N/A 85 GW-3 (10'-12') 91	N/A 85 71 GW-3 (10'-12') 91 75	N/A 85 71 72 GW-3 (10'-12') 91 75 79	N-Nitroso-di-n-propylamine	N/A 85 71 72 76 77 GW-3 (10'-12') 91 75 79 78 82 GW-3 (10'-12') 73 63 64 66 67	N/A 85 71 72 76 77 70	Base-Neutrals	N-Nitroso-di-n-propylamine N-Nitroso-di-n-propylamine N/A 85 71 72 76 77 70 71 70	Base-Neutrals	Base-Neutrals

Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil

Client:

Leader Professional Services, Inc Lab Project No.:

Lab Project No.: Lab Sample No.: 01-2757

Method Blank

Client Job Site:

RoCo, Ltd

Client Job No.:

147.007

Sample Type:

Soil

Field Location:

N/A

Date Sampled: Date Received: N/A N/A

Field ID No:

N/A

Date Analyzed:

11/12/01

Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.50
PCB 1221	ND	0.50
PCB 1232	ND	0.50
PCB 1242	ND	0.50
PCB 1248	ND	0.50
PCB 1254	ND	0.50
PCB 1260	ND	0.50

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments:

ND denotes Not Detected.

Approved By:

Laboratory Director

File ID: 012757P8.XLS

SEMI-VOLATILE PCB SPIKE RECOVERY SUMMARY FORM Soil Method

Lab Sample ID	Field Location	PCB Spike	Percent Recovery
LCS	N/A	1221	63
10015MS	GW-3 (10-12')	1221	70
10015MSD	GW-3 (10-12')	1221	66

Comments:

Chlorinated Hydrocarbon Pesticides in Soil/Solid Waste

Client: Leader Professional Service, Inc. Lab Project No: 01-2757

Lab Sample No: Method Blank

Sample Type: Client Job Site: Soil RoCo, Ltd

Date Sampled: Client Job No: 147-007 N/A **Date Received:** N/A Field Location: N/A

Field ID No: Date Analyzed: 11/13/01 N/A

Parameter	Result (ug/Kg)		
alpha-BHC	ND<	2.9	
gamma-BHC	ND<	2.9	
beta-BHC	ND<	2.9	
Heptachlor	ND<	2.9	
delta-BHC	ND<	2.9	
Aldrin	ND<	2.9	
Heptachlor Epoxide	ND<	2.9	
Chlordane	ND<	29	
Endosulfan I	ND<	2.9	
4,4'-DDE	ND<	2.9	
Dieldrin	ND<	2.9	
Endrin	ND<	4.0	
Endosulfan II	ND<	2.9	
4,4'-DDD	ND<	2.9	
Methoxychlor	ND<	2.9	
4,4'-DDT	ND<	2.9	
Endrin Aldehyde	ND<	2.9	
Endosulfan Sulfate	ND<	2.9	
Toxaphene	ND<	143	

Analytical Method: EPA 8081 **ELAP ID: 10958**

ND denotes not detected Comments:

Approved By: Laboratory Director

File ID: 012757Q7.XLS

PESTICIDES
LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM
Soil Method

Percent Recovery ab Sample ID ield Location g-BHC Heptachlor Aldrin Dieldrin Endrin 4,4-DDT LCS N/A 108 134 125 90 133 137 10015MS GW-3 (10'-12') 17 46 60 33 38 45 42 83 104 73 92 10015MSD GW-3 (10'-12') 84



LABORATORY QUALITY CONTROL

Client: Leader Professional Services, Inc.

QC Type: Matrix Spike
Matrix: Soil
Sample No.: 10015

ANALYTE	Spike Added (ug/g)	Sample Amount (ug/g)		% Recovery
Antimony	228	<5.66	218	95.6
Arsenic	228	1.20	206	89.6
Beryllium	45.6	<0.472	40.8	89.4
Cadmium	91.2	<0.472	80.7	88.4
Chromium	228	8.43	213	89.4
Copper	228	8.54	226	95.3
Lead	228	3.02	209	90.3
Mercury	2.01	<0.0837	1.97	97.7
Nickel	456	<3.77	414	90.8
Selenium	228	<0.472	212	92.7
Silver	22.8	<0.942	22.3	97.6
Thallium	228	<0.566	209	91.6
Zinc	228	39.3	238	86.8



LABORATORY QUALITY CONTROL Metals

Client: Leader Professional Services, Inc.

QC Type: Sample Replicate
Matrix: Soil
Sample Number: 10015

Analyte	Result (ug/g)	Duplicate (ug/g)	% Difference
Antimony	<5.66	<5.66	NC
Arsenic	1.20	1.44	18.3
Beryllium	<0.472	<0.472	, NC
Cadmium	<0.472	<0.472	NC
Chromium	8.43	8.21	2.6
Copper	8.54	8.62	0.9
Lead	3.02	3.05	1.1
Mercury	<0.0837	<0.0837	NC
Nickel	<3.77	<3.77	NC
Selenium	<0.472	<0.472	NC
Silver	<0.942	<0.942	NC
Thallium	<0.566	<0.566	NC
Zinc	39.3	40.4	3.0



Volatile Laboratory Analysis Report For Non-Potable Water

Client: <u>Lead</u>

Leader Professional Services, Inc

Lab Project No.:

01-2677

Client Job Site:

Roco, Ltd

Lab Sample No.:

9759

Client Job No.:

147.007

Sample Type:

Water

Field Location:

Field Blank

Date Sampled:

10/25/01

Field ID No.:

N/A

Date Received: Date Analyzed:

10/29/01 11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)		
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00		
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00		
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00		
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00		
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00		
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00		
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00		
Chloroform	2.94				
Dibromochloromethane	ND< 2.00				
1,1-Dichloroethane	ND< 2.00				
. 1,2-Dichloroethane	ND< 2.00				
1,1-Dichloroethene	ND< 2.00				
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.			
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0		
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00		
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00		
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00		
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00		
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00		
Tetrachloroethene	ND< 2.00				
1,1,1-Trichloroethane	ND< 2.00				
1,1,2-Trichloroethane	ND< 2.00				
Trichloroethene	ND< 2.00				
Vinyl Chloride	ND< 2.00				

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Leader Professional Services, Inc Client:

Lab Project No.:

01-2677

Client Job Site:

Roco, Ltd

Lab Sample No.:

9758

Client Job No.:

147.007

Sample Type:

Water

Field Location:

Trip Blank

Date Sampled: **Date Received:**

10/25/01 10/29/01

Field ID No.:

N/A

Date Analyzed:

11/01/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	2.01	Benzene	ND< 2.00
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	3.08		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	ND< 2.00		
Vinyl Chloride	ND< 2.00		
Analytical Method: E	PA 8260	ELAP ID No	o.: 10958

Comments:

ND denotes Not Detected

Approved By



Client Job Site:

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

01-2757

10020

Volatile Laboratory Analysis Report For Non-Potable Water

Leader Professional Services Client:

Lab Project No.:

Lab Sample No.: RoCo, Ltd.

Sample Type: Client Job No.: 147.007 Water

Date Sampled: 11/01/01 Field Location: Trip Blank

Date Received: 11/06/01 Field ID No.: N/A Date Analyzed: 11/13/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)		
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00		
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00		
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00		
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00		
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00		
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00		
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00		
Chloroform	ND< 2.00				
Dibromochloromethane	ND< 2.00				
1,1-Dichloroethane	ND< 2.00				
1,2-Dichloroethane	ND< 2.00				
1,1-Dichloroethene	ND< 2.00				
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.			
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0		
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00		
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00		
trans-1,3-Dichloropropene	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00		
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00		
1,1,2,2-Tetrachloroethane	ND< 2.00	Carbon disulfide	ND< 5.00		
Tetrachloroethene	ND< 2.00				
1,1,1-Trichloroethane	ND< 2.00				
1,1,2-Trichloroethane	ND< 2.00				
Trichloroethene	ND< 2.00				
Vinyl Chloride	ND< 2.00				

ELAP ID No.: 10958 Analytical Method: EPA 8260

ND denotes Not Detected Comments:

Approved By Laboratory Director

Volatile Laboratory Analysis Report For Non-Potable Water

Client: Leader Professional Services, Inc

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10233

Client Job No.:

147.007

Sample Type:

Water

Field Location:

Trip Blank

Date Sampled:

11/09/01 11/12/01

Field ID No.:

N/A

Date Received: Date Analyzed:

11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	ND< 2.00		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00
trans-1,3-Dichloropropen	ND< 2.00	· 4-Methyl-2-pentanone	ND< 5.00
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	ND< 2.00		
Vinyl Chloride	ND< 2.00		

Analytical Method: EPA 8260 ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By

Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

10234

Client Job No.:

147.007

Sample Type:

Water

Field Location:

Field Blank

Date Sampled:

11/09/01 11/12/01

Field ID No.:

N/A

Date Received: Date Analyzed:

11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)		
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00		
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00		
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00		
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00		
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00		
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00		
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00		
Chloroform	ND< 2.00				
Dibromochloromethane	ND< 2.00				
1,1-Dichloroethane	ND< 2.00				
1,2-Dichloroethane	ND< 2.00				
1,1-Dichloroethene	ND< 2.00	•			
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.			
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0		
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00		
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00		
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00		
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00		
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00		
Tetrachloroethene	ND< 2.00				
1,1,1-Trichloroethane	ND< 2.00				
1,1,2-Trichloroethane	ND< 2.00				
Trichloroethene	ND< 2.00				
Vinyl Chloride	ND< 2.00				

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

Method Blank

Client Job No.:

147.007

Sample Type:

Water

Field Location:

N/A

Date Sampled:

11/09/01 11/12/01

Field ID No.:

N/A

Date Received: Date Analyzed:

11/14/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)		
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00		
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00		
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00		
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00		
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00		
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00		
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00		
Chloroform	ND< 2.00				
Dibromochloromethane	ND< 2.00				
1,1-Dichloroethane	ND< 2.00				
1,2-Dichloroethane	ND< 2.00				
1,1-Dichloroethene	ND< 2.00				
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.			
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0		
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00		
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00		
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00		
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00		
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00		
Tetrachloroethene	ND< 2.00				
1,1,1-Trichloroethane	ND< 2.00				
1,1,2-Trichloroethane	ND< 2.00				
Trichloroethene	ND< 2.00				
Vinyl Chloride	ND< 2.00				
A	D4 0000	51.45.15.11			

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By



Volatile Laboratory Analysis Report For Non-Potable Water

Client:

Leader Professional Services, Inc.

Lab Project No.:

01-2822

Client Job Site:

RoCo, Ltd

Lab Sample No.:

Method Blank

Client Job No.:

147.007

Sample Type:

Water

Field Location:

N/A

Date Sampled: Date Received:

11/09/01 11/12/01

Field ID No.:

N/A

Date Analyzed:

11/15/01

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00	Benzene	ND< 2.00
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	ND< 2.00		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	ND< 2.00	Ketones & Misc.	
trans-1,2-Dichloroethene	ND< 2.00	Acetone	ND< 10.0
1,2-Dichloropropane	ND< 2.00	Vinyl acetate	ND< 5.00
cis-1,3-Dichloropropene	ND< 2.00	2-Butanone	ND< 5.00
trans-1,3-Dichloropropen	ND< 2.00	4-Methyl-2-pentanone	ND< 5.00
Methylene chloride	ND< 5.00	2-Hexanone	ND< 5.00
1,1,2,2-Tetrachloroethan	ND< 2.00	Carbon disulfide	ND< 5.00
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	ND< 2.00		
Vinyl Chloride	ND< 2.00		
A - al Aladh a d	DA 8360	FLADIDAL	

Analytical Method:

EPA 8260

ELAP ID No.: 10958

Comments:

ND denotes Not Detected

Approved By

PARADIGM

ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

VOLATILES LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM Water Method

		Percent Recovery						
Lab Sample ID	Field Location	1,1-Dichloro ethene	Trichloro ethene	Benzene	Toluene	Chloro benzene		
LCS	N/A	97	94	103	111	97		
10232MS	GW-5	97	147	105	110	96		
10232MSD	GW-5	94	104	109	113	100		
				•				
	#B. TW. ARABIRA &							

		_						



SERVICES, INC.

179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

SEMI-VOLATILES LABORATORY REPORT FOR WATERS

Client:

Leader Professional Services, Inc

Lab Project No.:

01-2849

Client Job Site:

RoCo, Ltd

Lab Sample No.:

Method Blank

Client Job No.:

Sample Type:

Water

147.007

Sample Date:

N/A

Field Location:

N/A

Date Received:

N/A

Field ID No.:

N/A

Date Analyzed:

11/20/01

COMPOUND	RESULT (ug/l)	COMPOUND	RESULT (ug/l)
Damed alaskal	ND< 25.0	2.4 Dinitrophonel	ND< 10.0
Benzyl alcohol		2,4-Dinitrophenol	ND< 10.0 ND< 10.0
Bis (2-chloroethyl) ether	ND< 10.0	2,4-Dinitrotoluene	
Bis (2-chloroisopropyl) ether	ND< 10.0	2,6-Dinitrotoluene	ND< 10.0
2-Chlorophenol	ND< 10.0	Fluorene	ND< 10.0
1,3-Dichlorobenzene	ND< 10.0	Hexachlorocyclopentadiene	ND< 10.0
1,4-Dichlorobenzene	ND< 10.0	2-Nitroaniline	ND< 25.0
1,2-Dichlorobenzene	ND< 10.0	3-Nitroaniline	ND< 25.0
Hexachloroethane	ND< 10.0	4-Nitroaniline	ND< 25.0
2-Methylphenol	ND< 10.0	4-Nitrophenol	ND< 25.0
4-Methylphenol	ND< 10.0	2,4,6-Trichlorophenol	ND< 10.0
N-Nitrosodimethylamine	ND< 10.0	2,4,5-Trichlorophenol	ND< 25.0
N-Nitroso-di-n-propylamine	ND< 10.0	4-Bromophenyl phenyl ether	ND< 10.0
Phenol	ND< 10.0	Di-n-butyl phthalate	ND< 10.0
Benzoic acid	ND< 25.0	4,6-Dinitro-2-methylphenol	ND< 25.0
Bis (2-chloroethoxy) methane	ND< 10.0	Fluoranthene	ND< 10.0
4-Chloroaniline	ND< 10.0	Hexachlorobenzene	ND< 10.0
4-Chloro-3-methylphenol	ND< 10.0	N-Nitrosodiphenylamine	ND< 10.0
2,4-Dichlorophenol	ND< 10.0	Pentachlorophenol	ND< 25.0
2,6-Dichlorophenol	ND< 10.0	Anthracene	ND< 10.0
2,4-Dimethylphenol	ND< 10.0	Phenanthrene	ND< 10.0
Hexachlorobutadiene	ND< 10.0	Benzidine	ND< 25.0
sophorone	ND< 10.0	Benzo (a) anthracene	. ND< 10.0
2-Methylnapthalene	ND< 10.0	Bis (2-ethylhexyl) phthalate	ND< 10.0
Naphthalene	ND< 10.0	Butylbenzylphthalate	ND< 10.0
Nitrobenzene	ND< 10.0	Chrysene	ND< 10.0
2-Nitrophenol	ND< 10.0	3,3'-Dichlorobenzidine	ND< 10.0
1,2,4-Trichlorobenzene	ND< 10.0	Pyrene	ND< 10.0
2-Chloronaphthalene	ND< 10.0	Benzo (b) fluoranthene	ND< 10.0
Acenaphthene	ND< 10.0	Benzo (k) fluoranthene	ND< 10.0
Acenapthylene	ND< 10.0	Benzo (g,h,i) perylene	ND< 10.0
4-Chlorophenyl phenyl ether	ND< 10.0	Benzo (a) pyrene	ND< 10.0
Dibenzofuran	ND< 10.0	Dibenz (a,h) anthracene	ND< 10.0
Diethyl phthalate	ND< 10.0	Di-n-octylphthalate	ND< 10.0
Dimethyl phthalate	ND< 25.0	Indeno (1,2,3-cd) pyrene	ND< 10.0

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments:

ND denotes Not Detected

Approved By:

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

SEMI-VOLATILES LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM Water Method

Percent Recovery

			1 Clock Recovery									
			Base-Neutrals							Acids		
Lab Sample ID	Field Location	Pyrene	1,4- Dichoro benzene	N-Nitroso-di-n- propylamine	1,2,4- Trichlo benzene	Acenaph thene	2,4-Dinitro toluene	2-Chloro phenol	Phenol	4-Chloro 3-methyl phenol	4-Nitro	Penta chloro phenol
LCS	N/A	80	38	63	39	67	70	68	27	83	30	56
10310MS	GW-3	85	59	70	59	76	73	71	26	85	32	62
10310MSD	GW-3	79	54	66	55	74	65	68	39	87	32	64
								-				



Laboratory Analysis For Polychlorinated Biphenyls in Water

Client: <u>Leader Professional Services, Inc.</u> Lab Project No: 01-2849

Lab Sample No:

Method Blank

Client Job Site:

RoCo, Ltd

Sample Type:

Water

Client Job No.:

147.007

Date Sampled:

N/A N/A

Field Location:

N/A

Date Received:

Field ID No.:

N/A

Date Analyzed:

11/20/01

Polychlorinated Biphenyl	Result (ug/L)	Reporting Limit (ug/L)
PCB 1016	ND	1.00
PCB 1221	ND	1.00
PCB 1232	ND	1.00
PCB 1242	ND	1.00
PCB 1248	ND	1.00
PCB 1254	ND	1.00
PCB 1260	ND	1.00

Analytical Method: EPA 8082

ELAP ID: 10958

Comments: ND denotes Not Detected.

Approved By:

Laboratory Director

File ID: 012849P2.XLS



179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

SEMI-VOLATILE PCB SPIKE RECOVERY SUMMARY FORM Water Method

Lab Sample ID	Field Location		PCB Spike	Percent Recovery
LCS	N/A		1221	62
10310MS	GW-3		. 1221	90
10310MSD	GW-3		1221	94
			-	

Comments:



Pesticides in Water

Client: <u>Leader Professional Services, Inc</u> Lab Project No: 01-2849

Lab Sample No: Method Blank

Client Job Site: RoCo, Ltd

N/A

Sample Type: Water

Client Job No: N/A

Field Location:

Date Sampled: N/A
Date Received: N/A

Field ID No: N/A Date Analyzed: 11/26/01

Parameter	Result (ug/L)	Reporting Limit (ug/L)
alpha-BHC	ND	0.10
gamma-BHC	ND	0.10
beta-BHC	ND	0.10
Heptachlor	ND	0.10
delta-BHC	ND	0.10
Aldrin	ND	0.10
Heptachlor Epoxide	ND	0.10
Chlordane	. ND	0.10
Endosulfan I	ND	0.10
4,4'-DDE	ND	0.20
Dieldrin	ND	0.20
Endrin	ND	0.20
Endosulfan II	ND	0.20
4,4'-DDD	ND	0.20
Methoxychlor	ND	0.10
4,4'-DDT	ND	0.20
Endrin Aldehyde	ND	0.20
Endosulfan Sulfate	ND	0.20
Endrin Ketone	ND	0.10
Toxaphene	ND	2.00

Analytical Method: EPA 8081 ELAP ID: 10958

Comments: ND denotes Not Detected

Laboratory Director

File ID: 012849Q2.XLS



179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716-647-3311

PESTICIDES
LABORATORY CONTROL SAMPLE RECOVERY SUMMARY FORM
Water Method

Percent Recovery

Lab Sample ID	Field Location	Aldrin	g-BHC	4,4'-DDT	Dieldrin	Endrin	Heptachlor
LCS	N/A	112	152	128	134	138	128
10310MS	GW-3	80	64	66	54	62	92
10310MSD	GW-3	108	53	74	52	60	108



179 Lake Avenue, Rochester, NY 14608 (716) 647-2530 FAX (716) 647-3311

Client:

Leader Professional Services, Inc.

Lab Project No. 01-2757

Client Job Site:

RoCo, Ltd.

Client Job No.:

147.007

Field Location:

N/A

Field ID No.:

N/A

Lab Sample No. N/A

Sample Type: Method Blank

Date Sampled: N/A

Date Received: N/A

Date Analyzed	Analytical Method	Result (mg/kg)
11/09/2001	SW846 6010	<6.00
11/09/2001	SW846 6010	<0.500
11/09/2001	SW846 6010	<0.500
11/09/2001	SW846 6010	<0.500
11/09/2001	SW846 6010	<1.00
11/09/2001	SW846 6010	<1.00
11/09/2001	SW846 6010	<0.500
11/13/2001	SW846 7471	<0.100
11/09/2001	SW846 6010	<4.00
11/09/2001	SW846 6010	<0.500
11/09/2001	SW846 6010	<1.00
11/09/2001	SW846 6010	<0.600
11/09/2001	SW846 6010	<2.00
	Analyzed 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001 11/09/2001	Analyzed Method 11/09/2001 SW846 6010

ELAP ID No.:10958

Comments:

Approved By:

Laboratory Director

File ID: 012757



179 Lake Avenue, Rochester, NY 14608 (716) 647-2530 FAX (716) 647-3311

Client: Leader Professional Services, Inc. Lab Project No.: 01-2849

Lab Sample No.: Method Blank

Client Job Site: RoCo, Ltd.

Sample Type: N/A

Client Job No.: 147.007

Date Sampled: N/A

Field Location: N/A Field ID No.: N/A

Date Received: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Antimony	11/21/2001	EPA 6010	<0.060
Arsenic	11/20/2001	EPA 6010	<0.005
Beryllium	11/20/2001	EPA 6010	<0.005
Cadmium	11/20/2001	EPA 6010	<0.005
Chromium	11/20/2001	EPA 6010	<0.010
Copper	11/20/2001	EPA 6010	<0.010
Lead	11/20/2001	EPA 6010	<0.005
Mercury	11/21/2001	EPA 7470	<0.0002
Nickel	11/20/2001	EPA 6010	<0.040
Selenium	11/20/2001	EPA 6010	<0.005
Silver	11/20/2001	EPA 6010	<0.010
Thallium	11/21/2001	EPA 6010	<0.006
Zinc	11/20/2001	EPA 6010	<0.020

Comments:

Approved By:

Laboratory Director

File ID: 012849



LABORATORY QUALITY CONTROL

Client: Leader Professional Services, Inc.

QC Type: Matrix Spike Matrix: Water Sample No.: 10310

ANALYTE	Spike Added (mg/L)	Sample Amount (mg/L)	Spike Recovered (mg/L)	% Recovery
Antimony	2.50	<0.060	2.24	89.6
Arsenic	2.50	2.22	86.9	
Beryllium	0.500	<0.005	0.413	82.6
Cadmium	1.00	0.012	0.813	80.1
Chromium	2.50	0.516	2.57	82.2
Copper	2.50	0.434	2.66	89.0
Lead	2.50	2.22	83.4	
Mercury	0.0050	0.0005	0.00520	94.8
Nickel	5.00	0.158	4.20	80.8
Selenium	2.50	<0.005	2.15	87.6
Silver	0.250	<0.010	0.227	90.8
Thallium	Thallium 2.50 0.024		2.12	83.8
Zinc	2.50	1.91	3.94	81.2



LABORATORY QUALITY CONTROL Metals

Client: Leader Professional Services, Inc.

QC Type: Sample Replicate
Matrix: Water
Sample Number: 10310

Analyte	Result (mg/L)	Duplicate (mg/L)	% Difference
Antimony	<0.060	<0.060	NC
Arsenic	0.048	0.053	9.6
Beryllium	<0.005	<0.005	NC
Cadmium	0.012	0.012	0
Chromium	0.516	0.523	1.3
Copper	0.434	0.431	0.8
Lead	0.135	0.138	2.0
Mercury	0.0005	0.0005	0
Nickel	0.158	0.159	0.8
Selenium	<0.005	<0.005	NC
Silver	<0.010	<0.010	NC
Thallium	0.024	0.025	4.1
Zinc	1.91	1.92	0.4



LABORATORY QUALITY CONTROL Metals

Client: Leader Professional Services, Inc.

QC Type: Sample Replicate
Matrix: Water
Sample Number: 10310

Analyte	Result (mg/L)	Duplicate (mg/L)	% Difference
Antimony	<0.060	<0.060	NC
Arsenic	0.048	0.053	9.6
Beryllium	<0.005	<0.005	NC
Cadmium	0.012	0.012	0
Chromium	0.516	0.523	1.3
Copper	0.434	0.431	0.8
Lead	0.135	0.138	2.0
Mercury	0.0005	0.0005	0
Nickel	0.158	0.159	0.8
Selenium	<0.005	<0.005	NC
Silver	<0.010	<0.010	NC
Thallium	0.024	0.025	4.1
Zinc	1.91	1.92	0.4

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AIR BILL NO.

DATE RESULTS REPORTED BY

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Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued August 18, 2001

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved subcategories and/or analytes are listed below:

Purgeable Halocarbons

1,1-Dichloroethane	SW-846 8260B
1,1-Dichloroethene	SW-846 8260B
1,2-Dichloroethane	SW-846 6260B
1,2-Dichloropropane	SW-846 8260B
2-Chloroethylvinyl ether	SW-846 8260B
Bromodichloromethane	SW-846 8260B
Bromoform	SW-846 8260B
Bromomethane	SW-846 8260B
Carbon tetrachloride	SW-846 8260B
Chloroethane	SW-846 8260B
Chloroform	SW-846 8260B
Chloromethane	SW-846 5260B
da-1,3-Dichloropropene	Method Not Specified
Dibromochloromethane	SW-846 8260B
Dichlorodilluoromethane	SW-846 8260B
Methylene chloride	SW-846 8260B
Tetrachloroethene	SW-846 8260B
trans-1,3-Dichloropropene	Method Not Specified
Trichloroethene	SW-846 8260B
Trichiorofluoromethane	SW-846 82608
Vinyl chioride	SW-846 8260B

Serial No.: 13210

Property of the New York State Department of Health. Valid only at the address shown. Must be conspicuously posted. Valid certificates have a raised seal and may be verified by calling (518)485-5570.

DOH-3817 (3/97)

Page 2 of 2

Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



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MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved analyses are listed below:

	All app	TOVAG Briarytes are listed below.	
Phthalate Esters		Priority Pollutant Phenols	
Diethyl phthalate	SW-846 8270C	2,4-Dichlorophenol	SW-846 B270C
Dimethyl phthalate	SW-846 8270C	2,4-Dimethylphanol	SW-846 8270C
Di-n-butyl phthalate	SW-846 8270C	2,4-Dinitrophenol	SW-846 6270C
Ol-n-octyl phthalate	SW-846 8270C	2-Chlorophenol	SW-846 8270C
Polychlorinated Biphenyis	•	2-Methyl-4,6-dinitrophenol	SW-846 8270C
PCB-1016	SW-846 8082	2-Nitrophenol	SW-846 8270C
PCB-1221	SW-846 8082	4-Chloro-3-methylphenol	SW-846 8270C
PCB-1232	SW-846 8082	4-Nitrophenol	SW-846 8270C
PCB-1242	SW-846 8082	Pentachiorophenoi	SW-846 8270C
PCB-1248	SW-846 8082	Phenol	SW-846 6270C
PCB-1254	SW-846 8082		
PCB-1250	SW-846 8082		
Polynuclear Aromatic Hyd	Irocarbons		
Acenaphthylene	SW-846 8270C		
Benzo(b)fluoranthene	SW-846 8270C		
Benzo(ghi)perylene	SW-846 8270C		

Serial No.: 13209

Dibenzo(a,h)anthracene

Priority Pollutant Phenois 2,4,6-Trichlorophenoi

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SW-846 8270C

DOH-3317 (3/97)

Page 2 of 2

Chrysene

Fluorene

Naphthalene

Phenanthrene



Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued July 14, 2001 Revised August 18, 2001

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MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14508 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

Is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER All approved subcategories and/or analytes are listed below:

Chlorinated Hydrocarbon i	³ esticides	Polynuclear Aromatics				
4,4-DDD	EPA 608	Chrysene	EPA 610			
alpha-BHC	EPA 608		EPA 625			
Dieldrin	EPA 608	Dibenzo(a,h)anthracene	EPA 610			
Endosulfan I	EPA 608		EPA 625			
Endosulfan sulfate	EPA 608	Fluorene	EPA 610			
Endrin aldehyde	EPA 608		EPA 625			
Heptachlor epoxide	EPA 608	Naphthalene	EPA 610			
Lindane	EPA 608		EPA 625			
Toxaphene	EPA 608	Phenanthrene	EPA 625			
Mineral		Priority Pollutant Phenois				
Hardness, Total	Method Not Specified	Phenol	Method Not Specified			
Nitroaromatics and Isopho	prone	Purgeable Aromatics				
Nitrobenzene	Method Not Specified	1,2-Dichlorobenzene	EPA 501			
Polychlorinated Biphenyls	•		EPA 624			
PCB-1016	EPA 608		EPA 625			
PC8-1221	EPA 608	1,4-Dichlorobenzené	EPA 601			
PC8-1221 PC8-1248	EPA 608	1,4-Dichlorobenzene	EPA 601 EPA 624			
PC8-1221 PC8-1248 PC8-1254	EPA 608	1,4-Dichlorobenzené				
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PCB-1248 PCB-1254 Polynuclear Aromatics	EPA 608 EPA 608		EPA 624			
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Serial No.: 13208

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DOH-3317 (3/97)

Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued July 14, 2001 Revised August 18, 2001

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with end pursuant to section 502 Public Health Law of New York State

MR. BRUCE HOOGESTEGER PARADIGM ENVIRONMENTAL SERVICES INC 179 LAKE AVENUE ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER All approved analytes are listed below:

Phthalate Esters		Priority Pollutant Phenois	
Di-n-butyl phthalate	EPA 625	2,4-Dimethylphenol	EPA 625
Di-n-octyl phthalate	EPA 625	2,4-Dinitrophenol	EPA 625
Polychlorinated Biphenyls		2-Chlorophenal	EPA 625
PCB-1232	EPA 606	2-Methyl-4,6-dinitrophenol	EPA 625
PCB-1250	EPA 608	2-Nitrophenol	EPA 625
PCB-1200	EPA 608	4-Chloro-3-methylphenol	EPA 625
Polynuclear Aromatics		4-Nitrophenol	EPA 625
Acenaphthene	EPA 625	Pentachlorophenol	EPA 625
Anthracene	EPA 625		
Benzo(a)anthracene	EPA 610	Purgeable Aromatics	
	EPA 625	1,3-Dichlorobenzene	EPA 601
Benzo(a)pyrene	EPA 610		EPA 624
, ,, ,	EPA 625		EPA 625
Benzo(b)fluoranthene	EPA 625	Benzene	EPA 624
Fluoranthene	EPA 610	Chlorobenzene	EPA 601
	EPA 625		EPA 624
Indeno(1,2,3-cd)pyrene	EPA 610	Ethyl benzene	EPA 624
	EPA 625	Toluene	EPA 624
Pyrene	EPA 610	Total Xylenes	EPA 624
	EPA 625	Purgeable Halocarbons	
		1,1,1-Trichloroethane	EPA 601
Priority Pollutant Phenois	_		EPA 624
2,4,5-Trichlorophenol	SW-846 8270C	1,1,2,2-Tetrachioroethane	EPA 601
2,4,6-Trichlorophenol	EPA 625	11.1919 1019011010010110	EPA 624
2.4-Dichlorophenol	EPA 625		PL U APA

Serial No.: 13207

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DOH-3317 (3/97)



Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued July 14, 2001 Revised August 18, 2001

→→→ LEADER BUFFALO

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. BRUCE HOOGESTEGER PARADIGM ENVIRONMENTAL SERVICES INC 179 LAKE AVENUE ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER All approved analytes are listed below:

Benzidines		Chlorophenoxy Acid Pesticid	9 \$		
Benzidine	EPA 625	2,4,5-TP (Silvex)	SM18 6640B		
Chlorinated Hydrocarbon Pes	ticides EPA 608	2,4-D Dicamba	EPA 1978, p.115 EPA 1978, p.115		
4,4 -DOT Aldrin beta-BHC Chlordane Total delta-BHC Endosulfan II Endrin Heptachlor Methoxychlor	EPA 608	Haloethers 4-Bromophenylphenyl ether 4-Chlorophenylphenyl ether Bis (2-chlorosthoxy)methans Bis(2-chloroethoxy)methans Bis(2-chloroethyl)ether Nitroaromatics and isophorol 2,4-Dinitrotoluene 2.6-Dinitrotoluene	EPA 625 EPA 625 EPA 625 EPA 625 EPA 625 EPA 625		
Chlorinated Hydrocarbons		Isopharone	EPA 625		
1,2,4-Trichlorobenzene 2-Chloronaphthalene Hexachlorobenzene Hexachlorobutadiene Hexachlorocyclopentadiene	EPA 625 EPA 625 EPA 625 EPA 625 EPA 625	Nitrosoamines N-Nitrosodimethylamine N-Nitrosodi-n-propylamine N-Nitrosodiphenylamine	EPA 625 EPA 625 EPA 625		
Hexachloroethane	EPA 625	Phthelate Esters			
Chlorophenoxy Acid Pesticid 2,4,5-T 2,4,5-TP (Silvex)	BS EPA 1978. p.115 .SM18 6640B EPA 1978, p.115	Benzyl butyl phthalate Bis(2-ethylhexyl) phthalate Diethyl phthalate Dimethyl phthalate	EPA 625 EPA 625 EPA 625 EPA 625		

Serial No.: 13207

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DOH-3317 (3/97)



Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued August 18, 2001

CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR, BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab ki No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved subcategories and/or analytes are listed below:

Drinking Water Bacteriology

Coliform, Total Method Not Specified

Drinking Water Metals I

Marganese, Total Method Not Specified Sodium, Total Method Not Specified

Drinking Water Non-Metals

Calcium Hardness Method Not Specified

Serial No.: 13206

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DOH-3317 (3/97)

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179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Drinking Water Metals I

EPA 200.7
EPA 200.9
EPA 200.7
EPA 200.7
EPA 200.9
EPA 200.9
EPA 200.7
EPA 200.9
EPA 200.7

Serial No.: 13205

Drinking Water Non-Metals Hydrogen Ion (pH)

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EPA 150.1

DOH-3317 (3/97)



10/22/01 10:57 ☎716 647 3311 PARADIGM →→→ LEADER BUFFALO ☑ 004/015

NEW YORK STATE DEPARTMENT OF HEALTH WADSWORTH CENTER

Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



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179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

Is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES AIR AND EMISSIONS All approved subcategories and/or analytes are listed below:

Miscellaneous Air

Asbestos

YAMATE, AGARWAL GIBB

Fibers Method Not Specified

NIOSH 7400 A RULES

Serial No.: 13212

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DOH-3317 (3/97)

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MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved subcategories and/or analytes are listed below:

Chlorinated Hydrocarbon Pes	ticides	Polynuclear Aromatic Hydrocarbons					
4.4 -DDE	SW- 846 8081A	Indeno(1,2,3-cd)pyrene	SW-346 8270C				
4,4 -DDT	SW- 846 8081A	Pyrene	SW-846 8270C				
Aldrin	SW- 848 8081A	Purgeable Aromatics					
beta-BHC	SW- 846 8081A	1,2-Dichlorobenzana	SW-846 8021B				
delta-BHC	SW- 646 8081A	Har Old Indi Odd I Carlo	SW-946 8260B				
Endosulfan II	SW- 846 8081A	1,3-Dichlorobenzene	SW-846 8021B				
Endrin	SW- 846 8081A	1,000 to to to the total	SW-846 8260B				
Heptachlor	\$W- 846 8081A	1,4-Dichlorobenzene	SW-846 8021B				
Methoxychlor	SW- 846 6081A	1,4-2.0.0000.12010	SW-846 8260B				
Toxaphene	SW- 846 8081A	Benzene	SW-846 8021B				
Metals II			SW-846 8260B				
Chromjum VI	Method Not Specified	Chlorobenzene	SW-846 80219				
Mercury, Total	SW846 7470A		SW-846 82608				
	SW846 7471A	Ethyl benzene	\$W-846 8021B				
Miscellaneous			SW-846 8260B				
Asbestos in Friable Material	EPA 600/M4/82/020	Toluene	SW-846 8021B				
	Method Not Specified		SW-846 8260B				
	monot not appoint	Total Xylenes	SW-846 8021B				
Polynuclear Aromatic Hydroc	arbons		SW-846 8260 8				
Acenaphthene	SW-846 8270C	Purgeable Halocarbons					
Anthracene	\$W-846 8270C	1,1,1-Trichloroethane	SW-646 8260B				
Benzo(a)anthracene	SW-846 8270C	1,1,2,2-Tetrachloroethane	SW-846 8260B				
Benzo(a)pyrene	SW-845 8270C	1.1.2-Trichloroethane	SW-846 8260B				
Fluoranthene	\$W-845 \$270C	il ilm colanianamiana Arc Arc a					

Serial No.: 13210

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DQH-3317 (3/97)

Antonia C. Novello, M.D., M.P.H., Dr.P.H. Commissioner



Expires 12:01 AM April 01, 2002 Issued August 18, 2001

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MR. BRUCE HOOGESTEGER
PARADIGM ENVIRONMENTAL SERVICES INC
179 LAKE AVENUE
ROCHESTER NY 14608 USA

NY Lab Id No: 10958 EPA Lab Code: NY01287

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards for the category ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE All approved analytes are listed below:

Characteristic Testing		Metals I					
Corrosivity	SW846 1110	Bartum, Total	SW-846 6010B				
Ignitability	SW846 1020	Cadmium, Total	SW-846 6010B				
TCLP	FED REG 1311	Chromium, Total	SW-846 6010B				
Chlorinated Hydrocarbon Pes	ticides	Lead, Total	SW-846 6010B				
4,4-DDD	SW-845 8081A	Nickel, Total	SW-846 6010B				
alpha-BHC	SW- 846 8081A	Silver, Total	SW-846 6010B				
Chlordane Total	SW-846 8081A	Metals II					
Dieldrin	SW- 846 8081A	Antimony, Total	SW-846 6010B				
Endosulfan I	SW- 846 8081A	Arsenic, Total	SW-846 6010B				
Endosulfan sulfale	SW- 846 8081A	Salenium, Total	SW-846 60108				
Endrin aldehyde	SW- 846 8081A	Miscellaneous					
Heptachlor epoxide	SW- 846 8081A	Ashestos in Non-Friable Materi ITEM 198.4 OF MANUA					
Lindane	SW- 846 8081A	Lead In Paint	EPA 4.1.3				
Chlorinated Hydrocarbons		Ceso in Paint	SM16 3120B				
1,2,4-Trichlorobenzene	SW-846 8270C	Nitrogromatics and isophoro	ene				
2-Chloronaphthalene	SW-846 8270C	2.4-Dinitrololuene	SW-846 8270C				
Hexachlorobenzene	SW-846 8270C	2.6-Dinitrolojuene	SW-846 8270C				
Hexachlorobutadiene	SW-846 8270C	Isophorone	CLP 95-2				
Hexachiorocyclopentadiene	SW-846 8270C	Nitrobenzene	SW-846 8270C				
Hexachloroethane	SW-846 8270C	Magazina	4 1, 210 32.17				
Haloethers		Phthalate Esters					
Bis (2-chlorolsopropyl) ether	SW-846 6270C	Benzyl butyl phthalate	SW-846 8270C				
	\$W-846 8270C	Bis(2-ethylhexyl) phthalate	SVY-846 8270C				
Bis(2-chloroethoxy)methane	944-040 071AC						

Serial No.: 13209

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DOH-3917 (3/97)



APPENDIX G: WELL DEVELOPMENT LOGS



LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

Jaeckle, Fleischmann & Mugel, LLP -	RoCo, Ltd.	Project Number:	147.007
Karen C. Carlson November 8, 2001 November 8, 2001		End Development:	11:40 AM
		-	
GW-1		WELL ID.	VOL. (GAL/FT)
		1-inch	0.041
creen Length (Feet):	14.14	2-inch	0.163
meter (inches):	2	3-inch	0.367
Top of Casing (Feet):	1.4	4-inch	0.653
Casing (Gallons):	13.91	5-inch	1.020
		6-inch	1.469
x (No.2)= One Well Volume (gal/ft):	13.91	8-inch	2.611
	Karen C. Carlson November 8, 2001 November 8, 2001	November 8, 2001	November 8, 2001 End Development:

			Accumul	ated Volu	ne Purged	(Gallons)		
Parameters	11:15 AM							
pH (meter/litmus)	9.86/7.5							
Conductivity (umhos)	88							
Turbidity (NTU)	NM							
Temperature °C	20.3							
Eh	NM							
Time	11:40 AM							

3 Well Volumes: 41.74 gallons

Comments:	Well purged dry after bailing approximately 3-gallons of water.
	NM=Not Measured.



LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

Site Name:	Jaeckle, Fleischmann & Mugel, LLP - RoCo, Ltd.	Project Number:	147.007	
Developer:	Karen C. Carlson			
Development Date:	November 8, 2001			
Start Development:	November 8, 2001	End Development:	12:00 PM	
				_

Well Number:	<u>GW-2</u>	
1. Total Casing and So	creen Length (Feet):	13.66
2. Casing Interval Dia	meter (inches):	2
3. Water Level Below	Top of Casing (Feet):	1.28
4. Volume of Water in	Casing (Gallons):	13.45
(No 1) - (No 3)	x (No.2)= One Well Volume (gal/ft):	13 45

WELL ID.	VOL. (GAL/FT)
1-inch	0.041
2-inch	0.163
3-inch	0.367
4-inch	0.653
5-inch	1.020
6-inch	1.469
8-inch	2.611

3 Well Volumes: 40.35 gallons

	Accumulated Volume Purged (Gallons)							
Parameters	11:45 AM							
pH (meter/litmus)	9.02/7.5							
Conductivity (umhos)	202							
Turbidity (NTU)	NM							
Temperature °C	19.5							
Eh	NM							
Time	12:00 PM							

Comments:	Well purged dry after bailing approximately 3.5-gallons of water.
	NM=Not Measured.



3. Water Level Below Top of Casing (Feet):

(No.1) - (No.3) x (No.2)= One Well Volume (gal/ft):

4. Volume of Water in Casing (Gallons):

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

Site Name:	Jaeckle, Fleischmann & Mugel, LLP - RoCo, Ltd	d. Project Number:	147.007
Developer:	Karen C. Carlson		
Development Date:	November 8, 2001		
Start Development:	November 8, 2001	End Development:	11:40 AM
Well Number:	GW-3	WELL ID.	VOL. (GAL/FT)
		1-inch	0.041
1. Total Casing and So	creen Length (Feet):	86 2-inch	0.163
2. Casing Interval Dia	meter (inches):	2 3-inch	0.367

2.83

13.40

13.40

4-inch

5-inch

6-inch

8-inch

0.653

1.020 1.469

2.611

3 Well Volumes:	40.20 gallons

		Accumul	ated Volui	ne Purged	(Gallons)		
Parameters	12:40 PM						
pH (meter/litmus)	9.74/4.0						
Conductivity (umhos)	132						
Turbidity (NTU)	NM						
Temperature °C	18.3						
Eh	NM						
Time	1·10 PM						

Comments:	Well purged dry after bailing approximately 3-gallons of water.
	NM=Not Measured.



LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

Site Name:	Jaeckle, Fleischmann & Mugel, LLP - RoCo, Ltd.	Project Number:	147.007	
Developer:	Karen C. Carlson	-		
Development Date:	November 8, 2001			
Start Development:	November 8, 2001	End Development:	12:10 PM	

Well Number:

GW-4

1. Total Casing and Screen Length (Feet):

2. Casing Interval Diameter (inches):

3. Water Level Below Top of Casing (Feet):

4. Volume of Water in Casing (Gallons):

(No.1) - (No.3) x (No.2)= One Well Volume (gal/ft):

13.05

WELL ID.	VOL. (GAL/FT)
1-inch	0.041
2-inch	0.163
3-inch	0.367
4-inch	0.653
5-inch	1.020
6-inch	1.469
8-inch	2.611

3 Well Volumes: 39.16 gallons

		Accumu	lated Volu	me Purged	(Gallons)		
Parameters	12:15 PM						
pH (meter/litmus)	9.39/4.5						
Conductivity (umhos)	170						
Turbidity (NTU)	NM						
Temperature °C	21.1						
Eh	NM						
Time	12:35 PM						

Comments:	Well purged dry after bailing approximately 3-gallons of water.
	NM=Not Measured.



3. Water Level Below Top of Casing (Feet):

(No.1) - (No.3) x (No.2)= One Well Volume (gal/ft):

4. Volume of Water in Casing (Gallons):

LEADER PROFESSIONAL SERVICES, INC.

2300 WEHRLE DRIVE WILLIAMSVILLE, NEW YORK 14221

Site Name:	te Name: Jaeckle, Fleischmann & Mugel, LLP - RoCo, Ltd.		147.007	
Developer:	Karen C. Carlson	_		
Development Date:	November 8, 2001			
Start Development:	November 8, 2001	End Development: _	11:00 AM	
Well Number:	GW-5	WELL ID.	VOL. (GAL/FT)	
		1-inch	0.041	
1. Total Casing and So	creen Length (Feet): 17.61	2-inch	0.163	
2. Casing Interval Dia	ameter (inches):	3-inch	0.367	

13.51

15.41

15.41

4-inch

5-inch

6-inch

8-inch

0.653

1.020

1.469

2.611

3 Well Volumes: 46.22 gallons

	Accumulated Volume Purged (Gallons)							
Parameters	10:30 AM							
pH (meter/litmus)	10.0/4.5							
Conductivity (umhos)	85							
Turbidity (NTU)	NM							
Temperature °C	24.2			!				
Eh	MN							
Time	11:00 AM							

Comments:	Well purged dry after bailing approximately 2-gallons of water.
	NM=Not Measured.

APPENDIX H: DATA USABILITY REPORT

Data Usability Summary Report

Overall Summary

Review has been completed for the data packages generated by Paradigm Environmental, Inc., pertaining to samples collected at the RoCo Site. Twenty-five (25) soils and five (5) aqueous field samples were collected over the period October 25, 2001 through November 9, 2001. These samples were analyzed for TCL Volatiles. Six (6) of the soil samples and one of the aqueous samples were analyzed for TCL Semi-Volatiles, Priority Pollutant Metals, PCBs, and Pesticides by the following USEPA Methodology:

TCL Volatilies USEPA Method 8260; TCL Semi-Volatiles USEPA Method 8270;

Priority Pollutant Metals USEPA Method SW846-6010 and 7471 for Mercury;

PCBs USEPA Method 8082; and Pesticides USEPA Method 8081.

Equipment rinses, method blanks, trip blanks, and matrix spikes/duplicates were also processed. Samples were collected and received on the following schedule:

Date Collected	Date Received by	Date Received by	Sample Condition
	Paradigm's Buffalo	Paradigm's Rochester	(Temperature)
	Office	Laboratory	
10/25/01	10/26/01	10/29/01	11°C (iced)
11/9/01	11/9/01	11/12/01	8°C (iced)
11/1/01 & 11/2/01	11/5/01	11/6/01	5°C (iced)

Data usability was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for Organic and Inorganic Data Review. The following items were reviewed:

- Data Completeness;
- Custody Documentation;
- Holding Times:
- Sample Blanks Review;
- Field Duplicate Samples; and
- Control Spike/Laboratory Control Samples.

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned usability procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the reported data, and generated in compliance with protocol requirements.

In summary, sample processing was conducted with compliance to protocol requirements and with adherence to quality criteria, and the reported results are usable. One Sample cooler associated with the nine (9) soil samples collected on October 25, 2001 was received one day after sample collection at an elevated temperature (11°C). Therefore losses affecting volatile analyte concentrations may have occurred, and results are therefore qualified as estimated, with a possible low bias. However, it is noted that elevated temperature does not necessarily imply loss of components. Samples are, in fact, warmed to ambient temperature prior to analysis. Therefore, the nine (9) soil samples were allowed to reach ambient temperature prior to analysis and no data correction was necessary. A compliance chart is also included with this report.

Data Completeness

The goal of 95 percent completeness for this project was obtained.

Volatile Analysis by USEPA 8260

Bromodichloromethane and chloroform were found in the 10/25/01 Trip Blank at levels slightly above the Method Detection Limit. Chloroform was also found in the 10/25/01 Field Blank at a level slightly above the Method Detection Limit. These samples were taken from distilled water purchased at a Wal-Mart Store near the site. These analytes are typical compounds found in drinking water. Therefore, it is surmised that the analytes were contaminants in the purchased water. Because the volatile compounds found in the Trip Blank and Field Blank were not found in the actual samples, no corrected action is required. The following information outlines the blank sample results:

Sample	Analyte	Result	Method Detection Limit
Trip Blank	Bromodichloromethane Chloroform	2.01 μg/l 3.08 μg/l	2.00 μg/l 2.00 μg/l
Field Blank	Chloroform	2.94 μg/l	2.00 μg/l

There were no detections found in the subsequent Trip Blanks, Field Blanks, and Method Blanks. The Laboratory Control Samples (LCS) and the Matrix Spikes/Duplicates showed acceptable accuracy and precision.

Reported results appeared to be generated in compliance with required protocols.

Semi-Volatile Analyses by USEPA Method 8270

There were no detection of semi-volatiles associated method blanks; however, the level of bis (2-ethyl hexyl) phthalate found in Sample BH-11 (8'-10') is typical of laboratory contamination. This detected result should be used with caution. Laboratory Control Samples (LCS) and the Matrix Spikes/Duplicates showed acceptable accuracy and precision.

Reported results appeared to be generated in compliance with required protocols.

Pesticide Analyses by USEPA Method 8081

There were no detections of pesticides found in the Method Blanks. Laboratory Control Samples (LCS) and the Matrix Spikes/Duplicates showed acceptable accuracy and precision.

Reported results, which are non-detection, appeared to be generated in compliance with required protocols.

PCB Analyses by USEPA Method 8082

There were no detections for PCBs found in the Method Blanks. Laboratory Control Samples (LCS) and the Matrix Spikes/Duplicates showed acceptable accuracy and precision.

Reported results, which are non-detection, appeared to be generated in compliance with required protocols.

Metals Analyses by USEPA Methods 6000/7000

There were no detections of metals found in the Method Blank. The Matrix Spike and Field Duplicate samples showed acceptable accuracy, precision, and correlation.

Reported results appeared to be generated in compliance with required protocols.

Compliance Chart

RoCo, Ltd. Site

Date	Sample ID	Matrix	TCL	TCL Semi-	PP Metals	Pesticides	PCBs
Received			Volatiles	Volatiles			
10/26/01	BH-1 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-2 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-3 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-4 (0'-2')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-4 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-5 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-6 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-7 (6'-8')	Soil	OK	OK	OK	OK	OK
10/26/01	BH-7 (8'-10')	Soil	OK	OK	OK	OK	OK
10/26/01	Trip Blank	Water	OK	OK	OK	OK	OK
10/26/01	Field Blank	Water	OK	OK	OK	OK	OK
11/6/01	BH-3 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-9 (6'-8')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-10 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-11 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-12 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-13 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-13 (2'-4')	Soil	OK	OK	OK	OK	OK
11/6/01	BH-14 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-1 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-3 (2'-4')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-3 (6'-8')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-3 (10'-12')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-2 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-3 (16'-18')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-4 (6'-8')	Soil	OK	OK	OK	OK	OK
11/6/01	GW-5 (8'-10')	Soil	OK	OK	OK	OK	OK
11/6/01	Trip Blank	Water	OK	OK	OK	OK	OK
11/9/01	GW-1	Water	OK	OK	OK	OK	OK
11/9/01	GW-2	Water	OK	OK	OK	OK	OK
11/9/01	GW-3	Water	OK .	OK	OK	OK	OK
11/9/01	GW-4	Water	OK	OK	OK	OK	OK
11/9/01	GW-5	Water	OK	OK	OK	OK	OK
11/9/01	Trip Blank	Water	OK	OK	OK	OK	OK
11/9/01	Field Blank	Water	OK	OK	OK	OK	OK