

**SUPPLEMENTAL PHASE II  
ENVIRONMENTAL STUDIES**

**14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK**

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## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Background.....	1
<b>2.0</b>	<b>FIELDWORK AND FINDINGS.....</b>	<b>2</b>
2.1	Site Reconnaissance - Grammatico Parcels .....	2
2.2	Electromagnetic Geophysical Survey.....	3
2.3	Test Boring Evaluation .....	4
2.4	Groundwater Evaluation .....	5
2.5	Analytical Laboratory Testing.....	8
2.6	Removal and Disposal of Buried Tanks, In-Ground Lift and Soils.....	11
2.7	Potentiometric Maps .....	13
<b>3.0</b>	<b>CONCLUSIONS AND RECOMMENDATIONS.....</b>	<b>15</b>
<b>4.0</b>	<b>ABBREVIATIONS.....</b>	<b>20</b>

### APPENDICES

#### **Appendix A:** Figures and Maps

Figure 1 - Project Locus Map

Figure 2A - Site Plan

Figure 3 - Test Pit Location Map - EM61 Anomalies

Figure 4A - Test Boring and Well Locations with Peak PID Readings

Figure 5A - Groundwater Potentiometric Contour Map for June 23, 2000

Figure 5B - Groundwater Potentiometric Contour Map for August 31, 2000

Figure 5C - Groundwater Potentiometric Contour Map for September 14, 2000

Figure 6A - Area On-Site Currently Appearing To Require Remediation or  
Environmental Engineering Controls

Figure 7 - Sanborn Map updated through 1965

#### **Appendix B:** Tables

Table 1 - Soil Sample Log

Table 2 - Groundwater Sample Log

Table 3 - Total Petroleum Hydrocarbons - Soil Samples

Table 4A - Volatile Organic Compounds - Soil Samples

Table 4B - Volatile Organic Compounds - Soil Samples

Table 4C - Volatile Organic Compounds - Soil Samples

Table 5 - Semi-Volatile Organic Compounds - Soil Samples

Table 6 - Polychlorinated Biphenyls - Soil Samples

Table 7 - Total RCRA Metals - Soil Samples

Table 8 - Total Petroleum Hydrocarbons - 5/15 & 16/00 Groundwater Samples

Table 9 - Volatile Organic Compounds - 5/15 & 16/00 Groundwater Samples

Table 10A - Groundwater Elevation Data for 6/23/00

## **TABLE OF CONTENTS (Continued)**

### **Appendix B: Tables (Cont.)**

Table 10B -	Groundwater Elevation Data for 8/31/00
Table 10C -	Groundwater Elevation Data for 9/14/00
Table 11 -	Total Petroleum Hydrocarbons - 7/26/00 Groundwater Samples
Table 12 -	Volatile Organic Compounds - 7/26/00 Groundwater Samples
Table 13 -	Total Petroleum Hydrocarbons - 8/10/00 Soil Samples
Table 14 -	Volatile Organic Compounds - 8/10/00 Soil Samples
Table 15 -	Volatile Organic Compounds and Total Petroleum Hydrocarbons - 8/21/00 Groundwater Samples

### **Appendix C: Geophysical Survey Results Report**

### **Appendix D: Test Pit Logs, Test Boring Logs and Monitoring Well Logs**

### **Appendix E: Well Development Logs and Well Sampling Logs**

### **Appendix F: Analytical Laboratory Data**

### **Appendix G: Photographs**

### **Appendix H: Closure Reports for Underground Storage Tanks and Hydraulic Lift**



## 1.0 INTRODUCTION

This report prepared by Day Environmental, Inc. (DAY) summarizes the findings of Supplemental Phase II Environmental Studies conducted at 14-60 Charlotte Street, City of Rochester, County of Monroe, New York (Site). The general location of the Site is shown on Figure 1 (Project Locus Map) included in Appendix A. As shown on Figure 2A (Site Plan) included in Appendix A, the Site consists of seven contiguous parcels designated as the Grammatico parcels and City parcels. Selected photographs of the Site /that were taken between the years of 1997 and 2000 are included in Appendix G. Photographs of removed buried tanks, an in-ground hydraulic lift and the resulting excavations are included in Appendix H. The photographs show the locations of existing or former site features.

### 1.1 Background

DAY completed a Phase I Environmental Site Assessment (Phase I ESA) report (DAY file #1274E-97) dated May 15, 1997 for the Site. The Phase I ESA report identified the following environmental concerns:

1. Suspected and/or former underground storage tanks (USTs)
2. Historical uses of the Site as an auto repair, lumber company, industrial workshop, service station, battery service, used car lot, etc. [Note: A copy of a Sanborn map included as Figure 7 in Appendix A updated through 1965 depicts how the Site and some adjoining parcels were developed at that time.]
3. The findings of a previous test pit investigation
4. Floor drains
5. Basements on the 14-16 Charlotte Street parcel contained standing apparent water that was observed stained with pigment, dye, or some other type of material
6. Suspect asbestos-containing material (SACM)
7. Floor staining
8. In-ground hydraulic floor lifts

On behalf of the City of Rochester, DAY completed a Phase II Study report dated September 30, 1997 on the City parcel currently addressed as 48-60 Charlotte Street. A Supplemental Phase II Study report dated December 15, 1997 was also completed on this City parcel and in the adjoining right-of-ways of Haags Alley and Charlotte Street. The results of these studies indicated that hydrocarbon and chlorinated volatile organic compound (VOC) contamination apparently associated with petroleum products, paint thinner and dry cleaning solvents (e.g., Stoddard Solvent, Tetrachloroethene) were in the right-of-ways of Haags Alley and Charlotte Street and on the City parcel addressed as 48-60 Charlotte Street. The results of these 1997 intrusive studies also indicated the presence of fill material that contained concentrations of heavy metals (e.g., cadmium, lead, etc.) above typical naturally occurring concentration ranges of metals in soil.

In 1998 or 1999, the commercial building located on the City parcel addressed as 14-16 Charlotte Street was demolished. One apparent fill port to an UST and also the sub-grade portion of an in-ground hydraulic lift were noted during the demolition work. These sub-grade structures were marked and left in-place for future remediation (refer to Section 2.6 of this report).

## 2.0 FIELDWORK AND FINDINGS

To date, various tasks were performed on the Site including: a site reconnaissance of the Grammatico parcels, an electromagnetic geophysical survey, a test boring evaluation, a groundwater evaluation, and analytical laboratory testing. These tasks and the associated findings are discussed below.

### 2.1 Site Reconnaissance - Grammatico Parcels

A site visit on the Grammatico parcels addressed as 26-42 Charlotte Street was performed on March 7, 2000. As part of this site visit, the interior of the one-story building on the 42 Charlotte Street parcel was observed to assist in evaluating whether additional environmental concerns (i.e., in addition to those identified in the May 15, 1997 Phase I ESA report) exist in relation to this building.

The following observations were made during the site reconnaissance:

- Two areas of piping were observed to protrude through the paved surface on the southern portion of the 36 Charlotte Street parcel. The former function of the piping could not be determined during the site reconnaissance.
- An inactive in-ground hydraulic lift and suspect hydraulic oil reservoir tank were observed inside near the center of the building located on the 42 Charlotte Street building (see photograph in Appendix G).
- A sub-grade cylindrical pit (apparent former meter pit) with disconnected piping and a metal cover was observed inside near the northeast corner this building.
- Rust-colored ringed stains, indicative of apparent former drum storage, were observed on the concrete floor along a portion of the southern wall inside the building. Evidence of material spillage/leakage was not observed on the concrete floor in this area.
- A two to three inch diameter pipe with a threaded brass cap was observed in the concrete floor inside the building on the 42 Charlotte Street parcel in proximity to the overhead garage door along the north wall of the building. The function of this capped pipe could not be determined during the site reconnaissance; however, it appeared to be associated with a cleanout for sewer piping.
- Some piping was observed flush with the concrete floor inside the 42 Charlotte Street building along the south wall. This piping appeared to be associated with a former lavatory.
- A patch of newer concrete was observed to cover approximately one-third of the floor area inside the building on the 42 Charlotte Street parcel (see photograph in Appendix G). This concrete patch obscured a complete view of the pre-existing floor surface in this building. Subsequently, DAY retained Arrow Contracting to remove the concrete patch using a Bobcat equipped with a hoe-ram to reveal the pre-existing floor surface in this building. The concrete rubble was placed on the concrete-paved surface west of this building.

Subsequent to this concrete patch removal, the following observation was made:

- An apparent floor drain with a catch basin/sump that had been covered over by the concrete patch was observed inside near the northeast corner this building (see photograph in Appendix G). An approximate one-inch layer of apparent oil-like material was observed floating on approximately a two-inch layer of apparent water in this catch basin/sump. Approximately 18 inches of thick "oily" sediments were observed beneath the layer of apparent water. The catch basin/sump appeared to have a hard bottom; however, the integrity of this structure and the associated discharge piping, and the discharge location, could not be determined as part of this work.

Based on the site reconnaissance, the in-ground lift, apparent floor drain and utility pit located inside the 42 Charlotte Street building are considered areas of environmental concern.

## **2.2 Electromagnetic Geophysical Survey**

On March 14 & March 15, 2000, an electromagnetic geophysical survey on a 3-foot grid was performed in exterior locations of the Site to assist in evaluating the possible locations of USTs or other buried metallic structures. This survey was completed by Geomatrix Consultants, Inc. (Geomatrix) using an EM-61 electromagnetic induction meter.

A copy of Geomatrix' Geophysical Survey Results report dated March 17, 2000 is included in Appendix C. As shown on Figure 1 in the Geomatrix report, Geomatrix identified nineteen magnetic anomalies lettered A through R at the Site that could be USTs or other buried metal.

In order to evaluate whether USTs were present, test pits were subsequently excavated in these magnetic anomaly areas, with the exception of anomalies A, E, F, H and S, on March 30, 2000. [Note: Refer to the discussion at the end of this section for the rationale used not to excavate test pits at magnetic anomalies A, E, F, H and S.] Arrow Contracting provided the necessary backhoe and operator. A DAY representative documented and monitored the test pit excavation work for the presence of USTs, associated piping, or field evidence of contamination. DAY's monitoring included visual observations of excavated and in-situ materials as well as screening materials with a photoionization detector (PID) for evidence of petroleum or VOC contamination. The PID is a real-time field instrument that measures total VOCs.

Fourteen test pits (designated as TP-B, TP-C, TP-D, TP-G, TP-I, TP-J, TP-K, TP-L, TP-M, TP-N, TP-O, TP-P, TP-Q and TP-R) were excavated in the areas of magnetic anomalies B, C, D, G, I, J, K, L, M, N, O, P, Q, and R, respectively (refer to Figure 3 included in Appendix A). These test pits were excavated to depths ranging between approximately 4.5 feet and 6.5 feet below the ground surface. Copies of test pit logs are included in Appendix D. Within the exception of test pit TP-B, fill material consisting of soil, asphalt, ash, brick and miscellaneous metallic objects (e.g., metal flange, piping, cooking pan, hot water tank, metal plate, angle iron) was encountered in the remaining test pits. These metallic objects appear responsible for the magnetic anomalies detected in these areas. The peak PID readings above ambient air background concentrations measured during the excavation of these test pits ranged between 0.0 parts per million (ppm) and 0.6 ppm. In test pit TP-B, an apparent 1,000-gallon UST was encountered under approximately one foot of fill. This UST and a limited amount of soil were later removed (refer to Section 2.6 of this report). A peak PID reading of 795 ppm was detected on the ambient air inside the UST that was encountered in test pit TP-B.

Test pits were not excavated in proximity to anomalies A, E and F, since it was known that tanks were located at anomaly A and that an in-ground portion of a hydraulic lift was located at anomalies E and F. A test pit was not excavated at anomaly H because there was no reason to suspect a buried tank on this residential parcel since a heating oil tank was observed in the basement of the residential structure. A test pit was not excavated in the area of anomaly S since it was located inside the existing building on the 42 Charlotte Street parcel. It appears likely that the magnetic anomaly measured inside this building was attributable to the in-ground lift, floor drain with catch basin/sump, the former meter pit, and possibly reinforced concrete floor; however, it can not be definitively stated at this time that a UST does not exist beneath the building [DAY understands this building will be demolished by the City of Rochester, and it should be determined at that time whether a UST is present beneath the floor of the building. If a UST is encountered, it should be permanently closed in accordance with applicable regulations].

### **2.3 Test Boring Evaluation**

On April 18 and April 19, 2000, thirty (30) test borings (i.e., TB-1 through TB-30) were advanced on the Site using vehicle-mounted Geoprobe System soil sampling equipment. DAY retained Zebra Environmental Corp. to advance these test borings. Three of these test borings (TB-15, TB-16 and TB-17) were advanced inside the existing building on the 42 Charlotte Street parcel. In addition, three (3) test borings (i.e., B-1 through B-3) were advanced within the right-of-way of Haags Alley using vehicle-mounted Geoprobe System soil sampling equipment and/or conventional rotary drilling equipment on August 10, 2000. DAY retained Nothnagle Drilling to advance these test borings. Figure 4A (Appendix A) illustrates the locations of these test borings. The test borings described above were sampled continuously and advanced through overburden to depths ranging between approximately 7.5 feet and 12.7 feet below the ground surface, which are the depths where equipment refusal was encountered (i.e., inferred top of bedrock).

Selected samples of fill/soil collected from the test borings were evaluated in the field for evidence of contamination (i.e., staining, odors, type of fill material, elevated PID readings, etc.). Other portions of the samples were retained for possible testing at an analytical laboratory. In addition, selected surface soil samples were retained for possible metals testing at an analytical laboratory.

#### Decontamination Procedures and Study-Derived Wastes

Drilling and sampling equipment used during the test boring evaluation were decontaminated prior to being used at each location by steam cleaning or implementing the following procedures: 1) rough wash in tap water; 2) wash in mixture of tap water andalconox soap; 3) double rinse with distilled or deionized water; and 4) air dry and/or dry with clean paper towel. Decontamination was conducted as a quality control measure to avoid cross-contamination between sample intervals at and between test locations.

Drill cuttings, decontamination water, etc. that were generated during the test boring evaluation work were placed in New York State Department of Transportation (NYSDOT)-approved 55-gallon drums that were labeled and are staged on-site until a proper disposal method can be determined.

General field observations, PID readings, etc. that were noted on soil samples are summarized as follows:

- Fill material generally consisting of sand, gravel and silt with lesser amounts of brick, ash, wood, glass, asphalt, crushed stone, coal, rock fragments, cinders, and organics, was encountered beginning at the ground surface in each of the test borings. The fill material in these 33 test borings extended from the ground surface to depths ranging between approximately 2.0 feet and 10.0 feet below ground surface. Based on the observation of soil samples from the 33 test borings, the average thickness of the fill material on the Site is approximately 5.0 feet.
- Soils beneath the fill material generally consisted of silty sand or silty sand and gravel, with lesser amounts of clay. The thickness of soil observed ranged between approximately 0.0 feet (TB-6, TB-11, TB-13) and 10.0 feet (TB-14). Near the apparent top of bedrock (between approximately 7.5 feet and 12.7 feet below the ground surface), rock fragments were commonly encountered in soil samples.
- The apparent groundwater table was encountered (i.e., as evidenced by wet soil samples and/or standing water in the test boring) in 14 of the 33 test borings at an average depth of approximately 9.2 feet below ground surface.
- Field evidence of suspect contaminated soil (i.e., based upon PID readings greater than 5.0 ppm and observations including odors, staining, etc.) was detected on soil samples from 22 of the 33 test borings (i.e., TB-3 through TB-10, TB-14, TB-16 through TB-20, TB-23 through TB-26, TB-29, and B-1 through B-3). Peak PID readings at these locations ranged between ranging between 9.1 ppm (TB-10) and 1,769 ppm (TB-4). The suspect contamination was typically observed in the soils immediately above the groundwater table or in soils within the groundwater. However, suspect contaminated soil was also encountered in shallower unsaturated soil samples from test borings TB-4 (6.0'), TB-5 (1.5'), TB-8 (5.5'), TB-14 (0.5'), TB-16 (0.5'), TB-20 (0.5'), TB-25 (2.5'), B-1 (5.0'), and B-3 (0.5'). Apparent free light non-aqueous phase liquid (LNAPL) was observed in a saturated soil sample retrieved from test boring B-2 from a depth interval of 8 to 10.4 feet below the ground surface. Test Boring B-2 is located in the right-of-way of Haags Alley north of the 32-34 Charlotte Street parcel. A review of a portion of a Sanborn Map updated through 1965 (included as Figure 7 in Appendix A) shows that building located immediately north of test boring B-2 was used for auto painting and storage.
- The test boring logs included in Appendix D summarize subsurface conditions, PID measurements, etc. encountered in each test boring.

## 2.4 Groundwater Evaluation

As part of the studies conducted, a total of eleven groundwater monitoring wells were installed on the Site and one well was installed in the right-of-way of Haags Alley. These wells were later developed, and groundwater samples were collected for analytical laboratory testing. Further information is provided herein.

## Overburden Monitoring Wells

Five of the Geoprobe System test borings (i.e., TB-2, TB-10, TB-14, TB-23 and TB-24) were converted into overburden groundwater monitoring wells (i.e., MW-1, MW-2 and MW-3, MW-4 and MW-5, respectively). Each well consists of a pre-cleaned approximate five-foot long, 1.25-inch inner-diameter (ID), threaded, flush-jointed, No. 10 slot, Schedule 40 polyvinyl chloride (PVC) screen with attached riser casing of the same material. The well screens were installed to intercept the top of the water table observed in the overburden during advancement of the associated test borings. The well installations included a washed and graded sand pack surrounding the screen and about 1.5 to 6 feet of sand above the top of the screen. A bentonite seal was placed above the sand pack and the remaining annulus was filled with cement/bentonite grout. A steel protective curb box with locking cap was placed over the wells and cemented in place.

## Overburden/Bedrock Interface Wells

Six overburden/bedrock interface groundwater monitoring wells (i.e., MW-6, MW-7, MW-8, MW-9, MW-10, MW-11) were installed on the Site, and one overburden/bedrock interface groundwater monitoring well (i.e., MW-12) was installed in the right-of-way of Haags Alley (refer to Figure 4A included in Appendix A). Earth Dimensions, Inc. advanced and installed monitoring wells MW-6 through MW-11 using conventional rotary drilling techniques. Nothnagle Drilling advanced and installed monitoring well MW-12 using conventional rotary drilling techniques. A DAY representative observed and documented the work that was completed.

A truck-mounted drill-rig was used to advance 4 1/4-inch hollow stem augers at each well location. Continuous split spoon soil samples were collected ahead of the augers in general conformance with ASTM 1586 at well locations MW-6 through MW-11. Geoprobe soil samples were collected ahead of the augers at well location MW-12. Each boring was advanced through the overburden to depths between approximately 8.4 feet and 12.7 feet below the ground surface. The recovered samples were visually examined by a DAY representative for evidence of suspect contamination (e.g., staining, unusual odors, etc.). Portions of the recovered samples were collected for possible analytical laboratory testing. Other portions of selected samples were placed in containers and the ambient headspace air was screened with a PID in order to evaluate the presence of VOCs in the samples.

Subsequent to encountering auger refusal (indicating top of bedrock), bedrock at the well locations was cored and/or reamed as indicated on the well logs included in Appendix D. Following the completion of the boring at the seven well locations, a monitoring well was constructed within each boring. Each well consists of a pre-cleaned approximate 8-foot to 9-foot long, two-inch I.D., threaded, flush-jointed, No. 10 slot, schedule 40 PVC screen with attached riser casing of the same material. The well screens were installed to intercept the top of the water table, and the screening section was placed to straddle the overburden/bedrock interface. The well installations include washed and graded sand packs surrounding the screens and extending about one foot above them. The annulus beneath each well contains natural sediments and rock fragments that inadvertently collapsed into the bottom of the borings prior to installing the PVC screens and risers. Bentonite seals were placed above the sand packs and the remaining annuluses were filled with cement/bentonite grout. The top of each PVC riser was equipped with a locking cap, and specially-bolted steel protective curb boxes were placed over the wells and sealed in place with concrete.

A DAY representative recorded pertinent information for the overburden/bedrock interface wells in a field log whereupon portions of the information were subsequently transcribed onto well logs, which are included in Appendix D. General field observations, PID readings, etc. that were noted on soil samples from these overburden/interface wells are summarized as follows:

- Fill material generally consisting of sand, gravel and silt with lesser amounts of brick, clay, coal, cinders, and sometimes a trace of ash was encountered beginning at the ground surface at each location. The fill material in these wells extended from the ground surface to depths between approximately 2.0 feet and 6.0 feet, with an average depth of approximately 4.1 feet.
- Soils beneath the fill material generally consisted of sand and gravel or silt with lesser amounts of clay. The thickness of soil observed ranged between approximately 2.5 feet (MW-9) and 6.2 feet (MW-7). Rock fragments were encountered in the soil sample collected prior to auger refusal in wells MW-8, MW-10 and MW-11. The bedrock underlying the overburden soils at depths ranging between 7.7 feet (MW-12) and 10.2 feet (MW-6 and MW-7) consisted of gray Lockport Dolomite.
- Prior to drilling through bedrock, evidence that the groundwater table had been intercepted (i.e., wet soil samples and/or standing water in the test boring) was encountered in the test borings for MW-8, MW-9, MW-10 and MW-12 at depths between approximately 6.8 feet and 8.0 feet below the ground surface.
- Field evidence of suspect contaminated soil (i.e., PID readings greater than 5.0 ppm, odors, staining, etc.) was observed on soil samples from the borings for wells MW-6, MW-7, MW-8, MW-10, and MW-12. The contamination was typically first observed in the soils at depths ranging between 8.0 feet (MW-6), 6.0 feet (MW-7), 1.0 feet (MW-8), 8.0 feet (MW-10), and 5.0 feet (MW-12). The peak PID readings measured on soil samples from the wells ranged between 0.0 ppm (i.e., MW-9 and MW-11) and 563 ppm (MW-10). Field evidence of suspect contaminated soil was not observed on soil samples from the borings for wells MW-9 and MW-11.

### Monitoring Well Development

Monitoring wells MW-1 through MW-5 were developed by DAY on April 24 through April 26, 2000. Overburden/bedrock interface wells MW-6 through MW-11 were developed by DAY on May 10, 2000. Overburden/bedrock interface well MW-12 was developed by DAY on August 17, 2000. These wells were developed to remove some of the drill water utilized during advancement of the test borings, remove drill cuttings that were generated, and to the extent possible to ultimately restore natural hydraulic properties at the well locations. Well development was performed utilizing disposable bailers with dedicated cord and/or a centrifugal pump with dedicated tubing. No fluids were added to the wells during development, and well development equipment was decontaminated prior to development of the well. Water quality readings (i.e., pH, conductance, and temperature) were collected before, during and after development. Copies of well development logs for these wells are included in Appendix E.

## Monitoring Well Sampling

Wells were sampled as part of this environmental study. Copies of well sampling logs are included in Appendix E, and the well sampling conducted is further described below:

- On May 15 & 16, 2000, wells MW-1 through MW-11 were purged by removing more than three well casing volumes of groundwater, and a groundwater sample was collected from each well (designated as samples 2089-W1-01 through 2089-W11-01) for subsequent laboratory analysis.
- On July 25 and 26, 2000, wells MW-2, MW-3, MW-8 and MW-9 located on Grammatico parcels were purged by removing more than three well casing volumes of groundwater, and a groundwater sample was collected from each well (designated as samples MW-2-02, MW-3-02, MW-8-02, and MW-9-02) for subsequent laboratory analysis.
- On August 21, 2000, well MW-12 located in the right-of-way of Haags Alley was purged by removing more than three well casing volumes of groundwater, and a groundwater sample was collected from this well (designated as sample MW-12-8-00) for subsequent laboratory analysis.

## Decontamination Procedures and Study-Derived Wastes

Drilling, development and sampling equipment used during the groundwater evaluation were decontaminated prior to being used at each location by steam cleaning or implementing the following procedures: 1) rough wash in tap water; 2) wash in mixture of tap water andalconox soap; 3) double rinse with distilled or deionized water; and 4) air dry and/or dry with clean paper towel.

Drill cuttings, decontamination water, well development and sampling purge water, etc. that were generated during the groundwater evaluation work were placed in NYSDOT-approved 55-gallon drums that were labeled and are staged on-site until a proper disposal method can be determined.

## **2.5 Analytical Laboratory Testing**

Analytical laboratory testing services on this project were provided by Paradigm Environmental Services, Inc. (Paradigm) and Columbia Analytical Services, Inc. (CAS). Paradigm and CAS are New York State Department of Health (NYSDOH) approved laboratories. The following laboratory program was implemented on samples that were collected from test boring and monitoring well locations on the Site:

### Soil Samples

Twenty-five (25) soil samples were submitted for analytical laboratory testing. The specific locations, depth intervals, and test parameters for soil samples are illustrated on Table 1 included in Appendix B, and the samples are further summarized as follows:

- Seventeen (17) samples were tested for United States Environmental Protection Agency (USEPA) target compound list (TCL) and New York State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series

(STARS)-list VOCs using USEPA Method 8260. Three of these samples were re-analyzed (samples designated as 2089-08R, 2089R-09, and 2089R-14) utilizing a lower or no dilution factor, since constituents were not detected in the original samples when analyzed at a higher dilution factor.

- Nine (9) samples were tested for NYSDEC STARS-list base/neutral semi-volatile organic compounds (SVOCs) using USEPA Method 8270. One of these samples was re-analyzed (sample designated as 2089-06R) utilizing a lower or no dilution factor, since constituents were not detected in the original samples when analyzed at a higher dilution factor.
- Sixteen (16) samples were tested for total petroleum hydrocarbons (TPH) using NYSDOH Method 310.13.
- Four (4) samples were tested for total RCRA metals. These samples were collected near the ground surface and these samples consisted of fill material that was suspected to contain heavy metals (i.e., ash, etc.).
- Two (2) samples were tested for Polychlorinated Biphenyls (PCBs) using USEPA Method 8080.

#### Groundwater Samples

Eleven groundwater samples were collected on May 15 and 16, 2000 (designated as 2089-W1-01 through 2089-W11-01). Four groundwater samples were collected on July 26, 2000 (designated as MW-2-02, MW-3-02, MW-8-02 and MW-9-02). One groundwater sample was collected on August 21, 2000 (designated as MW-12-8-00). The test parameters for these groundwater samples included USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260 and TPH using NYSDOH Method 310.13 as illustrated on Table 2 included in Appendix B.

#### Quality Assurance/Quality Control (QA/QC)

In order to provide control over the collection, analysis, review, and interpretation of analytical data for samples collected from the Grammatico parcels, the following QA/QC samples were included as part of this environmental study:

- Trip blanks that accompanied shipments containing VOC samples from Grammatico parcels were analyzed for VOCs using USEPA Method 8260.
- One matrix spike/matrix spike duplicate (MS/MSD) was analyzed for each 20 samples or less of each matrix (i.e., soil and groundwater) that was collected from Grammatico parcels.
- One rinsate sample (designated sample FB) was analyzed for VOCs, SVOCs, PCBs, TPH and total RCRA metals during sampling at Grammatico parcels.

## Analytical Laboratory Test Results

Copies of analytical laboratory test results for the soil and groundwater samples are included in Appendix F. The analytical laboratory reports also include the results of the QA/QC that was performed. Tables summarizing the analytical laboratory data are included in Appendix B and the test results for the samples are further discussed as follows:

### Soil Samples

- As shown on Table 3 and Table 13 included in Appendix B, various weights (i.e., light, medium, and heavy) of TPH were detected in soil samples collected from the Site and Haags Alley. The analytical laboratory identified the detected TPH in one or more of the samples as kerosene, diesel, lube oil and mineral spirits [Note: The laboratory reported that TPH identified as "mineral spirits" could be "stoddard solvent" (i.e., these chemicals are used for paint thinning, and as a dry cleaning solvent) since they are comprised of similar weight constituents that appear similar on the analytical laboratory chromatograms]. The total concentrations of TPH detected in the soil samples ranged between 17.5 mg/Kg or ppm (at TB-29) and 23,800 mg/Kg or ppm (at MW-7). The NYSDEC's Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046) dated January 24, 1994 indicates that the soil cleanup objective for total VOCs is 10 ppm and for total SVOCs is 500 ppm. TPH is comprised primarily of VOCs and/or SVOCs. Also, although regulatory agencies in New York State have no specific cleanup criteria for TPH in soil, the NYSDEC and Monroe County Department of Health (MCDOH) in the Rochester, New York area have used a TPH cleanup value of 500 ppm for similar redevelopment projects. Based on these considerations, the TPH test results for at least eight of the soil samples indicate that regulatory agencies will likely require the remediation of TPH at the Site and in the right-of-way of Haags Alley.
- As shown on Tables 4A through 4C and Table 14 included in Appendix B, VOCs were detected above reported laboratory detection limits in 9 of the 16 soil samples. VOCs detected (e.g., ethylbenzene, toluene, xylenes, n-propylbenzene, trimethylbenzenes, etc.) are typically associated with petroleum or hydrocarbon-based products. As identified on these tables, the VOCs in 6 soil samples (four from the Site and two in the right-of-way of Haags Alley) were detected at concentrations above toxicity characteristic leaching procedure (TCLP) alternative soil guidance values (i.e., cleanup values) as referenced in the August 1992 NYSDEC Spill Technology and Remediation Series, STARS Memo #1, Petroleum-Contaminated Soil Guidance Policy (STARS Memo #1).
- As shown on Table 5 included in Appendix B, SVOCs were detected above reported laboratory detection limits in 3 of the 9 soil samples. SVOCs detected (e.g., naphthalene, phenanthrene, etc.) are typically associated with petroleum or hydrocarbon-based products. The SVOCs in 2 soil samples from the Site were detected at concentrations above TCLP alternative soil guidance values (i.e., cleanup values) as referenced in the August 1992 NYSDEC STARS Memo #1 (e.g., phenanthrene detected in sample 2089-07 at a concentration of 1,700 ppb, which exceeds its TCLP alternative soil guidance value of 1,000 ppb).

- As shown on Table 6 included in Appendix B, PCBs were not detected above analytical laboratory detection limits in the two samples that were tested.
- As shown on Table 7 included in Appendix B, the RCRA metals arsenic, barium, chromium, lead, mercury and selenium were detected in one or more of the four soil samples that were tested. The concentrations of mercury detected in each sample (i.e., 0.104 to 0.580 ppm or mg/kg) exceeded the January 24, 1994 NYSDEC TAGM 4046 recommended soil cleanup objective of 0.1 ppm for mercury. The detected concentration of mercury in two of the samples also exceeded the typical background range of mercury (i.e., 0.001 to 0.2 ppm) as referenced in NYSDEC TAGM 4046. The concentrations of the other metals detected were within the published background range presented in TAGM 4046.

### Groundwater Samples

- As shown on Table 8, Table 11 and Table 15, light weight and medium weight TPH identified as mineral spirits (or stoddard solvent), gasoline, diesel, and kerosene was detected in 9 of the 16 groundwater samples (i.e., groundwater samples from wells MW-2, MW-3, MW-6, MW-7, MW-8, MW-11 and MW-12) at estimated or actual concentrations ranging between 10 ug/kg or parts per billion (ppb) (MW-8) and 316,000 ug/kg or ppb (MW-7). There are no NYSDEC cleanup criteria for TPH in groundwater.
- As shown on Table 9, Table 12 and Table 15, TCL and STARS-list VOCs were detected above analytical laboratory detection limits in 7 of the 16 groundwater samples (i.e., groundwater samples from wells MW-1, MW-2, MW-3, MW-6, MW-7, MW-8 and MW-12). The VOCs detected in the groundwater samples were typically associated with petroleum and/or hydrocarbon-based products (i.e., VOCs such as benzene, ethylbenzene, trimethylbenzenes). Some chlorinated VOCs (e.g., tetrachloroethene, vinyl chloride) were also detected in the groundwater samples from MW-1, MW-8, and MW-12. Total VOC concentrations detected in the groundwater samples ranged between 11.4 ug/kg or ppb (MW-3) and 15,920 ug/kg or ppb (MW-7). The concentrations of one or more VOCs detected in at least one groundwater sample from wells MW-1, MW-2, MW-3, MW-6, MW-7, MW-8, and MW-12 exceeded their respective groundwater standards or guidance values as referenced in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1) dated June 1998. [Note: free product was encountered only in well MW-7 on August 31, 2000 and September 14, 2000 (refer to Section 2.7)].

## **2.6 Removal and Disposal of Buried Tanks, In-Ground Lift and Soils**

Three USTs designated as tanks 001, 002 and 003 were located on the 14-16 Charlotte Street parcel (refer to Figure 2A included in Appendix A). These tanks are further described as follows:

- Two 550-gallon gasoline USTs located along the west-central portion of this parcel.

- One 1,000-gallon crushed UST that contained residual amounts of apparent mineral spirits or paint thinner located on the northern portion of this parcel.

On June 6, 2000, Royal Environmental, Inc. (Royal) removed these UST systems. A DAY representative observed and documented the removal process of the USTs. This included observation of the UST and piping for holes or other structural deficiencies when removed, and observation/monitoring of the excavation for soil and/or groundwater contamination. The site assessment was generally consistent with the recommendations described in the NYSDEC Spill Prevention and Operations Technology Series (SPOTS No. 14). The following activities were completed during the UST removal work.

- Visually observed excavated and in-situ soil, bedrock (if encountered), and groundwater (if encountered) for evidence of suspect contamination.
- Screened soil for total VOCs in the field with a PID, and documented results.
- Photographed the USTs, piping, and the excavated pits for documentation purposes.
- Documented the cleaning and disposal of the USTs, piping, UST contents, and the UST washwaters.
- Collected soil samples from the tank excavations for analytical laboratory analysis.

Royal also removed approximately 40 cubic yards of petroleum-impacted soil/fill from the tank excavations and staged the material on-site on minimum 10-mil polyethylene plastic sheeting. The staged material was also covered with minimum 10-mil polyethylene plastic sheeting and secured in-place. This removal is considered to represent a "source removal" and does not include removing residual contamination that may have migrated away from the location of the USTs. Royal backfilled the excavations, and on November 2, 2000, the staged soils and drummed tank contents/washwaters were transported off-site and disposed of at Mill Seat Landfill. Disposal documentation will be provided as a supplement to this report when this information is available.

Upon completion of the UST closures, pertinent information for each tank was summarized on the underground storage tank closure reports included in Appendix H. This documentation includes field observations, field measurements, analytical laboratory test results for confirmatory soil samples, Table A summarizing the test results for confirmatory soil samples including a comparison to NYSDEC STARS guidance values, and copies of photographs taken at the time of removal. As shown in Table A, VOC contamination exceeding TCLP alternative guidance values was detected in a composite soil sample collected from the north, south and east walls of the Tank 001/002 excavation subsequent to the limited source soil removal. In addition, medium weight TPH was detected at a concentration of 23,400 ug/kg or ppb in a sample collected from the bottom of the Tank 003 excavation subsequent to the limited source soil removal.

On June 6, 2000, Royal removed the sub-grade portion of one hydraulic lift, including an oil reservoir and its contents that were located on the 14-16 Charlotte Street Parcel (refer to Figure 2A included in Appendix A). DAY representative observed and documented the removal process of the in-ground hydraulic lift. The following activities were completed during the UST removal.

- Observed the excavated and in-situ soil, bedrock (if encountered), and groundwater (if encountered) for evidence of suspect contamination;
- Screened soil for total VOCs in the field with a PID;
- Photographed the removed equipment and the excavation for documentation purposes;
- Documented the cleaning and disposal of the equipment;
- Collected soil samples from the excavation for analytical laboratory analysis; and

Royal also removed approximately 15 cubic yards of petroleum-impacted soil/fill from the lift excavation and staged the material on-site on minimum 10-mil polyethylene plastic sheeting. The staged material was also covered with minimum 10-mil polyethylene plastic sheeting and secured in-place. This removal is considered to represent a "source removal" and does not include removing residual contamination that may have migrated away from the location of the lift. Royal backfilled the excavations, and on November 2, 2000, the staged soils and drummed tank contents/washwaters were transported off-site and disposed of at Mill Seat Landfill. Disposal documentation will be provided as a supplement to this report when this information is available.

Upon completion of the lift closure, pertinent information for the lift was summarized on an underground hydraulic lift closure report included in Appendix H. This documentation includes field observations, field measurements, analytical laboratory test results for confirmatory soil samples, Table A summarizing the test results for confirmatory soil samples including a comparison to NYSDEC STARS guidance values, and copies of photographs taken at the time of removal. As shown in Table A, VOC contamination exceeding TCLP alternative guidance values remained in the east wall of the Lift excavation subsequent to the limited source soil removal. In addition, medium weight and heavy weight TPH was detected at a combined concentration of 1,249,000 ug/kg or ppb in a composite soil sample collected from the north and south walls of the Lift excavation subsequent to the limited source soil removal.

## **2.7 Potentiometric Maps**

The location of the wells on the Site and in Haags Alley were tape-measured in relation to existing site structures or to surveyed site boundaries, and a licensed land surveyor surveyed their elevations.

On June 23, 2000, DAY collected static water level measurements from wells MW-1 through MW-11. The well elevations, static water levels and calculated groundwater elevations are included on Table 10A in Appendix B. Evidence of LNAPL was not detected in the wells using the Heron oil/water interface probe during this monitoring event. DAY developed a groundwater potentiometric map using this data. A copy of the potentiometric map (Figure 5A) is included in Appendix A. As shown, groundwater on June 23, 2000 appears to generally flow toward the east/southeast/northeast on the western half of the Site and east/northeast on the eastern half of the Site.

On August 31, 2000, DAY collected static water level measurements from wells MW-1 through MW-11. The well elevations, static water levels, thickness of measured free product in the wells and calculated groundwater elevations are included on Table 10B in Appendix B. Note that approximately 1.93 feet of floating free petroleum product, or LNAPL, was measured in well MW-7 using the Heron oil/water interface probe on August 31, 2000. On September 5, 2000, a bailer was lowered into well MW-7 to confirm the presence of LNAPL. DAY developed a groundwater potentiometric map using this data. A copy of the potentiometric map (Figure 5B) is included in Appendix A. As shown, groundwater for August 31, 2000 appears to generally flow toward the east/southeast/northeast on the western half of the Site and east/northeast on the eastern half of the Site.

On September 14, 2000, DAY collected static water level measurements from wells MW-1 through MW-12. The well elevations, static water levels, thickness of measured free product in the wells and calculated groundwater elevations are included on Table 10C in Appendix B. Note that approximately 1.83 feet of LNAPL was measured in well MW-7 using the Heron oil/water interface probe. DAY developed a groundwater potentiometric map using this data. A copy of the potentiometric map (Figure 5C) is included in Appendix A. As shown, groundwater for September 14, 2000 appears to generally flow toward the east/southeast/northeast on the western half of the Site and east/southeast on the eastern half of the Site.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

Various studies were performed in an effort to evaluate environmental conditions on the Site and on the adjoining right-of-way of Haags Alley. These studies included: a site reconnaissance; an electromagnetic geophysical survey followed by excavation of shallow test pits to evaluate magnetic anomalies; advancement of test borings; installation of groundwater monitoring wells; field observations and PID screening on soil and groundwater samples; analytical laboratory testing of soil and groundwater samples; development of groundwater potentiometric maps; and evaluation of the data collected. The conclusions and recommendations developed by DAY based upon the work completed to date are summarized below.

#### Conclusions

An inactive in-ground hydraulic lift, and a former floor drain with a catch basin/sump containing oil, suspected contaminated sediments and liquids that require special characterization, handling and disposal, remain inside the existing building on the 42 Charlotte Street parcel. These structures were not fully evaluated as part of DAY's studies performed to date.

Areas of magnetic anomaly were detected on the Site and three tanks and one in-ground lift were documented and removed from areas of magnetic anomaly. The other areas of magnetic anomaly identified do not appear to require remediation. It is currently unknown whether a UST is located beneath the existing building on the 42 Charlotte Street parcel since the original concrete floor in the building remains intact.

Three USTs (tanks 001, 002 and 003) and an in-ground hydraulic lift were removed from the Site. A limited source removal of contaminated soil was completed in the three UST and lift excavations (excavations designated as Tank 001/002, Tank 003, and Lift). The analytical laboratory test results for the confirmatory soil samples collected from the Tank 001/002 and lift excavations show that some petroleum-type constituents were detected at concentrations exceeding regulatory cleanup criteria. The analytical laboratory test results for the confirmatory soil samples collected from the Tank 003 excavation show that petroleum-type constituents were not detected at concentrations above regulatory cleanup criteria.

Evidence of VOC, SVOC and TPH contaminated soils and groundwater was encountered on the Site and in the right-of-way of Haags Alley at concentrations that regulatory agencies will likely require be addressed (e.g., remediated, controlled, etc.). Types of TPH detected in groundwater and soil at the Site included mineral spirits (could also be stoddard solvent), gasoline, kerosene, diesel, and lube oil. The majority of VOCs and SVOCs detected appear associated with petroleum or hydrocarbon-based products; however, some chlorinated VOCs (e.g., vinyl chloride) that may be associated with dry cleaning solvents, degreasers, or other activities were detected in the groundwater in several locations along the northern portion of the Site (e.g., MW-1) and in Haags Alley (MW-12). LNAPL consisting of diesel fuel was encountered in overburden/bedrock interface well MW-7 located on the 14-16 Charlotte Street parcel. Petroleum or VOC contamination detected in soil and groundwater at the Site may be attributable to both on-site and off-site sources.

Potential on-site sources of the VOC, SVOC and TPH contamination identified to date include:

- former USTs on the Site as identified in DAY's Phase I ESA report dated May 15, 1997;
- USTs and the lift that were removed from the 14-16 Charlotte Street parcel as part of this environmental study (See closure reports in Appendix H);
- the inactive in-ground hydraulic lift located inside the existing building on the 42 Charlotte Street parcel (see photograph in Appendix G);
- the former floor drain and catch basin/sump that is located in the existing building on the 42 Charlotte Street parcel (see photograph in Appendix G); and
- drums previously observed on the 28-30 and 32-34 Charlotte Street parcels as documented in DAY's Phase I ESA report dated May 15, 1997 (see photograph in Appendix G).

Potential off-site sources of the VOC, SVOC and TPH contamination identified to date include:

- A dry cleaner with solvent tanks located north of the 14-16 Charlotte Street parcel.
- A former auto painting and storage facility located north of the 32-34 Charlotte Street parcel.
- Commercial properties with suspected or confirmed underground storage tanks and/or documented releases of petroleum located south of the Site (i.e., former EG Snyder property at 68 - 86 Scio Street located south of the 14-16 Charlotte Street parcel, a trucking facility located at 37 Charlotte Street).

The metal mercury was detected in near-surface fill material samples at concentrations exceeding its typical background range and the NYSDEC recommended cleanup objective. The source of the mercury appears attributable to the on-site fill material.

PID readings up to 1,769 ppm were measured on samples of soil that were collected from the Site. The approximate area of the Site appearing to require remediation or engineering controls based on the detected PID readings and analytical laboratory test results is shown on Figure 6A included in Appendix A.

In April 2000, the City of Rochester notified the NYSDEC of the preliminary field findings of the environmental studies that were being performed on the Site. The NYSDEC generated an active spill number (NYSDEC Spill #0070043) to the parcels addressed as 26-60 Charlotte Street. A separate active spill number (NYSDEC Spill #0070044) was assigned to the parcel addressed as 14-16 Charlotte Street. A spill file with an active status indicates further investigation and/or remediation is warranted.

The results of the environmental studies that were performed on the Site were discussed with Mr. Joseph Albert of the MCDOH during a July 10, 2000 telephone conversation. Specifically, DAY described the scope of the environmental work performed and the findings. This included a description of the existing Site use, the analytical test results, field observations and the peak PID readings measured at each test location. DAY requested that Mr. Albert provide input on what environmental measures would be necessary to redevelop the Site with one commercial building. Based on the findings of DAY's environmental studies performed to date, Mr. Albert indicated that the MCDOH would accept commercial redevelopment of the Site provided that at a minimum, the following issues were addressed:

- The full extent of on-site and off-site sources of contamination need to be identified (i.e., establish the source(s) of contamination).
- Unsaturated soil containing elevated concentrations of TPH and/or elevated PID readings should be removed and treated/disposed. Mr. Albert suggested that 500 ppm may be an appropriate TPH cleanup number for this Site.
- Environmental engineering controls and long-term monitoring would likely be required on the new buildings to prevent the infiltration of VOC vapors into the building.
- Depending upon the location of the source (s) of contamination, environmental engineering controls would likely be required on other areas of the Site (i.e., along property boundaries, in proximity to localized on-site areas of contamination, etc.).
- Deed restrictions would likely be required to prevent future changes in use of the Site without further evaluating exposure risks, etc.

[Note: the MCDOH may require additional work if the Site is to be developed for residential purposes].

### Recommendations

Assuming the building on the 42 Charlotte Street parcel is to be demolished, that the building on the 26 Charlotte Street parcel continues to be used for residential purposes, that the 14-16 Charlotte Street parcel will be redeveloped with a commercial building, and that the 28-60 Charlotte Street parcels will be redeveloped with residential townhouses, the following recommendations are made:

1. The full extent of on-site and off-site sources of contamination should be identified through further on-site and off-site studies.
2. An environmental management plan (EMP), including a site-specific health and safety plan (HASP) should be developed to address environmental conditions during redevelopment activities at the Site. The EMP and HASP would in part be used to assist in the proper handling and disposal of contaminated media encountered during the redevelopment and to assist in protecting construction workers and nearby residents/occupant of adjoining properties against exposures to site contaminants. Regulatory agencies should be offered the opportunity to review and comment on the EMP and HASP. It is anticipated that the

EMP would include the following actions for addressing environmental conditions at the site.

- a. Areas of localized petroleum-contaminated unsaturated soil (soil above the water table) that exceed NYSDEC cleanup criteria should be removed and disposed at an approved landfill or treated to acceptable concentrations below cleanup criteria.
  - b. When the existing building on the 42 Charlotte Street building is demolished, the in-ground hydraulic lift, the former floor drain with a catch basin/sump, and any contents in these structures should be properly characterized, removed, handled and disposed of in accordance with applicable regulations. Also, work should be performed to confirm the presence or absence of an UST beneath this building. If an UST exists, it would need to be permanently closed (i.e., removed) in accordance with applicable regulations.
  - c. During demolition of the existing building on the 42 Charlotte Street building, and during redevelopment activities that would potentially disturb contaminated media, environmental monitoring (air monitoring with a PID and particulate meter; visual observations; etc.) should be conducted to evaluate the disturbed materials for the presence of various types of contamination. This monitoring would assist in preventing potential exposures to contaminated media (i.e., environmental monitoring will assist in determining how the work is done and what level of personal protective equipment is appropriate, such as the use of air purifying respirators, gloves, etc.). The EMP should also contain guidance on how to address (e.g., identify, characterize, remove, handle, dispose, etc.) contaminated materials, tanks, drums, etc., if encountered.
  - d. Since elevated concentrations of the heavy metal mercury were detected in near surface soil samples, a layer of clean soil covering the existing soil may be required by regulatory agencies in areas not covered by new buildings or by paved surfaces (i.e., driveways, parking lots, sidewalks, etc.). Surface soil/fill contaminated with mercury that can not be re-used on-site will likely require removal and off-site disposal at an approved facility (e.g., landfill).
3. Based on the PID readings and analytical laboratory test results for soil and groundwater samples, the MCDOH has indicated environmental engineering controls (i.e., vapor barriers, passive or active venting systems, etc.) and deed restrictions would be warranted if new buildings are to be constructed in order to prevent VOC vapors in soil or groundwater from volatilizing and contaminating the indoor air inside the new building. Confirmatory air sampling and testing should be conducted inside the building subsequent to its construction. Also, environmental engineering controls may be required along one or more property boundaries on the Site to mitigate off-site contamination from entering soil or groundwater on Site in the future.
  4. Air sampling and subsequent analytical testing should be conducted on the ambient air in the residence at 26 Charlotte Street to evaluate the air for the presence of VOCs that were detected in soil and groundwater in proximity to this structure. Further work would be warranted if VOCs were detected at concentrations above regulatory agency (e.g., permissible exposure limits, etc.).

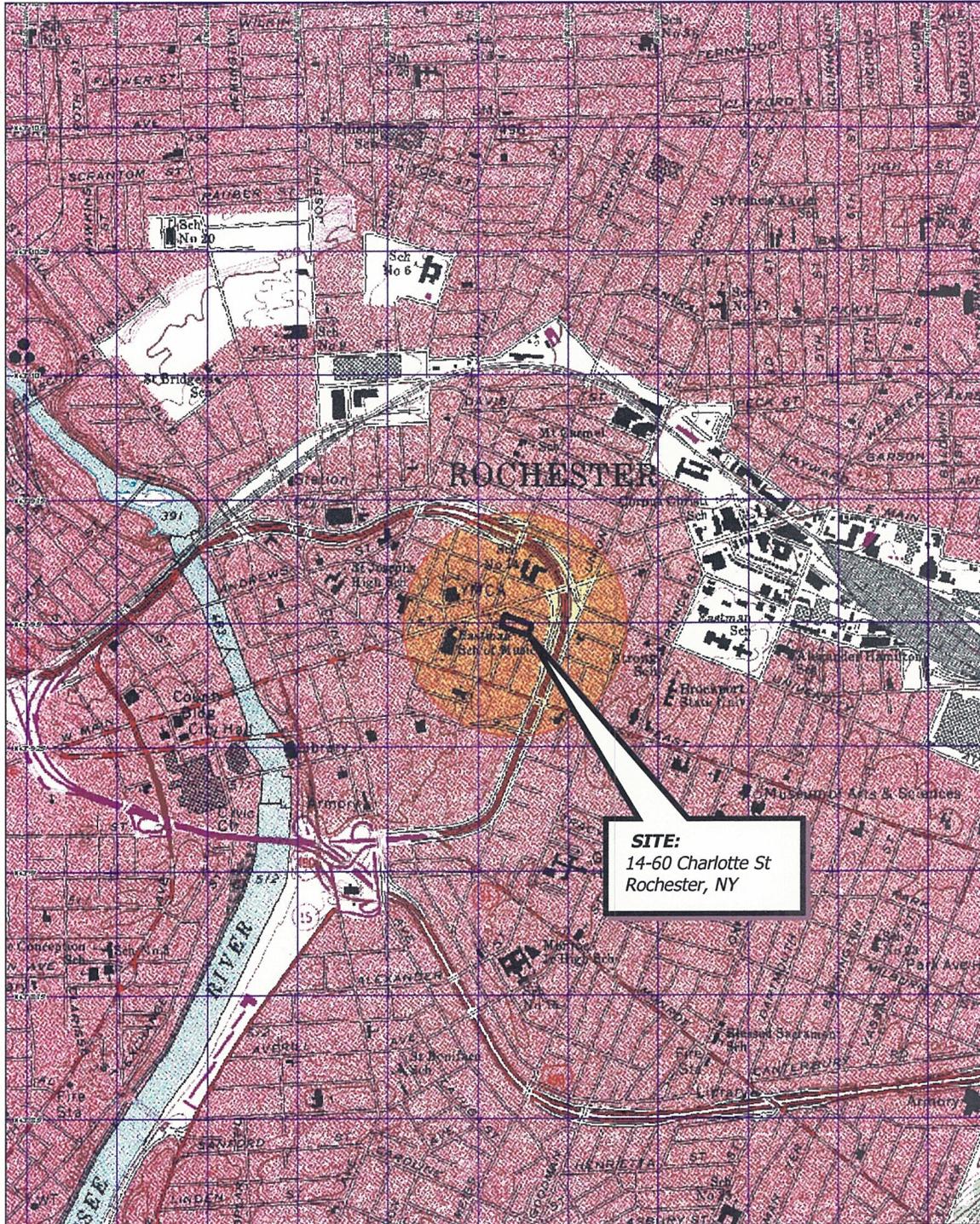
5. A long-term monitoring program should be instituted subsequent to redevelopment activities. The long-term monitoring should include monitoring of environmental engineering controls implemented, and groundwater monitoring wells. As part of this task, it is presumed that the existing groundwater monitoring wells would be decommissioned and that new wells would be installed as a result of redeveloping the Site.
6. The free product encountered at well MW-7 on the Site should be addressed (remediated).
7. The NYSDEC and the MCDOH should continue to be involved with this project, and should be provided a copy of the results of the environmental studies performed to date. The actions for addressing the contamination with the assumption that the Site will be redeveloped for commercial and residential use will be dependent upon NYSDEC and MCDOH input.

#### 4.0 ABBREVIATIONS

DAY	Day Environmental, Inc.
EMP	Environmental Management Plan
FID	Flame Ionization Detector
HASP	Health and Safety Plan
ID	Inner Diameter
LNAPL	Light Non-Aqueous Phase Liquid
MCDOH	Monroe County Department of Health
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
ppb	Parts Per Billion
ppm	Parts Per Million
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
SACM	Suspect Asbestos-Containing Material
STARS	Spill Technology and Remediation Series
SVOC	Semi-Volatile Organic Compound
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

**APPENDIX A**

**Figures and Maps**



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 1" = 500 ft Scale: 1 : 19,200 Detail: 14-0 Datum: NAD27

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad map Rochester East (NY) 1995. Site Lat/Long: N43d-9.50' – W77d-35.90'

DATE <b>06/14/2000</b>	 <b>DAY ENVIRONMENTAL, INC.</b> ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	PROJECT TITLE <b>14-60 CHARLOTTE STREET          ROCHESTER, NEW YORK</b>  <b>PHASE II ENVIRONMENTAL STUDY</b>	PROJECT NO. <b>2089S-99</b>  <b>FIGURE 1</b>  SHEET 1 OF 1
DRAWN BY <b>Tww</b>		DRAWING TITLE <b>PROJECT LOCUS MAP</b>	
SCALE <b>1" = 2000'</b>			

**LEGEND**

Property Line

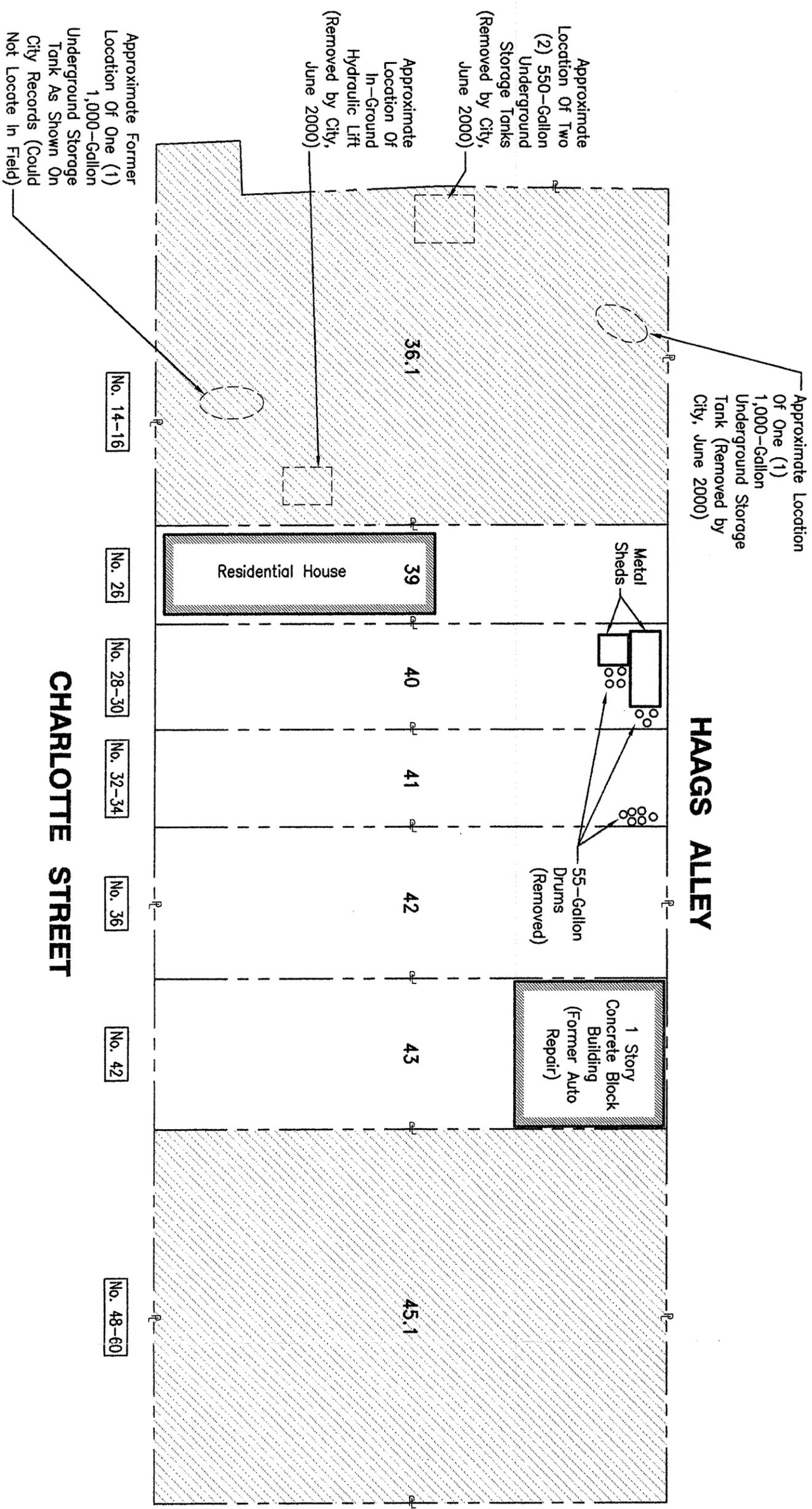
Lot Number

No. 32-34

Charlotte Street Addresses

Property Owned By The City Of Rochester

Property Owned By Louis Grammatico



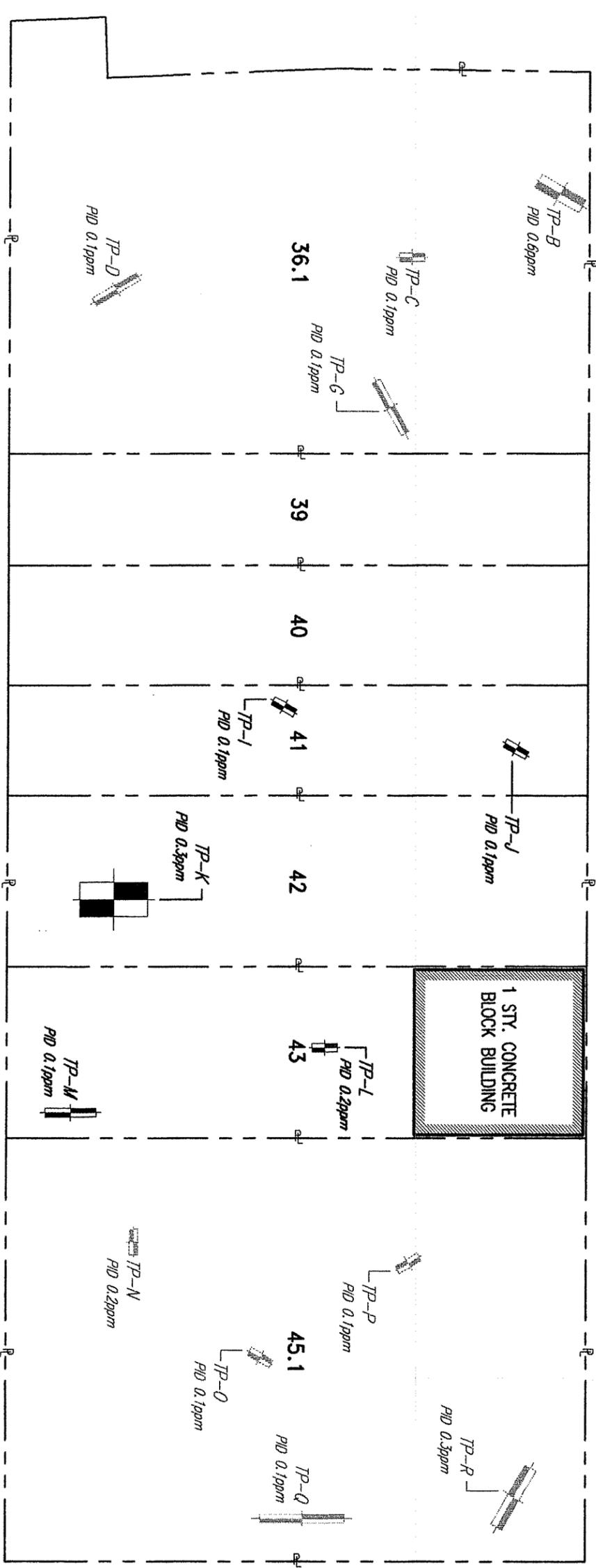
**SITE PLAN**  
SCALE: 1" = 30'

**NOTE:**  
Site Plan Produced From a Tax Map Of The City Of Rochester.



PROJECT NO. 2089S-99	PROJECT TITLE 14-60 CHARLOTTE STREET ROCHESTER, NEW YORK	FIELD VERIFIED BY <b>JAD</b>	DATE 7/2000
	DRAWING TITLE SITE PLAN	DRAWN BY RJM/Tww	DATE DRAWN 7/10/2000
PROJECT TITLE PHASE II ENVIRONMENTAL STUDY		SCALE 1" = 30'	DATE ISSUED 9/13/2000
PROJECT TITLE 14-60 CHARLOTTE STREET ROCHESTER, NEW YORK		DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	

**LEGEND**  
 ---P--- Property Line  
 41 Lot Number  
 No. 32-34 Charlotte Street Addresses  
 TP-C  
 PID 0.1ppm  
 Approximate Test Pit Location With Peak  
 Photoionization Detector (PID) Reading  
 Recorded In Parts Per Million (ppm)

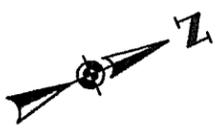


**CHARLOTTE STREET**

**HAAGS ALLEY**

**SITE PLAN**  
SCALE: 1" = 30'

**NOTE:**  
Site Plan Produced From a Tax Map Of The City Of Rochester.

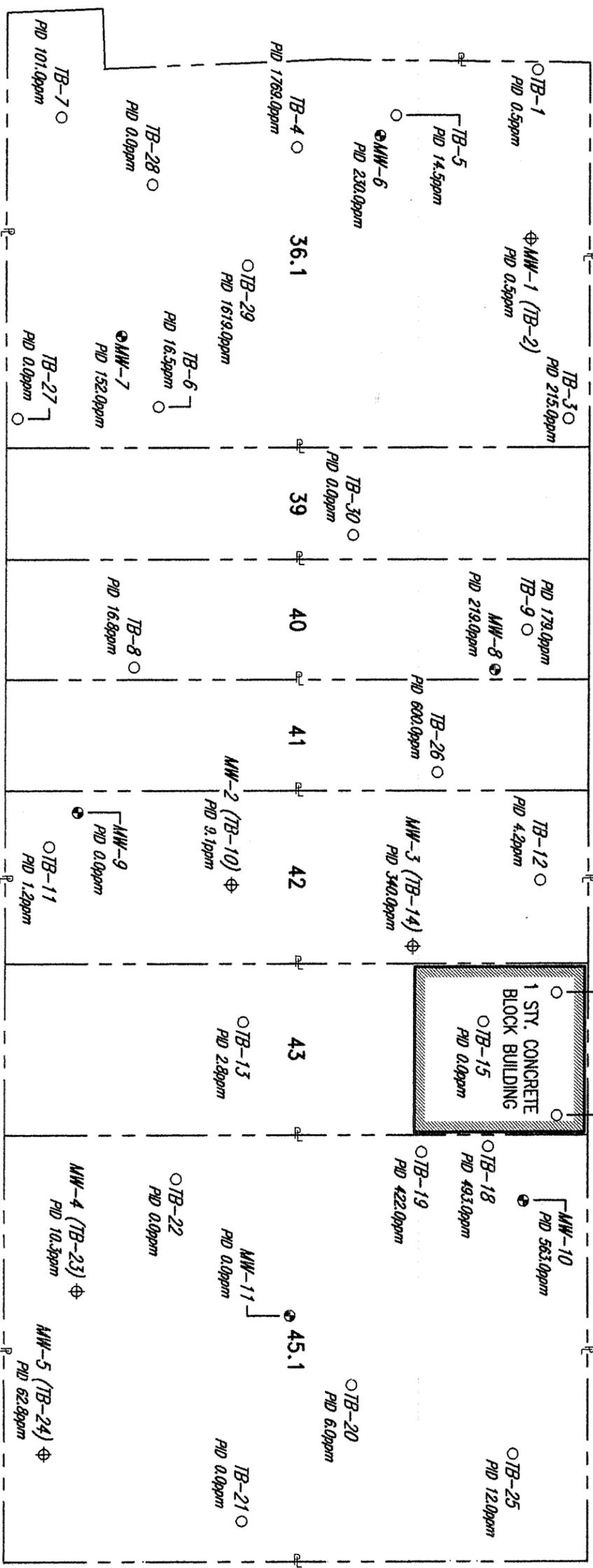


PROJECT TITLE <b>14-60 CHARLOTTE STREET ROCHESTER, NEW YORK</b>	PROJECT NO. <b>2089S-99</b>	<b>DAY ENVIRONMENTAL, INC.</b> ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	FIELD VERIFIED BY <b>JAD</b>	DATE <b>5/2000</b>
			DRAWING TITLE <b>TEST PIT LOCATION MAP - EM61 ANOMALIES</b>	DRAWN BY <b>RJM</b>
			SCALE <b>1" = 30'</b>	DATE ISSUED <b>7/10/2000</b>

**FIGURE 3**  
SHEET 1 OF 1

**LEGEND**  
 ——— Property Line  
 41 Lot Number  
 [No. 32-34] Charlotte Street Addresses  
 ○ TB-1  
 PID 0.5ppm  
 Approximate Geoprobe Test Boring Location  
 With Peak Photoionization Detector (PID)  
 Reading Recorded In Parts Per Million  
 (ppm)

⊕ MW-1 (TB-2)  
 PID 0.5ppm  
 Approximate Overburden/Bedrock Monitoring Well  
 Location With Peak PID Reading Recorded In ppm  
 ⊕ MW-6  
 PID 230.0ppm



**CHARLOTTE STREET**

**HAAGS ALLEY**

**SITE PLAN**

SCALE: 1" = 30'

**NOTE:**

Site Plan Produced From a Tox Map Of The City Of Rochester.



PROJECT TITLE <b>14-60 CHARLOTTE STREET                  ROCHESTER, NEW YORK</b>	PROJECT NO. <b>2089S-99</b>	DRAWING TITLE <b>TEST BORING AND WELL LOCATIONS                  WITH PEAK PID READINGS</b>	FIELD VERIFIED BY <b>JAD</b>	DATE <b>5/2000</b>
			DRAWN BY <b>RJM/Tw</b>	DATE DRAWN <b>8/29/2000</b>
SCALE <b>1" = 30'</b>			DATE ISSUED <b>9/13/2000</b>	

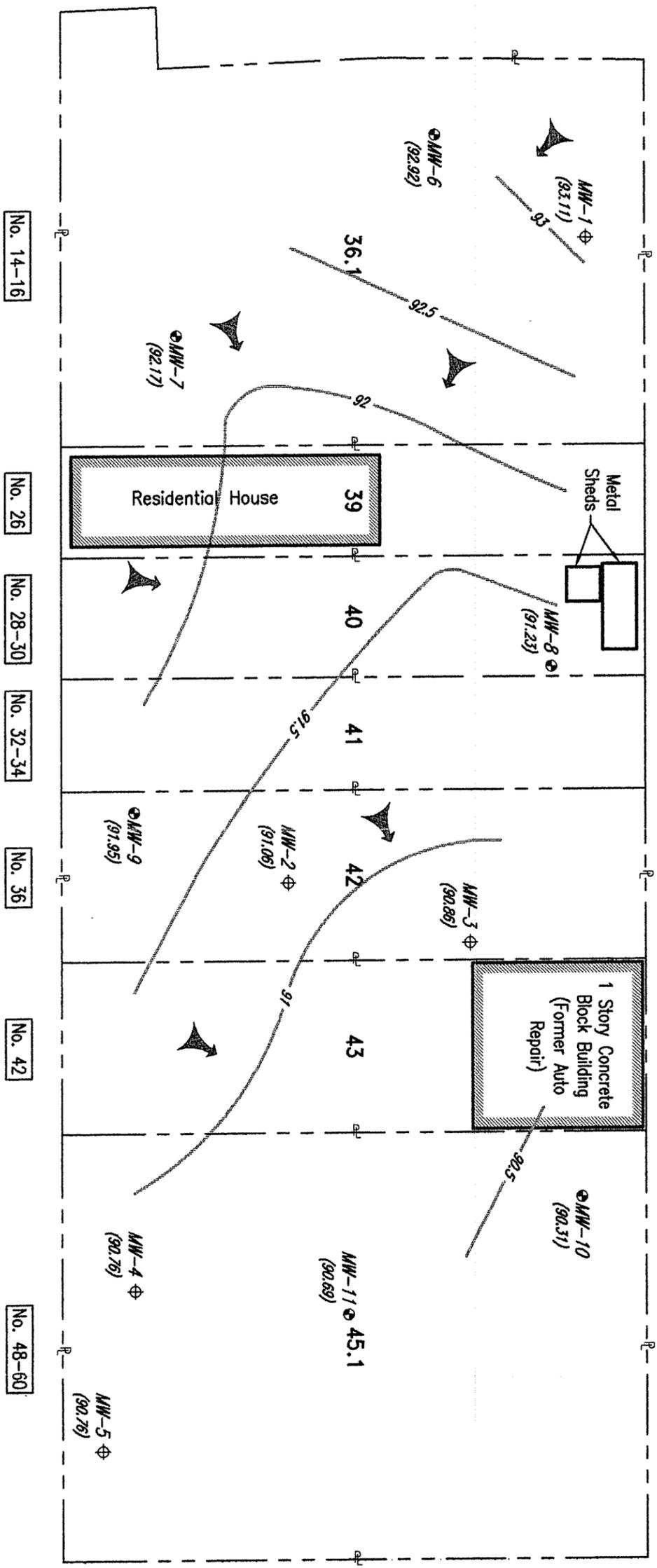
**day**  
 DAY ENVIRONMENTAL, INC.  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK 14623-2700

**LEGEND**

- P— Property Line
- 41 Lot Number
- [No. 32-34] Charlotte Street Addresses
- 92 Potentiometric Contour Line
- Approximate Direction Of Groundwater Flow

⊕ MW-1 (93.11) Approximate Overburden Geoprobe Monitoring Well Location With Groundwater Elevation In Feet, Obtained On June 23, 2000

⊕ MW-6 (92.92) Approximate Overburden/Bedrock Monitoring Well Location With Groundwater Elevation In Feet, Obtained On June 23, 2000



**CHARLOTTE STREET**

**HAAGS ALLEY**

**SITE PLAN**

SCALE: 1" = 30'

**NOTES:**

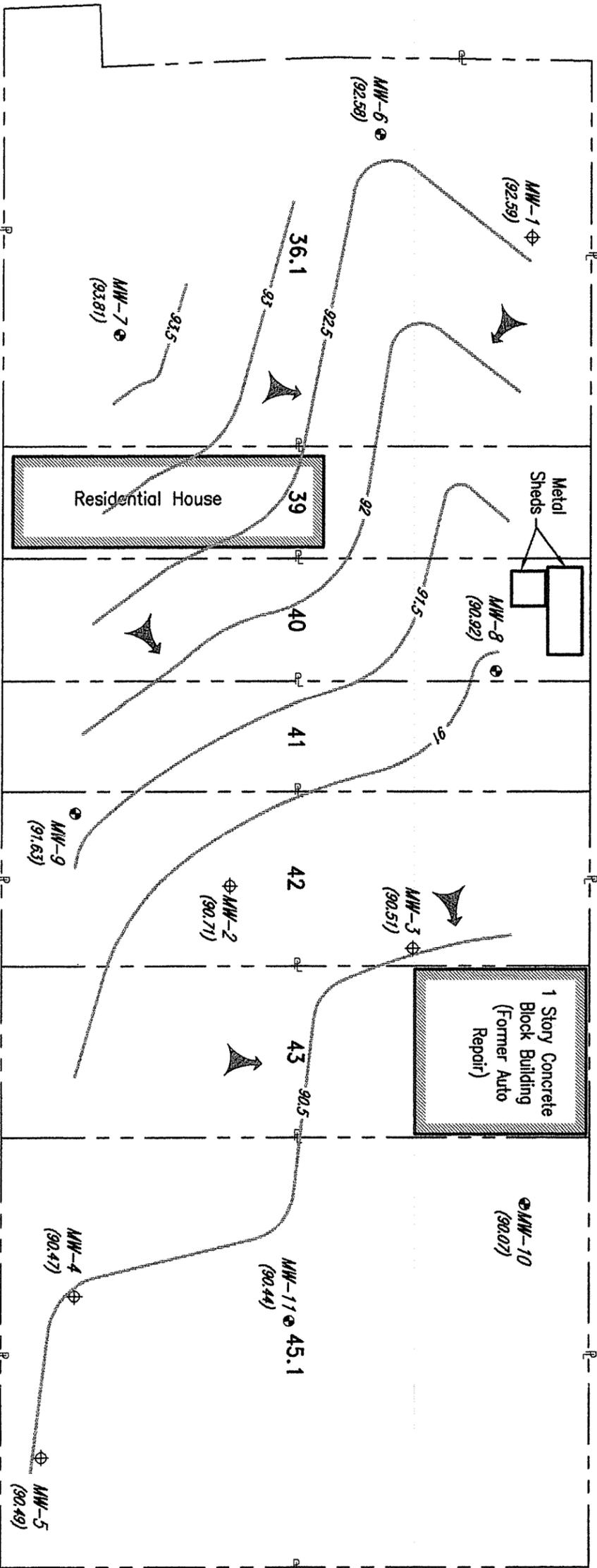
1. Site Plan Produced From A Tax Map Of The City Of Rochester.
2. Groundwater Elevations Will Vary Due To Seasonal Factors, Pumping, Etc., As Such, The Potentiometric Contours Will Also Vary, And Flow Direction May Be Different From Those Shown.

PROJECT TITLE <b>14-60 CHARLOTTE STREET          ROCHESTER, NEW YORK</b>	PROJECT NO. <b>2089S-99</b>	<b>DAY ENVIRONMENTAL, INC.</b> ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	FIELD VERIFIED BY <b>JAD</b>	DATE <b>6/23/2000</b>
	DRAWING TITLE <b>PHASE II ENVIRONMENTAL STUDY</b>		DRAWN BY <b>RJM/Tww</b>	DATE DRAWN <b>6/26/2000</b>
DRAWING TITLE <b>GROUNDWATER POTENTIOMETRIC CONTOUR MAP          FOR JUNE 23, 2000</b>	<b>FIGURE 5A</b>	SCALE <b>1" = 30'</b>	DATE ISSUED <b>9/26/2000</b>	
SHEET 1 OF 1	<b>FIGURE 5A</b>			

- LEGEND**
- P— Property Line
  - 41 Lot Number
  - No. 32-34 Charlotte Street Addresses
  - 93 Potentiometric Contour Line
  - Approximate Direction Of Groundwater Flow

⊕ MW-1 (92.59) Approximate Overburden Geoprobe Monitoring Well Location With Groundwater Elevation In Feet, Obtained On August 31, 2000

⊕ MW-6 (92.59) Approximate Overburden/Bedrock Monitoring Well Location With Groundwater Elevation In Feet, Obtained On August 31, 2000



**CHARLOTTE STREET**

**HAAGS ALLEY**

**NOTES:**

1. Site Plan Produced From A Tax Map Of The City Of Rochester.
2. Groundwater Elevations Will Vary Due To Seasonal Factors, Pumping, Etc., As Such, The Potentiometric Contours Will Also Vary, And Flow Direction May Be Different From Those Showin.
3. The Groundwater Elevation At MW-7 Was Adjusted Due To The Presence Of Flooding Free Product (Refer To Table 10B In Report).

**SITE PLAN**

SCALE: 1" = 30'

PROJECT TITLE  
**14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK**

DRAWING TITLE  
**PHASE II ENVIRONMENTAL STUDY  
GROUNDWATER POTENTIOMETRIC CONTOUR MAP  
FOR AUGUST 31, 2000**

PROJECT NO.  
2089S-99

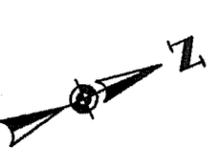
**FIGURE 5B**

SHEET 1 OF 1



**DAY ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK 14623-2700

FIELD VERIFIED BY <b>JAD</b>	DATE <b>8/31/2000</b>
DRAWN BY <b>RJM/TWW</b>	DATE DRAWN <b>9/21/2000</b>
SCALE <b>1" = 30'</b>	DATE ISSUED <b>10/23/2000</b>

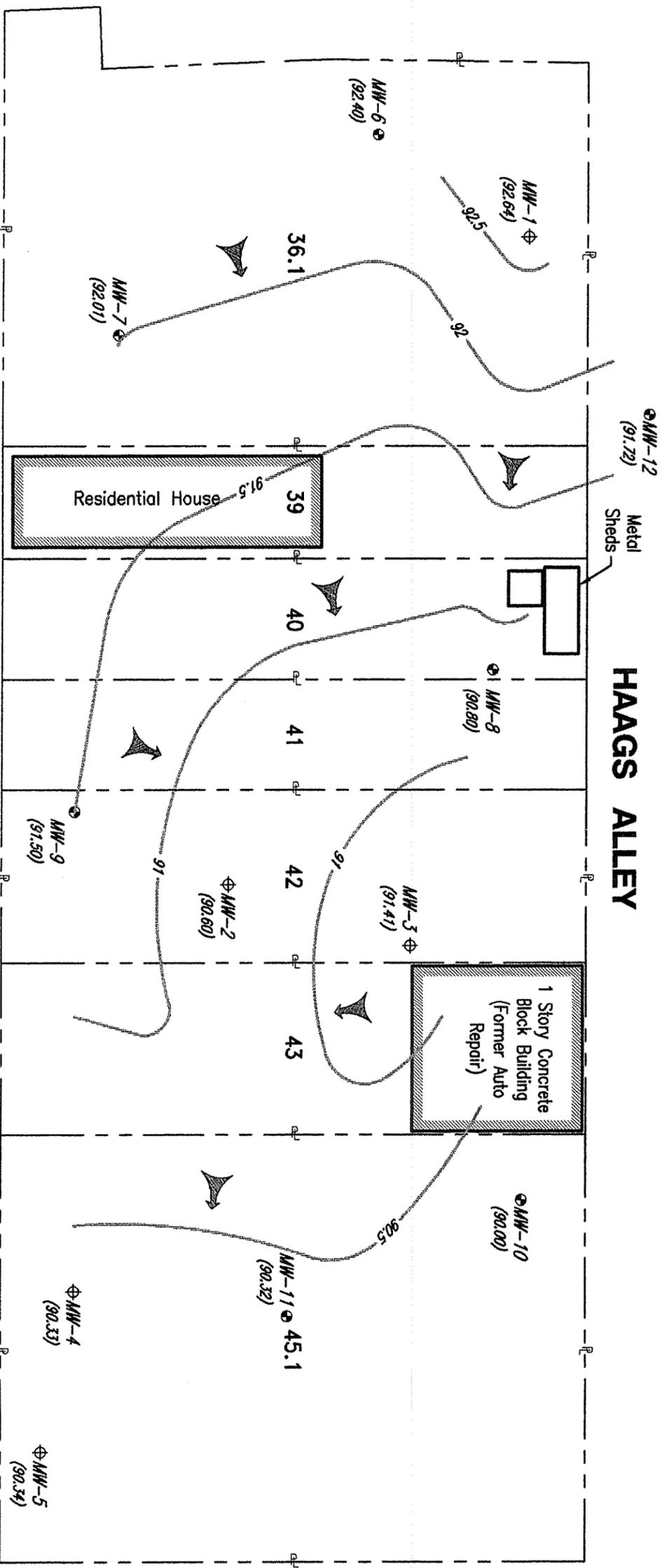


**LEGEND**

- P — Property Line
- 41 Lot Number
- No. 32-34 Charlotte Street Addresses
- 93 Potentiometric Contour Line
- Approximate Direction Of Groundwater Flow

Approximate Overburden Geoprobe Monitoring Well Location With Groundwater Elevation In Feet, Obtained On September 14, 2000

Approximate Overburden/Bedrock Monitoring Well Location With Groundwater Elevation In Feet, Obtained On September 14, 2000



**NOTES:**

1. Site Plan Produced From A Tax Map Of The City Of Rochester.
2. Groundwater Elevations Will Vary Due To Seasonal Factors, Pumping, Etc., As Such, The Potentiometric Contours Will Also Vary, And Flow Direction May Be Different From Those Shown.
3. The Groundwater Elevation At MW-7 Was Adjusted Due To The Presence Of Flooding Free Product (Refer To Table 10C In Report).

**SITE PLAN**

SCALE: 1" = 30'

**CHARLOTTE STREET**

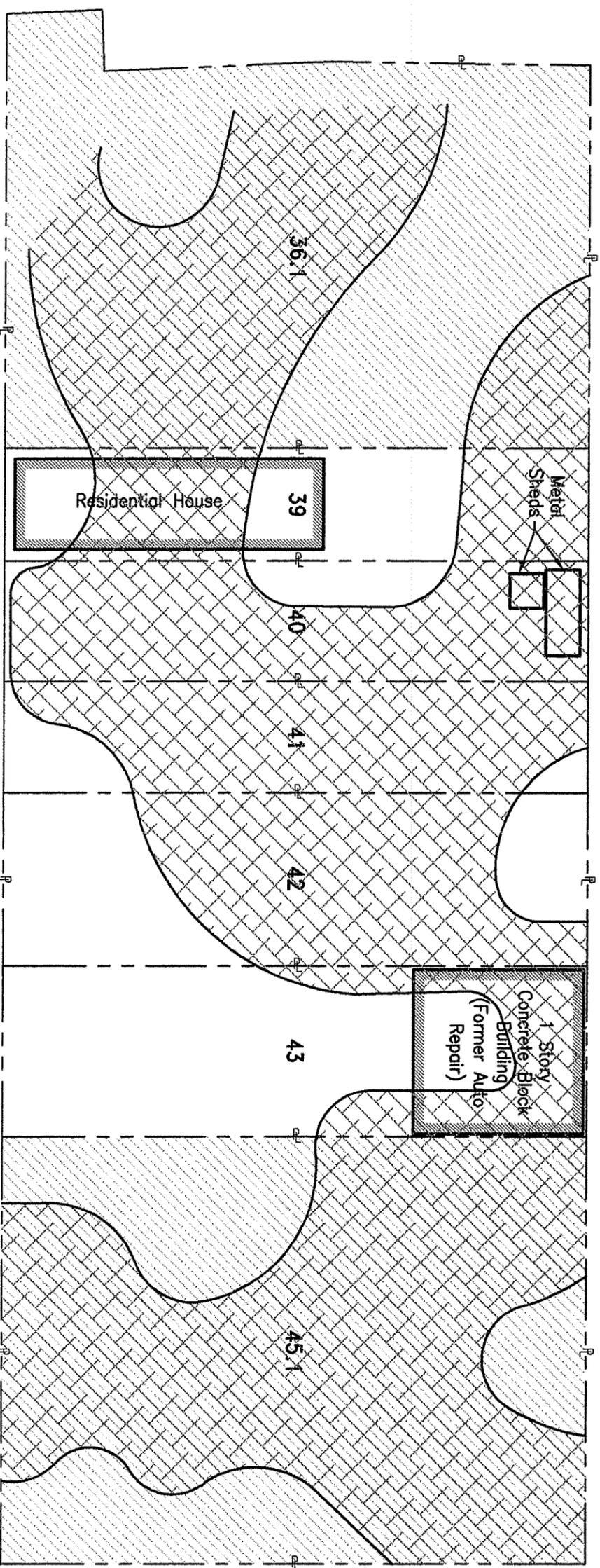
**HAAGS ALLEY**

<p>PROJECT TITLE <b>14-60 CHARLOTTE STREET ROCHESTER, NEW YORK</b></p> <p>PROJECT NO. <b>2089S-99</b></p>	<p>DRAWING TITLE <b>GROUNDWATER POTENTIOMETRIC CONTOUR MAP FOR SEPTEMBER 14, 2000</b></p>	<p>FIELD VERIFIED BY <b>JAD</b></p>		DATE <b>9/14/2000</b>
		<p>DRAWN BY <b>RJM/Tww</b></p>		DATE DRAWN <b>9/21/2000</b>
<p>FIGURE 5C SHEET 1 OF 1</p>		<p>SCALE <b>1" = 30'</b></p>		DATE ISSUED <b>10/23/2000</b>
<p>DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700</p>				

**LEGEND**  
 ---P--- Property Line  
 41 Lot Number  
 No. 32-34 Charlotte Street Addresses

Property Owned By The City Of Rochester  
 Property Owned By Louis Grammatico

Approximate Area Currently Appearing To Require Remediation Or Environmental Engineering Controls Based On Detected PID Readings And/Or Analytical Laboratory Test Results



**HAAGS ALLEY**

**CHARLOTTE STREET**

**SITE PLAN**  
SCALE: 1" = 30'

**NOTE:**  
Site Plan Produced From a Tax Map Of The City Of Rochester.

PROJECT TITLE <b>14-60 CHARLOTTE STREET ROCHESTER, NEW YORK</b>	PHASE II ENVIRONMENTAL STUDY	<b>DAY ENVIRONMENTAL, INC.</b> ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	FIELD VERIFIED BY <b>JAD</b>	DATE <b>7/2000</b>
			DRAWN BY <b>RJM/TWW</b>	DATE DRAWN <b>7/10/2000</b>
DRAWING TITLE <b>Area On Site Currently Appearing To Require Remediation Or Environmental Engineering Controls</b>			SCALE <b>1" = 30'</b>	DATE ISSUED <b>10/23/2000</b>
PROJECT NO. <b>2089S-99</b>		<b>FIGURE 6A</b> SHEET 1 OF 1		



## **APPENDIX B**

### **Tables**

TABLE 1

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SOIL ANALYTICAL PROGRAM

Sample Number/Location	Location	Analysis
2089-03 / TB-3 @ 9'	City Parcel	8260 / 8270
2089-04 / TB-4 @ 7.5'	City Parcel	8260 / 8270 / 310.13
2089-05 / TB-5 @ 3'	City Parcel	RCRA Metals
2089-06 / TB-6 @ 11'	City Parcel	8260 / 8270 / 8080 PCBs 8270**310.13**
2089-07 / TB-7 @ 10'	City Parcel	8260 / 8270 / 310.13
2089-08 / TB-8 @ 6'	Grammatico Parcel	8260 / 8270, 8260**310.13**
2089-09 / TB-9 @ 11.5'	Grammatico Parcel	8260 / 8270, 8260**310.13**
2089-11 / TB-11 @ 2'	Grammatico Parcel	RCRA Metals
2089-14 / TB-14 @ 2'	Grammatico Parcel	RCRA Metals (MS/MSD)
2089-14 / TB-14 @ 11.5'	Grammatico Parcel	8260 / 8260**
2089-16 / TB-16 @ 1.5'	Grammatico Parcel	310.13 (MS/MSD)
2089-17 / TB-17 @ 10.5'	Grammatico Parcel	8270 / 310.13 / PCB's (MS/MSD)
2089-18 / TB-18 @ 10'	City Parcel	8260 / 310.13
2089-21 / TB-21 @ 7.5'	City Parcel	8260
2089-23 / TB-23 @ 8'	City Parcel	310.13
2089-24 / TB-24 @ 9'	City Parcel	8260
2089-25 / TB-25 @ 3'	City Parcel	RCRA Metals / 310.13
2089-26 / TB-26 @ 12'	Grammatico Parcel	8260 / 8270 / 310.13
2089-27 / TB27 @ 8.5'	City Parcel	8260
2089-29 / TB-29 @ 8.5'	City Parcel	8260 / 8270 / 310.13
2089-FB / Field Blank	--	8260 / RCRA Metals / 8080 PCBs / 8270 / 310.13
2089-TB	City Parcel	8260
MW-7 (10-10.7')	City Parcel	310.13
MW-8 (0-2')	Grammatico Parcel	8260 / 310.13
2089-H1 / B-1(MW-12) @ 7'	Haags Alley	8260 / 310.13
2089-H2 / B-2 @ 8.5'	Haags Alley	8260 / 310.13

\*\* = Sample was re-analyzed.

**TABLE 2**

**14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK**

**GROUNDWATER ANALYTICAL PROGRAM**

<b>Well Location</b>	<b>Sample Date</b>	<b>Sample Number</b>	<b>Location</b>	<b>Analysis</b>
MW-1	5/15/00	2089-W1-01	City Parcel	8260 / 310.13
MW-2	5/16/00	2089-W2-01	Grammatico Parcel	8260 / 310.13
MW-2	7/26/00	MW-2-02	Grammatico Parcel	8260 / 310.13
MW-3	5/15/00	2089-W3-01	Grammatico Parcel	8260 / 310.13
MW-3	7/26/00	MW-3-02	Grammatico Parcel	8260 / 310.13
MW-4	5/16/00	2089-W4-01	City Parcel	8260 / 310.13
MW-5	5/15/00	2089-W5-01	City Parcel	8260 / 310.13
MW-6	5/15/00	2089-W6-01	City Parcel	8260 / 310.13
MW-7	5/15/00	2089-W7-01	City Parcel	8260 / 310.13
MW-8	5/15/00	2089-W8-01	Grammatico Parcel	8260 / 310.13
MW-8	7/26/00	MW-8-02	Grammatico Parcel	8260 / 310.13
MW-9	5/15/00	2089-W9-01	Grammatico Parcel	8260 / 310.13
MW-9	7/26/00	MW-9-02	Grammatico Parcel	8260 / 310.13
MW-10	5/15/00	2089-W10-01	City Parcel	8260 / 310.13
MW-11	5/15/00	2089-W11-01	City Parcel	8260 / 310.13
MW-12	8/21/00	MW-12-8-00	Haags Alley	8260 / 310.13

TABLE 3

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

TOTAL PETROLEUM HYDROCARBONS (TPH)  
IN MG/KG OR PARTS PER MILLION (PPM)

SOIL SAMPLES

SAMPLE DESIGNATION AND LOCATION	TPH TEST RESULTS (mg/kg or PPM)	
	TOTAL CONCENTRATION	CONCENTRATIONS BY HYDROCARBON WIEGHT
2089-04 (TB-4 @ 7.5')	561	561 - LW (kerosene)
2089-07 (TB-7 @ 10')	627	627 - MW (diesel)
2089-16 (TB-16 @ 1.5')	215.2	10.2 - MW (diesel) 205 - HW (lube oil)
2089-17 (TB-17 @ 10.5')	347	169 - LW (mineral spirits*) 178 - HW (lube oil)
2089-18 (TB-18 @ 10')	114.8	92.8 - LW (mineral spirits*) 22 - HW (lube oil)
2089-23 (TB-23 @ 8')	--	--
2089-25 (TB-25 @ 3')	--	--
2089-26 (TB-26 @ 12')	120.7	98.2 - LW (mineral spirits*) 22.5 - HW (lube oil)
2089-29 (TB-29 @ 8.5')	17.5	17.5 - LW (kerosene)
MW-7 (10-10.7')	23,800	23,800 - MW (diesel)
MW-8 (0-2')	1,250	1,250 - MW (diesel)
2089-08R (TB-8 @ 6') **	4,660	4,660 - MW (diesel)
2089-09R (TB-9 @ 11.5') **	385.9	372 - LW (mineral spirits*) 13.9 - HW (lube oil)
2089-06R (TB-6 @ 11') **	3,670	3,670 - HW (lube oil)
Local regulatory TPH Guidance Value <sup>(1)</sup>	500	500

-- = Not detected above reported laboratory detection limit values.

\* = Laboratory reported that TPH identified as "mineral spirits" or "stoddard solvent".

\*\* = Samples was re-analyzed.

LW = Light Weight

MW = Medium Weight

HW = Heavy Weight

(1) = Guidance value used by local regulatory agencies on similar sites in the Rochester, New York area that are being redeveloped for commercial purposes.

TABLE 4A

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
IN UG/KG OR PARTS PER BILLION (PPB)

SOIL SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION									NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB)
	2089-04 TB-4 @ 7.5'	2089-03 TB-3 @ 9'	2089-06 TB-6 @ 11'	2089-07 TB-7 @ 10'	2089-08* TB-8 @ 6'	2089-09* TB-9 @ 11.5'				
Ethylbenzene	9,010	--	--	40	--	--	--	--	--	100
Toluene	15,600	--	--	--	--	--	--	--	--	100
Total Xylenes	50,600	--	--	140	--	--	--	--	--	100
n-Propylbenzene	4,600	--	440	330	--	--	--	--	--	100
1,3,5-Trimethylbenzene	10,800	--	57	610	--	--	--	--	--	100
1,2,4-Trimethylbenzene	35,100	--	--	620J	--	--	--	--	--	100
sec-Butylbenzene	--	--	97	350	--	--	--	--	--	100
n-Butylbenzene	--	--	420	1,100	--	--	--	--	--	100
Isopropylbenzene	--	--	110	120	--	--	--	--	--	100
p-Isopropyltoluene	--	--	48	440	--	--	--	--	--	100
tert-Butylbenzene	--	--	--	29	--	--	--	--	--	100
Naphthalene	--	--	--	1,100	--	--	--	--	--	200
<b>Total VOCs</b>	<b>125,710</b>	<b>0</b>	<b>1,172</b>	<b>4,879</b>	<b>0*</b>	<b>0*</b>	<b>0*</b>	<b>0*</b>	<b>0*</b>	<b>NA</b>

J = Indicates an estimate value.  
 -- = Not detected above reported laboratory detection limit value.  
 NA = Not available.  
 \* = Sample was analyzed at a high dilution factor; however, constituents were not detected above analytical laboratory detection limits.

TABLE 4B

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
IN UG/KG OR PARTS PER BILLION (PPB)

SOIL SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION						NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB)
	2089-14* TB-14 @ 11.5'	2089-21 TB-21 @ 7.5'	2089-24 TB-24 @ 9'	2089-27 TB-27 @ 8.5'	2089-29 TB-29 @ 8.5'	2089-18 TB-18 @ 10'	
Ethylbenzene	--	--	--	--	120	--	100
Toluene	--	--	--	--	--	--	100
Total Xylenes	--	--	--	--	522	11.8	100
n-Propylbenzene	--	--	--	--	78	--	100
1,3,5-Trimethylbenzene	--	--	--	--	150	--	100
1,2,4-Trimethylbenzene	--	--	--	--	430	--	100
sec-Butylbenzene	--	--	--	--	--	33.5	100
n-Butylbenzene	--	--	--	--	65	--	100
Isopropylbenzene	--	--	--	--	18	--	100
p-Isopropyltoluene	--	--	--	--	--	--	100
tert-Butylbenzene	--	--	--	--	--	--	100
Naphthalene	--	--	--	--	130	--	200
<b>Total VOCs</b>	<b>0*</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,533</b>	<b>45.3</b>	<b>NA</b>

J = Indicates an estimate value.  
 -- = Not detected above reported laboratory detection limit value.  
 NA = Not available.  
 \* = Sample was analyzed at a high dilution factor; however constituents were not detected above analytical laboratory detection limits.

TABLE 4C

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
IN UG/KG OR PARTS PER BILLION (PPB)

SOIL SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION					NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB)
	2089-26 TB-26 @ 12'	MW-8 (0-2')	2089-08R** TB-8 @ 6'	2089-09R** TB-9 @ 11.5'	2089-14R** TB-14 @ 11.5'	
Ethylbenzene	--	--	--	--	--	100
Toluene	--	--	--	--	--	100
Total Xylenes	--	--	--	--	--	100
n-Propylbenzene	--	--	--	--	--	100
1,3,5-Trimethylbenzene	--	--	--	--	--	100
1,2,4-Trimethylbenzene	--	--	--	--	--	100
sec-Butylbenzene	17.3	--	--	50.9	--	100
n-Butylbenzene	--	--	--	--	--	100
Isopropylbenzene	--	--	--	--	--	100
p-Isopropyltoluene	--	--	--	--	--	100
tert-Butylbenzene	--	--	--	--	--	100
Naphthalene	--	--	--	--	--	200
<b>Total VOCs</b>	17.3	0	0**	50.9**	0**	NA

J = Indicates an estimate value.  
 -- = Not detected above reported laboratory detection limit value.  
 NA = Not available.  
 \*\* = Samples was re-analyzed and test results are considered biased low.

TABLE 5

14-60 CHALOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
SEMI-VOLATILE ORGANIC COMPOUND (SVOC) TEST RESULTS  
IN UG/KG OR PARTS PER BILLION (PPB)  
SOIL SAMPLES

DETECTED SVOCs	SAMPLE AND LOCATION						NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB)
	2089-04 TB-4 @ 7.5'	2089-07 TB-7 @ 10'	2089-08 TB-8 @ 6.0'	2089-09 TB-9 @ 11.5'	2089-17 TB-17 @ 10.5'		
Naphthalene	6,790	766	--	--	--	--	200
Acenaphthene	--	431	--	--	--	--	400
Fluorene	--	584	--	--	--	--	1000
Phenanthrene	--	1,700	--	--	--	--	1000
Anthracene	--	--	--	--	--	--	1000
Pyrene	--	--	--	--	--	--	1000
<b>TOTAL SVOCs</b>	6,790	3,481	0	0	0	0	NA

DETECTED SVOCs	SAMPLE AND LOCATION						NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB)
	2089-03 TB-3 @ 9.0'	2089-06* TB-6 @ 11.0'	2089-06R** TB-6 @ 11.0'	2089-26 TB-26 @ 12.0'	2089-29 TB-29 @ 8.5'		
Naphthalene	--	--	--	--	--	--	200
Acenaphthene	--	--	--	--	--	--	400
Fluorene	--	--	--	--	--	--	1000
Phenanthrene	--	--	665	--	--	--	1000
Anthracene	--	--	--	--	--	--	1000
Pyrene	--	--	313	--	--	--	1000
<b>TOTAL SVOCs</b>	0	0*	978**	0	0	0	NA

-- = Not detected above reported laboratory detection limit value.

NA = Not available.

\* = Sample was analyzed at a high dilution factor; however constituents were not detected above analytical laboratory detection limits.

\*\* = Samples was re-analyzed.

TABLE 6

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

POLYCHLORINATED BIPHENYLS TEST RESULTS  
IN UG/KG OR PARTS PER BILLION (PPB)

SOIL SAMPLES

CONSTITUENTS	SAMPLE DESIGNATION AND LOCATION		NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVES (PPB)
	2089-06 (TB-6 @ 11')	2089-17 (TB-17 @ 10.5')	
PCBs	--	--	10

PCBs = Polychlorinated Biphenyls

-- = Not detected above reported laboratory detection limit value.

TABLE 7

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

TOTAL RCRA METALS TEST RESULTS  
IN MG/KG OR PARTS PER MILLION (PPM)

SOIL SAMPLES

DETECTED ANALYTES	SAMPLE AND LOCATION				NYSDEC TAGM 4046 TYPICAL BACKGROUND RANGES (PPM)	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)
	2089-05 TB-5 @ 3'	2089-11 TB-11 @ 2'	2089-14 TB-14 @ 2'	2089-25 TB-25 @ 3'		
Arsenic	3.8	--	4.12	10	3-12	7.5 or SB
Barium	69.8	43	78.5	85.1	15-600	300 or SB
Cadmium	--	--	--	--	0.1-1	1 or SB (10) <sup>1</sup>
Chromium	8.16	4.72	9.22	23.2	1.5-40	10 or SB (50) <sup>2</sup>
Lead	141	69.3	223	102	200-500	SB
Mercury	0.395	0.192	0.380	0.104	0.001-0.2	0.1
Selenium	--	1.07	--	--	0.1-3.9	2 or SB
Silver	--	--	--	--	NA	SB

-- Not detected above reported laboratory detection limit value.

NA Not available.

1 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for cadmium of 10 ppm

2 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for chromium of 50 ppm.

**TABLE 8**

**14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK**

**TOTAL PETROLEUM HYDROCARBONS (TPH)  
IN UG/L OR PARTS PER BILLION (PPB)**

**MAY 15 & 16, 2000 GROUNDWATER SAMPLES**

<b>SAMPLE LOCATION</b>	<b>SAMPLE DESIGNATION</b>	<b>TPH TEST RESULTS (PPB)</b>
<b>MW-1</b>	2089-W1-01	--
<b>MW-2</b>	2089-W2-01	--
<b>MW-3</b>	2089-W3-01	52 J - LW (mineral spirits)
<b>MW-4</b>	2089-W4-01	--
<b>MW-5</b>	2089-W5-01	--
<b>MW-6</b>	2089-W6-01	7,270 - LW (gasoline)
<b>MW-7</b>	2089-W7-01	316,000 - MW (diesel)
<b>MW-8</b>	2089-W8-01	10 J - LW (mineral spirits)
<b>MW-9</b>	2089-W9-01	--
<b>MW-10</b>	2089-W10-01	--
<b>MW-11</b>	2089-W11-01	34 J - LW (mineral spirits)

-- = Not detected above reported laboratory detection limit values.

J = Indicates an estimated value.

LW = Light Weight

MW = Medium Weight

HW = Heavy Weight

TABLE 9

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
IN UG/L OR PARTS PER BILLION (PPB)

MAY 15 & 16, 2000 GROUNDWATER SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION								NYSDEC TOGS I.1.1 GROUNDWATER STANDARDS AND GUIDANCE VALUES (PPB) (1)
	2089-W1-01 from MW-1	2089-W2-01 from MW-2	2089-W3-01 from MW-3	2089-W4-01 from MW-4	2089-W5-01 from MW-5	2089-W6-01 from MW-6			
Benzene	--	--	--	--	--	110			1
Ethylbenzene	--	--	--	--	--	1,400			5
Toluene	--	--	--	--	--	2,400			5
Total Xylenes	--	--	--	--	--	5,400			5
n-Propylbenzene	--	--	--	--	--	250			5
1,3,5-Trimethylbenzene	--	--	--	--	--	520			5
1,2,4-Trimethylbenzene	--	--	--	--	--	1,900			5
Naphthalene	--	--	--	--	--	140			10
Tetrachloroethene	17	--	--	--	--	--			5
<b>Total VOCs</b>	17	0	0	0	0	15,920			NA

DETECTED VOCs	SAMPLE AND LOCATION								NYSDEC TOGS I.1.1 GROUNDWATER STANDARDS AND GUIDANCE VALUES (PPB) (1)
	2089-W7-01 from MW-7	2089-W8-01 from MW-8	2089-W9-01 from MW-9	2089-W10-01 from MW-10	2089-W11-01 from MW-11				
Benzene	--	--	--	--	--	--			1
Ethylbenzene	--	--	--	--	--	--			5
Toluene	--	--	--	--	--	--			5
Total Xylenes	--	--	--	--	--	--			5
n-Propylbenzene	--	--	--	--	--	--			5
1,3,5-Trimethylbenzene	260	--	--	--	--	--			5
1,2,4-Trimethylbenzene	410	--	--	--	--	--			10
Naphthalene	--	--	--	--	--	--			5
Tetrachloroethene	--	--	--	--	--	--			5
<b>Total VOCs</b>	670	0	0	0	0	0			NA

-- = Not detected above reported laboratory detection limit value.

NA = Not available.

(1) = June 1998 Division of Water TOGS (1.1.1) Ambient Groundwater Standards and Guidance Values.

TABLE 10A

GROUNDWATER ELEVATION DATA FOR JUNE 23, 2000

14 – 60 Charlotte Street  
Rochester, New York

WELL ID	CURB BOX ELEVATION (FT)	ELEVATION OF PVC WELL CASING (FT)	STATIC WATER LEVEL (SWL) MEASUREMENT (FT)	GROUNDWATER ELEVATION (FT)
MW-1	100.93	100.65	7.54	93.11
MW-2	98.76	98.46	7.40	91.06
MW-3	98.79	98.51	7.65	90.86
MW-4	97.66	97.36	6.60	90.76
MW-5	97.60	97.41	6.65	90.76
MW-6	101.91	101.72	8.80	92.92
MW-7	100.49	100.10	7.97	92.13
MW-8	99.68	99.38	8.15	91.23
MW-9	98.75	99.38	7.43	91.95
MW-10	98.04	97.76	7.45	90.31
MW-11	97.91	97.64	6.95	90.69

NOTE: Elevations based on assumed Project Benchmark elevation of 100.00 feet  
SWL measurements were collected from the north side of the PVC well casing.

TABLE 10B

GROUNDWATER ELEVATION DATA FOR AUGUST 31, 2000

14 – 60 Charlotte Street  
Rochester, New York

WELL ID	CURB BOX ELEVATION (FT)	ELEVATION OF PVC WELL CASING (FT)	STATIC WATER LEVEL (SWL) MEASUREMENT (FT)	GROUNDWATER ELEVATION (FT)	DEPTH TO TOP OF FREE PRODUCT (FT)	FREE PRODUCT ELEVATION (FT)	FREE PRODUCT THICKNESS (FT)	(1)ADJUSTED GROUNDWATER ELEVATION (FT)
MW-1	100.93	100.65	8.06	92.59	---	---	---	---
MW-2	98.76	98.46	7.75	90.71	---	---	---	---
MW-3	98.79	98.51	8.00	90.51	---	---	---	---
MW-4	97.66	97.36	6.89	90.47	---	---	---	---
MW-5	97.60	97.41	6.92	90.49	---	---	---	---
MW-6	101.91	101.72	9.14	92.58	---	---	---	---
MW-7	100.49	100.10	9.76	90.34	7.83	92.27	1.93	93.81
MW-8	99.68	99.38	8.46	90.92	---	---	---	---
MW-9	98.75	99.38	7.75	91.63	---	---	---	---
MW-10	98.04	97.76	7.69	90.07	---	---	---	---
MW-11	97.91	97.64	7.20	90.44	---	---	---	---

NOTE: Elevations based on assumed Project Benchmark elevation of 100.00 feet

SWL and free oil product measurements were collected from the north side of the PVC well casing.

NC - Not Collected

(1) Adjusted Groundwater Elevation due to the presence of Free Oil Product = [Thickness of Product x Assumed Density of Product (0.9)] + Measured Groundwater Elevation

TABLE 10C

GROUNDWATER ELEVATION DATA FOR SEPTEMBER 14, 2000

14 – 60 Charlotte Street  
Rochester, New York

WELL ID	CURB BOX ELEVATION (FT)	ELEVATION OF PVC WELL CASING (FT)	STATIC WATER LEVEL (SWL) MEASUREMENT (FT)	GROUNDWATER ELEVATION (FT)	DEPTH TO TOP OF FREE PRODUCT (FT)	FREE PRODUCT ELEVATION (FT)	FREE PRODUCT THICKNESS (FT)	(1)ADJUSTED GROUNDWATER ELEVATION (FT)
MW-1	100.93	100.65	8.01	92.64	---	---	---	---
MW-2	98.76	98.46	7.86	90.60	---	---	---	---
MW-3	98.79	98.51	7.10	91.41	---	---	---	---
MW-4	97.66	97.36	7.03	90.33	---	---	---	---
MW-5	97.60	97.41	7.07	90.34	---	---	---	---
MW-6	101.91	101.72	9.32	92.40	---	---	---	---
MW-7	100.49	100.10	9.74	90.36	7.91	92.19	1.83	92.01
MW-8	99.68	99.38	8.58	90.80	---	---	---	---
MW-9	98.75	99.38	7.88	91.50	---	---	---	---
MW-10	98.04	97.76	7.76	90.00	---	---	---	---
MW-11	97.91	97.64	7.32	90.32	---	---	---	---
MW-12	99.67	99.32	7.60	91.72	---	---	---	---

NOTE: Elevations based on assumed Project Benchmark elevation of 100.00 feet

SWL and free oil product measurements were collected from the north side of the PVC well casing.

NC - Not Collected

(1) Adjusted Groundwater Elevation due to the presence of Free Oil Product = [Thickness of Product x Assumed Density of Product (0.9)] + Measured Groundwater Elevation

**TABLE 11**

**14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK**

**TOTAL PETROLEUM HYDROCARBONS (TPH)  
IN µg/L OR PARTS PER BILLION (PPB)**

**JULY 26, 2000 GROUNDWATER SAMPLES**

<b>SAMPLE LOCATION</b>	<b>SAMPLE DESIGNATION</b>	<b>TPH TEST RESULTS (µg/L or PPB)</b>
<b>MW-2</b>	MW-2-02	1,910 - MW (kerosene)
<b>MW-3</b>	MW-3-02	386 - LW (mineral spirits)
<b>MW-8</b>	MW-8-02	148 - LW (mineral spirits)
<b>MW-9</b>	MW-9-02	--

- = Not detected above reported laboratory detection limit values.
- J = Indicates an estimated value.
- LW = Light Weight
- MW = Medium Weight
- HW = Heavy Weight

TABLE 12

14-60 CHARLOTTE STREET  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
IN µg/L OR PARTS PER BILLION (PPB)

JULY 26, 2000 GROUNDWATER SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION				NYSDEC TOGS 1.1.1 GROUNDWATER STANDARDS AND GUIDANCE VALUES (µg/L or PPB) <sup>(1)</sup>
	MW-2-02 from MW-2	MW-3-02 from MW-3	MW-8-02 from MW-8	MW-9-02 from MW-9	
Benzene	--	--	14.8	--	1
Chlorobenzene	--	--	22.3	--	5
Ethylbenzene	--	--	37.5	--	5
Total Xylenes	--	--	65.5	--	5
n-Propylbenzene	2.63	--	--	--	5
1,3,5-Trimethylbenzene	6.61	2.88	23.4	--	5
1,2,4-Trimethylbenzene	14.1	8.52	59.0	--	5
sec-Butylbenzene	4.11	--	--	--	5
p-Isopropyltoluene	7.47	--	--	--	5
<b>Total VOCs</b>	34.92	11.4	222.5	0	NA

-- = Not detected above reported laboratory detection limit value.

NA = Not available.

(1) = June 1998 Division of Water TOGS (1.1.1) Ambient Groundwater Standards and Guidance Values.

**TABLE 13**

**HAAGS ALLEY  
ROCHESTER, NEW YORK**

**TOTAL PETROLEUM HYDROCARBONS (TPH)  
IN MG/KG OR PARTS PER BILLION (PPM)**

**AUGUST 10, 2000 SOIL SAMPLES**

SAMPLE DESIGNATION AND LOCATION	TPH TEST RESULTS (mg/kg or PPM)	
	TOTAL CONCENTRATION	CONCENTRATIONS BY HYDROCARBON WIEGHT
2089-H1 (B-1/MW-12 @ 7')	819	324 - LW (mineral spirits) 495 - MW (diesel)
2089-H2 (B-2 @ 8.5')	1,540	1,540 - LW (mineral spirits)
Local regulatory TPH Guidance Value <sup>(1)</sup>	500	500

- = Not detected above reported laboratory detection limit values.
- \* = Laboratory reported that TPH identified as "mineral spirits" could be "stoddard solvent".
- LW = Light Weight
- MW = Medium Weight
- (1) = Guidance value used by local regulatory agencies on similar sites in the Rochester, New York area that are being redeveloped for commercial purposes.

**TABLE 14**  
**HAAGS ALLEY**  
**ROCHESTER, NEW YORK**  
**SUMMARY OF DETECTED**  
**VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS**  
**IN UG/KG OR PARTS PER BILLION (PPB)**  
**AUGUST 10, 2000 SOIL SAMPLES**

DETECTED VOCs	SAMPLE AND LOCATION		NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (ug/kg or PPB) <sup>(1)</sup>
	2089-H1 from B-1/MW-12 @ 7'	2089-H2 from B-2 @ 8.5'	
n-Propylbenzene	--	2,330	100
1,3,5-Trimethylbenzene	--	3,530	100
1,2,4-Trimethylbenzene	--	20,600	100
sec-Butylbenzene	460	3,630	100
Isopropylbenzene	--	787	100
p-Isopropyltoluene	--	4,060	100
Naphthalene	1,720	--	200
<b>Total VOCs</b>	2,180	34,937	NA

-- = Not detected above reported laboratory detection limit value.

NA = Not available.

\* = Sample was analyzed at a high dilution factor; however, constituents were not detected above analytical laboratory detection limits.

(1) = NYSDEC TCLP Alternative Guidance Values as referenced in the August 1992 NYSDEC STARS Memo #1.

TABLE 15

HAAGS ALLEY RIGHT-OF-WAY  
ROCHESTER, NEW YORK

SUMMARY OF DETECTED  
VOLATILE ORGANIC COMPOUND (VOC) TEST RESULTS  
AND TOTAL PETROLEUM HYDROCARBONS (TPH)  
IN UG/L OR PARTS PER BILLION (PPB)

AUGUST 21, 2000 GROUNDWATER SAMPLE

DETECTED VOCs	SAMPLE MW-1-8-00 from MW-12	NYSDEC TOGS 1.1.1 GROUNDWATER STANDARDS AND GUIDANCE VALUES (µg/L or PPB) <sup>(1)</sup>
Benzene	2.13	1
Total Xylenes	3.32	5
Isopropylbenzene	5.03	5
n-Propylbenzene	4.84	5
1,3,5-Trimethylbenzene	22.4	5
1,2,4-Trimethylbenzene	124	5
sec-Butylbenzene	6.33	5
p-Isopropyltoluene	6.94	5
cis-1,2-Dichloroethene	62.6	5
Vinyl Chloride	30.8	2
<b>Total VOCs</b>	268.39	NA
<b>Total Petroleum Hydrocarbons (TPH)</b>	490-LW (gasoline)	NA

NA = Not available.

(1) = June 1998 Division of Water TOGS (1.1.1) Ambient Groundwater Standards and Guidance Values.

LW = Light Weight

**APPENDIX C**

**Geophysical Survey Results Report**

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MAR 21 2000

March 17, 2000  
6249

Mr. Jeff Danzinger  
Day Environmental, Inc.  
2144 Brighton-Henrietta Townline Road  
Rochester, New York 14623

**Subject: Geophysical Survey Results**  
Charlotte Street  
Rochester, New York

Dear Mr. Danzinger:

## 1.0 INTRODUCTION

This report presents the results of a geophysical investigation performed at a site located on the north side of Charlotte Street in Rochester, NY. The investigation area consisted of 9 grass, cement, and asphalt covered parcels totaling approximately 1.3 acres. The nine parcels are divided into four areas by chain link fence. On one of these areas there is a residential house. On another area there is a 1 story concrete block building. The remaining parcels are vacant. Historical information suggests that underground storage tanks (USTs) may be present in the investigation area. An electromagnetic (EM) survey was conducted at the site on March 14 and 15, 2000 to explore for the presence of potential USTs at the subject property.

The geophysical results presented herein are intended to serve as a guide to focus any future intrusive investigations, if warranted. Additional collaborative data is generally necessary to confirm geophysical anomalies suggestive of USTs.

## 2.0 METHODOLOGY

A reference grid was installed to facilitate data acquisition along lines spaced three feet apart. The grid was marked with orange and red spray paint, with select locations labeled relative to the adopted coordinate system. Grid coordinate 0N, 0E was established at the southwest corner of the site, in the center of the sidewalk bounding the north side of Charlotte Street. Grid east was taken as the direction parallel to Charlotte Street.

The survey area was investigated with the Geonics EM61 unit (EM61-HH), a high sensitivity, high resolution TDEM metal detector that can detect both ferrous and nonferrous metallic objects. This unit has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator and is interfaced to a digital data logger. The response of the EM61-HH is sampled and recorded at two time gates along the response decay curve. The data recorded at the two time gates allow for the discrimination of metal

Mr. Jeff Danzinger  
Day Environmental, Inc.  
March 17, 2000  
Page 2

targets based on different response decay rates. The decay rate of an object is related to size, shape, material, and orientation. The early time gate detects targets with both short and long decay rates (small, medium and large targets) and the late time gate detects targets with a longer decay rate (larger targets). The EM61 HH data were collected along lines spaced 3 feet apart.

### 3.0 RESULTS

The EM61 data are presented in Figure 1. The color bar to the right of the map indicates the colors associated with the respective measured values. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 20 mVolts) likely contain buried metals. These areas are depicted in shades of light blue through purple on the figure.

A portion of the survey area was surfaced with concrete. The instrument response within this concrete area strongly suggests that the concrete is reinforced with metal screen or rod. It is not possible to make interpretations concerning the presence or absence of USTs beneath this reinforced pad. The remainder of the survey area contained numerous buried metal anomalies. Anomalies interpreted to be significant, relative to the objective of this investigation, are alphabetically labeled on the figure and discussed below. It is possible that any of the additional above background responses may be related to a UST, however, it is more likely that they are associated with minor amounts of buried metals. Linear anomalies are denoted with dashed white lines in Figure 1.

The following anomaly specific discussion is referenced to the Electromagnetic data shown in Figure 1.

#### **Lot 36.1 and Lot 39 - Anomalies A, B, C, D, E, F, G and H**

Anomalies A, B, C, D, E, F, G and H are buried metal anomalies located in Lot 36.1 and Lot 39. These anomalies are characterized by a high electromagnetic response and are shown in shades of red on Figure 1. Anomaly A is located in the area identified by Day as potentially containing two 500 gallon USTs. Anomaly B is located near an approximate 4 inch diameter pipe that was observed to protrude from the ground approximately 1 ft. Anomaly D is near the area identified by Day as being the suspect location of one 1000 gallon UST. There is an electrical service structure consisting of a mounted electric circuit breaker between anomalies E and F. Anomalies A, B, C, D, E, F, G, and H may represent USTs or other buried metals.

#### **Lot 40 and Lot 41 - Anomalies I and J**

Anomalies I and J are buried metal anomalies located in Lot 40 and 41. These anomalies are

Mr. Jeff Danzinger  
Day Environmental, Inc.  
March 17, 2000  
Page 3

characterized by a high electromagnetic response and are shown in shades of red on Figure 1. These anomalies may represent USTs or other buried metals.

#### **Lot 42 and Lot 43 - Anomalies K, L, M, and S**

Anomalies K, L, M, and S are buried metal anomalies located in Lots 42 and 43. These anomalies are characterized by a high electromagnetic response and are shown in shades of red on Figure 1. Several surface features suggestive of UST appurtenances are observed immediately north of Anomaly K. Anomaly L consists of a group of 3 small anomalies and is identified as potentially significant due to the proximity of an approximately 4 inch pipe that was observed in this area. Anomaly S is located within a 1 story concrete block building. The concrete floor in the area of Anomaly S appeared to be patched. Anomalies K, L, M, and S may represent USTs or other buried metals.

#### **Lot 44, 45, and 46 - Anomalies N, O, P, Q, and R**

Anomalies N, O, P, Q, and R are buried metal anomalies located in Lots 44, 45, and 46. These anomalies are characterized by a high electromagnetic response and are shown in shades of red on Figure 1. A linear anomaly, identified with a dashed white line on the figure, may be associated with Anomalies N, O, and/or P. Anomalies N, O, P, Q, and R may represent USTs or other buried metals.

### **4.0 LIMITATIONS**

The geophysical methods used during this survey are established, indirect techniques for non-invasive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. All geophysical methods utilize interpretative techniques which can be significantly impacted by varying site conditions. Anomalies can only be identified if they show recognizable patterns against data representative of background or natural conditions. Therefore, where possible, confirmation of any geophysical anomalies identified or interpreted should be sought through the use of historical aerial photography, test pit and/or borehole information.

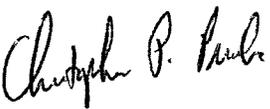
### **5.0 CONCLUSIONS**

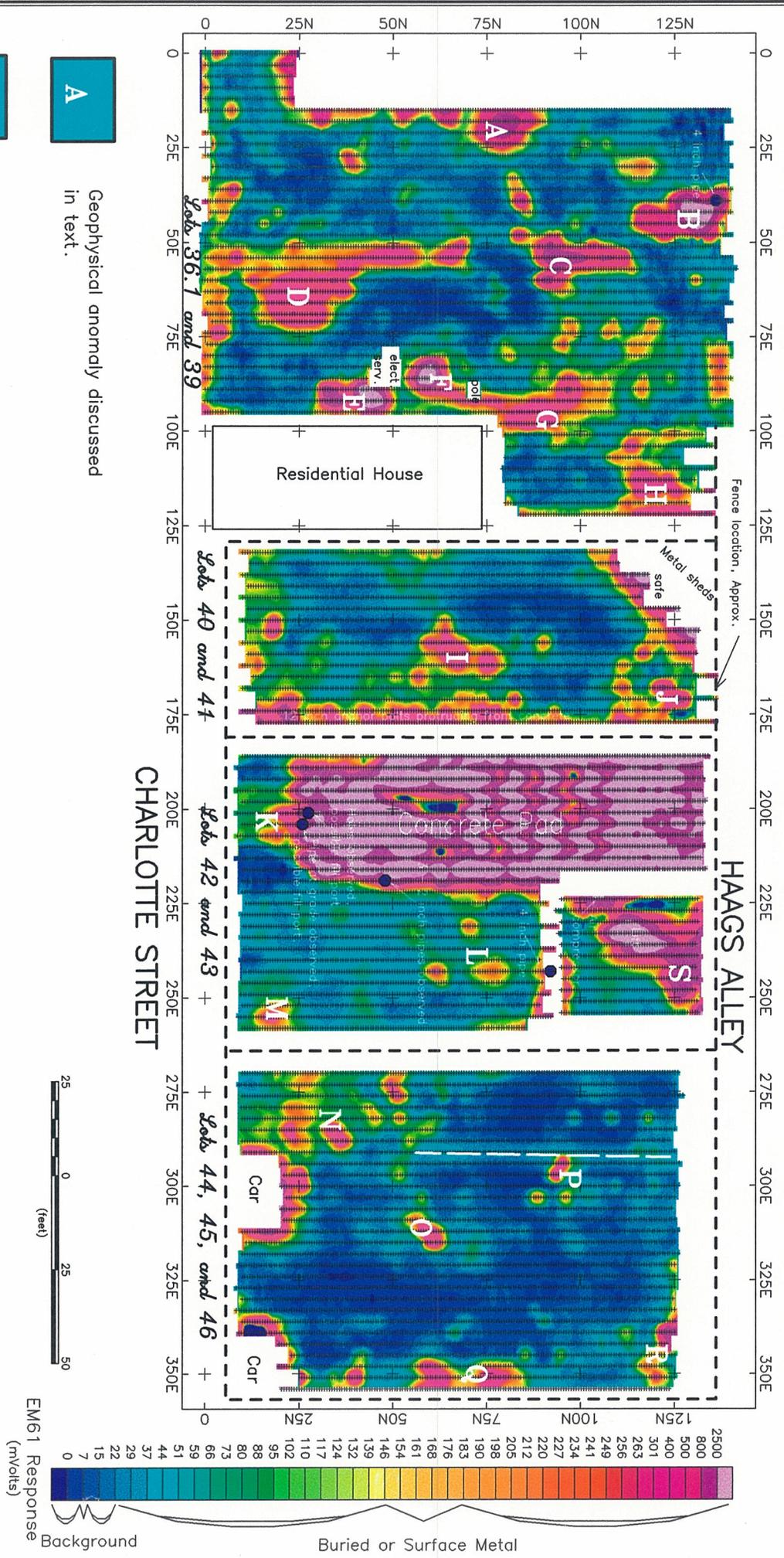
The geophysical investigation at the Charlotte Avenue site in Rochester, NY appears to have been successful at mapping the distribution of buried metals. A total of 19 buried metal anomalies were identified and may potentially represent USTs. These anomalies are labeled Anomalies A through S on Figure 1. It is possible that any of the additional above background responses may be indicative of USTs however it is believed that they are more likely related to miscellaneous buried or surface metal.

Mr. Jeff Danzinger  
Day Environmental, Inc.  
March 17, 2000  
Page 4

We trust the information contained in this report is sufficient for your present needs. Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,  
GEOMATRIX CONSULTANTS, INC.

  
 John Luttinger  
Project Geophysicist



**A**

Geophysical anomaly discussed in text.

**Interpreted linear anomaly**

Geophysical measurement point. 3 ft line spacing, 0.67 ft measurement spacing

Grid North

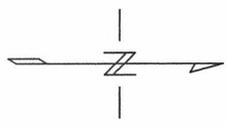


Figure 1

Geophysical Survey Results  
Color Contours of EM61 Data  
(mVolts)

Charlotte Street Site  
Rochester, NY  
Day Environmental, Inc.  
Geomatrix (716) 565-0624

**APPENDIX D**

**Test Pit Logs, Test Boring Logs and Monitoring Well Logs**

**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: B**

**Project No:** 2089S-99

**Project:** Subsurface Investigation

**Location:** 14-60 Charlotte Street

**Date:** 3/30/00

**Test Pit Depth:** 5.0 feet

**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.

**Excavation Equipment:** Case 580K Extendahoe

**Equipment Reach:** Approximately 13 feet

**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.1 0.3 0.6	Brown and black Sand, Silt, Gravel, Brick, Cobbles, Metal, Ash, damp (FILL).		Encounter metal flange @ 12" BG. Excavate around and uncover tank. PID inside tank = 795 ppm.
2	0.1 0.1	Brown Silty SAND, some Gravel, trace Clay, damp.		
3	0.0 0.1	Brown Silty SAND and GRAVEL, occasional Cobbles, moist.		No visible staining.
4	0.1 0.0 0.1			
5		Bottom of Test Pit		
6				
7				
8				
9				
10				
11				
12				
13				
14				
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19				
20				
21				

**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: C**

**Project No:** 2089S-99

**Project:** Subsurface Investigation

**Location:** 14-60 Charlotte Street

**Date:** 3/30/00

**Test Pit Depth:** 5.0 feet

**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.

**Excavation Equipment:** Case 580K Extendahoe

**Equipment Reach:** Approximately 13 feet

**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
0.0	0.0	Brown Sand, Silt, Gravel, Brick, Wood, Ash, damp (FILL).		3 metal sewer pipes @ 1' BG.
1	0.0			
0.1	0.0			
2	0.0	Reddish brown Silty SAND and GRAVEL, moist.		No unusual odors
0.1	0.0			
0.0	0.0			
3	0.0	...Cobbles, trace Clay, moist.		
0.0	0.0			
0.1	0.0			
4	0.0	Bottom of Test Pit		
0.1				
0.0				
5				
6				
7				
8				
9				
10				
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12				
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**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: D**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 6.0 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Brown Sand, Silt, Gravel, Brick, Metal, Ash, Wood, damp (FILL).		Large amount of metal pieces.
	0.1			
2	0.0			
	0.0			
3	0.0	Reddish brown Silty SAND and GRAVEL, trace Clay, moist.		No unusual staining.
	0.1			
4	0.1			
	0.0			
5	0.0	Bottom of Test Pit		
	0.1			
6	0.0			
7				
8				
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21				

**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: G**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.0 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE					West Side of Foundation Remarks	East Side of Foundation Remarks
Depth	Peak PID/FID Reading (ppm)	West Side of Foundation Description	East Side of Foundation Description	Sample Number		
1	0.0	Brown Sand, Silt, Gravel, Ash, Brick, Metal Pipe, Pipe Wrap, Clay Tile, moist (FILL).	Black Sand, Gravel, Asphalt, Brick, Ash, moist (FILL).		Metal heat pipe and sewer pipe at 1.5'	Metal cooking pan at 3.0'
2	0.0		Tan Sand, Silt, Gravel, Brick, Ash, Moist (FILL).			
3	0.0	Brown Silty SAND and GRAVEL, trace Clay, moist. ...Cobbles	Brown Silty SAND and GRAVEL, some Clay, Roots, moist.			
4	0.0		...Cobbles			
5	0.0	Bottom of test pit				Bottom of Test Pit
6						
7						
8						
9						
10						
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12						
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14						
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20						
21						

**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: I**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 6.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.1	Dark brown Sand, Gravel, Brick, Ash, Roots, damp (FILL).		
2	0.1			
2	0.0	Tan Sand, Gravel, Brick, Metal, Wood, Boulders, Fabric, Plastic, damp (FILL).		Hot water tank @ 2' BG.
3	0.0			
4	0.0			
5	0.1			
5	0.1			
6	0.0	Concrete Slab.		Apparent former basement floor.
6	0.0	Reddish brown Silty SAND and GRAVEL, trace Clay, moist.		
7		Bottom of Test Pit		
8				
9				
10				
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**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: J**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Brown Sand, Gravel, Wood, Silt, Clay, Metal, Ash, Boulders, damp (FILL).		16"x24" metal plate (1" thick) @ 1.5' BG.
	0.0			
2	0.0			
3	0.0			
	0.1	Reddish brown Silty SAND and GRAVEL, trace Clay, moist.		
4	0.0			
5	0.0			
6		Bottom of Test Pit		
7				
8				
9				
10				
11				
12				
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14				
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16				
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19				
20				
21				

**Day Environmental, Inc.**  
**2144 Brighton-Henrietta T.L. Rd.**  
**Rochester, New York 14623**

**TEST PIT NO.: K**

**Project No:** 2089S-99

**Project:** Subsurface Investigation

**Location:** 14-60 Charlotte Street

**Date:** 3/30/00

**Test Pit Depth:** 4.5 feet

**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.

**Excavation Equipment:** Case 580K Extendahoe

**Equipment Reach:** Approximately 13 feet

**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Concrete		Two 4" diameter sanitary clean-outs. 3" diameter pipe with vinyl tape comes up along footing, goes under and toward street.
	0.1	Brown Sand, Gravel, Silt, Brick, Plastic, Metal, Wood, Ash, damp (FILL).		
	0.3			
2	0.1	Pipes connect to sewer.		
	0.1			
	0.2			
3	0.1	Metal bucket (5 gallon) under footing.		
	0.1			
	0.1			
4		Bottom of Test Pit		
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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16				
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20				
21				

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**TEST PIT NO.: L**

**Project No:** 2089S-99

**Project:** Subsurface Investigation

**Location:** 14-60 Charlotte Street

**Date:** 3/30/00

**Test Pit Depth:** 5.0 feet

**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.

**Excavation Equipment:** Case 580K Extendahoe

**Equipment Reach:** Approximately 13 feet

**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Sample Number	Remarks
Depth	Peak PID/FID Reading (ppm)	Description			
0.0		Asphalt, Cinders, Ash, damp (FILL).		Four pieces of 3"x3"x12" angle iron @ 3' BG. 2" metal pipe @ 3' BG - appears to go into building at former natural gas pipe	
1	0.1	Brown Sand, Gravel, Silt, Brick, Metal, Wood, moist (FILL).			
	0.1				
2	0.2				
3	0.0				
4	0.0				
5	0.0				
6		Bottom of Test Pit			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

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**TEST PIT NO.: M**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
0.0		Asphalt		Small pieces of metal intermixed.
1	0.0	Brown Sand, Brick, Gravel, Roots, Silt, Wood, damp (FILL).		
2	0.1			
3	0.0			
4	0.0			Apparent former basement floor.
4	0.1			
5	0.0	----- Concrete slab.		
5	0.0	Tan Silty SAND and GRAVEL, trace Clay, moist.		
6		Bottom of Test Pit		
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				

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**TEST PIT NO.: N**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.0 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Sample Number	Remarks
Depth	Peak PID/FID Reading (ppm)	Description			
1	0.0	Dark brown Sand, Gravel, Cinders, Roots, damp (FILL).		4" diameter x 5' long metal pipe.  Apparent former basement floor.	
	0.1	Tan/beige Sand, Gravel, Brick, Ash, Plaster, Concrete, damp (FILL).			
2	0.1				
	0.0				
	0.2				
3	0.1				
	0.1				
4	0.0	Concrete Slab.			
	0.0	Brown Silty SAND and GRAVEL, trace Clay, moist.			
5	0.0				
		Bottom of Test Pit			
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

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**TEST PIT NO.: O**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Sample Number	Remarks
Depth	Peak PID/FID Reading (ppm)	Description			
0.0	0.0	Brown Sand, Silt, Gravel, Brick, Ash, Metal, Ceramic, damp (FILL).		Angle iron.	
1	0.0				
2	0.0				
3	0.1				
4	0.0	Tan Silty SAND and GRAVEL, trace Clay, moist.			
5	0.0				
6	0.1				
6	0.0	Bottom of Test Pit			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

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**TEST PIT NO.: P**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Sample Number	Remarks
Depth	Peak PID/FID Reading (ppm)	Description			
0.0	0.0	Black Sand, Gravel, Cinders, Ash, Silt, damp (FILL).		4" diameter x 5' long sewer pipe with 2 fittings at 2' BG.	
1	0.0				
2	0.0	Tan Sand, Silt, Gravel, Brick, Ash, Roots, Metal, moist (FILL).			
3	0.0				
4	0.1				
5	0.1				
5	0.0				
5	0.1	Tan Silty SAND and GRAVEL, some Clay, moist, mottled.			
5	0.1				
6		Bottom of Test Pit			
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					

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**TEST PIT NO.: Q**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
0.0	0.0	Brown Sand, Silt, Gravel, Brick, Metal, Wood, Boulders, Roots, damp (FILL).		Pieces of 1" metal pipe at 2'-3' BG.
1	0.0			
2	0.1			
3	0.0			
4	0.0	Tan Silty SAND and GRAVEL, trace Clay, moist.		
5	0.0			
6	0.0			
6		Bottom of Test Pit		
7				
8				
9				
10				
11				
12				
13				
14				
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17				
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20				
21				

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**TEST PIT NO.: R**

**Project No:** 2089S-99  
**Project:** Subsurface Investigation  
**Location:** 14-60 Charlotte Street  
**Date:** 3/30/00  
**Test Pit Depth:** 5.5 feet  
**Depth to Water:** NA

**Excavation Contractor:** Arrow Contracting, Inc.  
**Excavation Equipment:** Case 580K Extendahoe  
**Equipment Reach:** Approximately 13 feet  
**DAY Representative:** J. Dorety

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Brown and red Sand, Silt, Gravel, Brick, Concrete slabs (reinforced), Wood, Roots, damp (FILL).		1" metal pipe 2' long at 1.5' BG.
	0.0			
	0.1			
2	0.3			
	0.1			
3	0.0	Reddish brown Silty SAND and GRAVEL, trace Clay, moist.		
	0.0			
	0.1			
4	0.0			
	0.0			
5	0.0	Bottom of Test Pit		
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				



**Day Environmental, Inc.**  
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**BORING NUMBER: TB-1**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.5 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.3		Black Sand, Gravel, Asphalt, Silt, Brick, damp (FILL).
2	NA	SS-1	0-4	80	NA	0.1 0.1		Brown Sand, Silt, Gravel, Brick, Glass, Ash, Organics, damp (FILL).
3						0.1		
4								
5						0.1		
6		SS-2	4-8	95		0.2 0.2		Brown Silty SAND, some fine Gravel, trace Clay, Rock fragments, moist.
7						0.3		
8		SS-3	8-8.5	20		0.1 0.5		
9								Refusal at 8.5'.
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-2 (MW-1)**

**Project:** Phase II Study

**DAY Representative:** J. Joseph Dorety

**Drilling Contractor:** Zebra Environmental

**Drilling Rig:** Track-mounted Geoprobe

**Sampling Method:** Direct Push

**Completion Method:** 1¼" ID PVC well

**Project No:** 2089S-99

**Boring Location:** Refer to Site Plan

**Top of Ledge:** 100.65'

**Start Date:** 4/18/00

**Borehole Diameter:** 2¼"

**Water Level:** 8.5 feet

**Datum:** 100.00'

**Completion Date:** 4/18/00

**Borehole Depth:** 9.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown Sand, Silt, Gravel, Glass, Ash, Brick, damp (FILL).
2	NA	SS-1	0-4	70	NA	0.2		Brown Silty SAND, some Gravel, trace Clay, damp.
3						0.2		
4						0.2		
5						0.2		
6		SS-2	4-8	60		0.3		... moist at 6'.
7						0.3		... seam of Gravel.
8						0.2		
9		SS-3	8-9.5	20		0.3		... wet at 8.5', Rock fragments.
10						0.4		
11						0.5		
12								Refusal at 9.5'.
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-3**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 9.0 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown Sand, Silt, Gravel, Brick, Ash, damp (FILL).
2	NA	SS-1	0-4	70	NA	0.3		
3						0.2		
4						0.2		
5						0.3		Brown Silty SAND, some Gravel, trace Clay, moist.
6		SS-2	4-8	80		0.2		
7						0.4		
8						0.5		... Rock fragments, moist. Volatile-type odor.
9		SS-3	8-9	30		0.5		
10						1.9		Refusal at 9'.
11						88.2		
12						215		
13								
14								
15								
16								
17								
18								
19								
20								

**Day Environmental, Inc.**  
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**BORING NUMBER: TB-4**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.0 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						2.4		Brown Sand, Silt, Gravel, Brick, Ash, Glass, Dry (FILL).
2	NA	SS-1	0-4	60	NA	2.8		Brown Sand, Silt, Gravel, Clay, Ash, Organics, Damp, (FILL).
3						3.0		
4								
5						7.2		
6		SS-2	4-8	90		6.7		Brown Silty SAND, some Gravel, trace Clay, Rock Fragments, Moist. Strong Petroleum type odors, Visible Sheen.
7						10.5		
8						3.6		
9						2.1		
10		SS-3	8-11	85		2.2		
11						1168		
12						1769		
13								Refusal at 11'.
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-5**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.0 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** 10.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown Sand, Silt, Gravel, Brick, Ash, Damp (FILL).
2	NA	SS-1	0-4	50	NA	11.8		
3						0.3		
4						14.5		
5						.6		Brown-Red Silty SAND, damp to moist.
6		SS-2	4-8	85		.9		
7						1.1		
8						.9		moist.
9						.4		wet.
10		SS-3	8-11	70		.2		
11						.1		
12								Refusal at 11'.
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-6**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 10.0 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** 8.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown Sand, Silt, Gravel, Ash, moist (FILL).
2	NA	SS-1	0-4	30	NA	0.2		
3						0.2		
4								
5						0.1		Brown silty SAND, some Gravel, trace Clay, moist (FILL).
6		SS-2	4-8	60		0.2		
7						0.2		
8						0.1		
9		SS-3	8-10	70		0.1		Brick, Ash, dark staining, strong weathered petroleum type odor, wet with sheen.
10						16.5		
						6.1		Refusal at 10'.
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-7**

**Project:** Phase II Study  
**DAY Representative:** J. Joseph Dorety  
**Drilling Contractor:** Zebra Environmental  
**Drilling Rig:** Track-mounted Geoprobe  
**Sampling Method:** Direct Push  
**Completion Method:** Backfill with soil cuttings

**Project No:** 2089S-99  
**Boring Location:** Refer to Site Plan  
**Ground Surface Elevation:** NA      **Datum:** NA  
**Start Date:** 4/18/00      **Completion Date:** 4/18/00  
**Borehole Diameter:** 2¼"      **Borehole Depth:** 11.0 feet  
**Water Level:** 10.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	90	NA	0.1		Brown Sand, Silt, Gravel, Brick, Ash, damp (FILL).
2						0.1		
3						0.2		
4						0.1		
5	0.1	SS-2	4-8	75	0.1	Brown SAND, some Silt, trace Clay, moist.		
6	0.1							
7	0.0							
8	0.1							
9	SS-3	8-11	80	80	1.3	Gray staining at 10' with petroleum odor, wet, slight sheen.		
10					18.6			
11					101			
12					16.9			
13							Refusal at 11'.	
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-8**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.5 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown Sand, Silt, Gravel, Brick, Ash, damp (FILL).
2	NA	SS-1	0-4	60	NA	0.1		
3						0.1		
4						0.1		
5						0.8		Reddish brown Silty SAND, some Gravel, trace Clay, moist. Slight gray staining, strong volatile-type odor.
6		SS-2	4-8	70		3.7		
7						16.8		
8						12.4		
8		SS-3	8-8.5	40		6.1		... Rock fragments Volatile-type odors diminishing.
8						5.6 4.4		
9								Refusal at 8.5'.
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-9**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.8 feet

**Completion Method:** Backfill with soil cuttings

**Water Level:** 11.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Dark brown to black Sand, Silt, Gravel, Brick, Ash, damp (FILL).
2	NA	SS-1	0-4	45	NA	0.0		
3						0.1		
4						0.1		
5						0.1		Brown silty SAND, some Gravel, trace Clay, moist.  ... Seam of Gravel at 7'.  ... Rock fragments.  ... Black staining, strong petroleum type odor.  ... Wet, visible sheen.
6		SS-2	4-8	80		0.1		
7						0.1		
8						0.1		
9						42.5		Refusal at 11.8'.
10		SS-3	8-11.8	75		54.9		
11						179.0		
12						77.6		
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-10 (MW-2)**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Top of Ledge:** 98.46'

**Datum:** 100.00'

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.5 feet

**Completion Method:** 1¼" ID PVC well

**Water Level:** 9.5feet

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	50	NA	0.4		Dark brown Sand, Silt, Gravel, Wood, Glass, Ash, damp (FILL).
2						0.2		
3						0.4		
4						0.1		
5	SS-2	4-8	60	60		0.2		Brown silty SAND, some Gravel, Rock fragments, moist.
6						0.1		
7						0.1		
8						0.1		
9	SS-3	8-11.5	60	60		0.1		Dark staining and weathered petroleum type odor begins at 9.5'.  ... Fractured Rock, Wet
10						0.3		
11						3.4		
11.5						9.1		
12						8.3		Refusal at 11.5'.
13								
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20								

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**BORING NUMBER: TB-11**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** 7.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	65	NA	0.6		Black Asphalt, Ash, Stone, Gravel, Sand, dry (FILL).
2						1.0		Brown Sand, Silt, Light Gravel, Ash, dry (FILL).
3						0.4		
4						1.2		Brown Sand, Silt, trace Clay, damp (FILL).
5	SS-2	4-8	4-8	90		0.3		Brown Sand, Silt, Gravel, Ash, dry to wet (FILL).
6						0.6		
7						0.7		
8						0.6		2" layer of Gravel at 7.0'.
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								Refusal at 8.0'.

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**BORING NUMBER: TB-12**

**Project:** Phase II Study  
**DAY Representative:** J. Joseph Dorety  
**Drilling Contractor:** Zebra Environmental  
**Drilling Rig:** Track-mounted Geoprobe  
**Sampling Method:** Direct Push  
**Completion Method:** Backfilled with soil cuttings

**Project No:** 2089S-99  
**Boring Location:** Refer to Site Plan  
**Ground Surface Elevation:** NA      **Datum:** NA  
**Start Date:** 4/18/00      **Completion Date:** 4/18/00  
**Borehole Diameter:** 2¼"      **Borehole Depth:** 9.0 feet  
**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Black Asphalt, Gravel, Ash, dry (FILL).
2	NA	SS-1	0-4	60	NA	2.4		3" layer of Rock fragments, dry (FILL).
3						2.1		Brown Sand, Silt, Gravel, trace Clay, damp (FILL).
4						3.6		
5						0.4		Red Brick, Sand, Silt, damp (FILL).
6		SS-2	4-8	60		0.5		Black Ash, Gravel, Sand, Silt, Organics (FILL).
7						4.2		Gray Silty SAND and GRAVEL, Rock fragments, damp.
8						4.0		
9		SS-3	8-9	40		0.1		Brown Silty SAND and GRAVEL, moist.
10						0.3		
11						1.0		
12								Refusal at 9'.
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-13**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 9.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						2.8		Gray Sand, Gravel, Ash, Coal, Rock fragments (FILL).
2	NA	SS-1	0-4	55	NA	2.0		
3						2.5		
4						2.2		
5						0.3		Brown Sand, Silt, trace Clay, Gravel, Rock fragments, Ash, damp (FILL). Weathered rock.
6		SS-2	4-8	70		1.0		
7						1.0		
8						0.7		
9		SS-3	8-9	80		0.3		Refusal at 9'.
						2.2		
						1.2		
10								
11								
12								
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20								

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**BORING NUMBER: TB-14 (MW-3)**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Top of Ledger:** 98.51'

**Datum:** 100.00'

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 12.0 feet

**Completion Method:** 1¼" ID PVC well

**Water Level:** 11.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						16.2		Gray Sand, Silt, Gravel, dry (FILL).
2	NA	SS-1	0-4	60	NA	10.6		Dark Brown Silty SAND, some Gravel, Rock fragments, moist.
3						4.6		
4						2.7		
5						0.8		
6		SS-2	4-8	70		1.4		Light Brown Silty SAND, trace Clay, small weathered Rocks, moist.
7						0.6		
8						0.4		
9						0.2		
10		SS-3	8-12	90		4.0		
11						3.5		
12						340		Gray and black Silty SAND, Rock fragments, moist to wet.
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-15**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description	
1						0.0		Brown to Black Sand, Silt, Gravel, Ash, Brick, Coal, damp (FILL).	
2	NA	SS-1	0-4	80	NA	0.0			
3						0.0			
4						0.0			
5						0.0			
6		SS-2	4-8	40		0.0			
7						0.0			
8									Brown Silty SAND, some Gravel, Rock fragments, damp.
9									Refusal at 8.0'.
10									
11									
12									
13									
14									
15									
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17									
18									
19									
20									

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**BORING NUMBER: TB-16**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.5 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	60	NA	7.6		Brown Sand, Silt, Gravel, Brick, Ash, Cinders, Coal, damp (FILL).
2						3.9		
3						0.6		
4						0.5		
5	SS-2	4-8	90	9.3		0.7		
6				2.4				
7				0.6				
8				0.8				
8	SS-3	8-8.5	5	0.1		0.1	Light Brown Silty SAND and GRAVEL, trace Clay, damp to moist.	
9								
10								
11								
12							Refusal at 8.5'.	
13								
14								
15								
16								
17								
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19								
20								

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**BORING NUMBER: TB-17**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 12.5 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** 10.0

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	50	NA	0.1		Brown to Black Sand, Silt, Gravel, Coal, Cinders, Brick, damp (FILL).
2						0.1		
3						0.1		
4						0.1		
5		SS-2	4-8	85		0.1		Brown Silty SAND and GRAVEL, trace Clay, moist.
6						0.1		
7						0.1		
8						0.1		
9	SS-3	8-12	60			851		Layer of Gravel, Black staining. Strong petroleum type odor, oil globules, wet, sheen visible.
10						522		
11						166		
12		SS-4	12-12.5	10				Fractured rock.
13								Refusal at 12.5'.
14								
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**BORING NUMBER: TB-18**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** 9.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	65	NA	0.1		Brown and Black Sand, Gravel, Silt, Ash, Cinders, damp (FILL).
2						0.2		Brown and Gray Sand, Silt, Gravel, Ash, moist (FILL).
3						0.1		
4						0.1		
5	SS-2	4-8	80	80		0.1		Brown Silty SAND and GRAVEL, trace Clay, Roots, Wood, moist.
6						0.1		
7						0.1		
8						0.1		
9	SS-3	8-11	50	50		366		Gray SAND, Silt, Rock fragments, Gravel Wet, petroleum type odor.
10						493		
11						103		
12								Refusal at 11'.
13								
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**BORING NUMBER: TB-19**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorey

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** 9.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.2		Black-Brown Sand, Silt, Gravel, Roots, Coal, damp (FILL).
2	NA	SS-1	0-4	65	NA	0.4 0.1		Brown Silty Sand, Ash, Gravel, damp to moist (FILL).
3						0.1		
4						0.1		
5						0.1		
6		SS-2	4-8	70		0.1		
7						0.1		
8						0.1		
9						10.1		
10		SS-3	8-11	40		0.1 0.2 422		Gray Rock fragments, GRAVEL, SILT. Petroleum type odor, wet.
11								Refusal at 11'.
12								
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20								

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**BORING NUMBER: TB-20**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	80	NA	6.0		Brown-Black Sand, Silt, Gravel, Ash, Slate, Coal, Rock fragments, damp (FILL).
2						0.1		Brown, SAND, SILT and GRAVEL, damp.
3						0.3		
4						0.1		
5		SS-2	4-8	70		0.1		Refusal at 8.0'.
6						0.1		
7						0.1		
8						0.1		
9								
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**BORING NUMBER: TB-21**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorey

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt, fine Gravel, Roots, damp (TOPSOIL).
2	NA	SS-1	0-4	50	NA	0.0		seam of organics.
3						0.0		Reddish brown Sand, Brick, Gravel, Ash, Silt, damp (FILL).
4						0.0		
5						0.0		Brown Silty SAND and GRAVEL, trace Clay, moist.
6		SS-2	4-8	50		0.0		
7						0.0		... Rock fragments.
8								Refusal at 8.0'.
9								
10								
11								
12								
13								
14								
15								
16								
17								
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19								
20								

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**BORING NUMBER: TB-22**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 8.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown and black Sand, Silt, Gravel, Brick, Ash, Metal, damp (FILL).
2	NA	SS-1	0-4	60	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown Silty SAND and GRAVEL, trace Clay, Rock fragments, moist.
6		SS-2	4-8	30		0.0		
7						0.0		
8								Refusal at 8.0'.
9								
10								
11								
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20								

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**BORING NUMBER: TB-23 (MW-4)**

**Project:** Phase II Study  
**DAY Representative:** J. Joseph Dorety  
**Drilling Contractor:** Zebra Environmental  
**Drilling Rig:** Track-mounted Geoprobe  
**Sampling Method:** Direct Push  
**Completion Method:** 1¼" ID PVC well

**Project No:** 2089S-99  
**Boring Location:** Refer to Site Plan  
**Top of Ledge:** 97.36' **Datum:** 100.00'  
**Start Date:** 4/19/00 **Completion Date:** 4/19/00  
**Borehole Diameter:** 2¼" **Borehole Depth:** 8.5 feet  
**Water Level:** 8.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Gravel, Silt, Brick, Ash, Organics, damp (FILL).
2	NA	SS-1	0-4	75	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown Silty SAND and GRAVEL, trace Clay, moist, mottled.
6		SS-2	4-8	95		0.0		
7						0.6		
8		SS-3	8-8.5	20		1.9		Slow PID rise at 8.5'.
9								Refusal at 8.5'.
10								
11								
12								
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**BORING NUMBER: TB-24 (MW-5)**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Top of Ledge:** 97.41'

**Datum:** 100.00'

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2 1/4"

**Borehole Depth:** 9.3 feet

**Completion Method:** 1 1/4" ID PVC well

**Water Level:** 8.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown reworked Sand, Silt, Gravel, Clay, Brick, Ash, Roots, damp (FILL).
2	NA	SS-1	0-4	65	NA	0.3		
3						0.3		
4						0.4		
5						0.2		Reddish brown Silty SAND and GRAVEL, trace Clay, Rock fragments.
6		SS-2	4-8	75		0.1		
7						0.3		
8						0.9		
9		SS-3	8-9.3	30		2.2		... weathered Rock, Volatile-type odor.
9						0.6		
10						5.3		Refusal at 9.3'.
10						62.8		
11								
12								
13								
14								
15								
16								
17								
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19								
20								

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**BORING NUMBER: TB-25**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 7.5 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.1		Brown and black Sand, Silt, Gravel, Coal, Ash, Slag, moist (FILL).
2	NA	SS-1	0-4	60	NA	0.1		
3						9.8		
4						12.0		
5						1.0		Slight petroleum type odor.
6		SS-2	4-7.5	60		0.1		
7						0.3		
8						0.3		Brown Silty SAND and GRAVEL, trace Clay, moist.
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								... Rock fragments.
								Refusal at 7.5'.

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**BORING NUMBER: TB-26**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 12.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** 11.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt, Gravel, Brick, Cinders, Coal, Ash, damp (FILL).
2	NA	SS-1	0-4	75	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown Silty SAND and GRAVEL, moist.
6		SS-2	4-8	80		0.0		
7						0.0		
8						0.0		
9						0.0		Gray to Black, Silty SAND and GRAVEL, Dark Staining. Petroleum type odor.
10		SS-3	8-12	60		85.0		
11						600.0		
12								
13								Refusal at 12'.
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-27**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/18/00

**Completion Date:** 4/18/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 10.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Silty Sand, Gravel, Quartz, trace Clay, damp (FILL).
2	NA	SS-1	0-4	60	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown Silty SAND and GRAVEL, trace Clay, damp.  some Rock fragments.
6		SS-2	4-8	60		0.0		
7						0.0		
8						0.0		
9		SS-3	8-10	50		0.0		Refusal at 10'.
10						0.0		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-28**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 11.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown and Black Sand, Silt, Gravel, trace Clay, Brick, Ash, damp (FILL).
2	NA	SS-1	0-4	90	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Gray Gravel, Sand, Silt, damp (FILL).
6		SS-2	4-8	90		0.0		Brown, Silty SAND and GRAVEL, damp.
7						0.0		
8						0.0		
9						0.0		Refusal at 11'.
10		SS-3	8-11	50		0.0		
11						0.0		
12								
13								
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: TB-29**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 9.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	60	NA	0.0		Brown Sand, Silt, trace Glay, Gravel, little Ash, Damp (FILL).
2						0.0		
3						0.0		
4						0.0		
5	SS-2	4-8	50	50		0.0		Brown Silty SAND and GRAVEL, trace Clay, damp.
6						0.0		
7						0.0		
8						0.0		
9		SS-3	8-9	40		1619.0		Red stone.
10						188		
11								
12								
13								Dark Brown, petroleum type odor.
14								
15								
16								
17								
18								
19								
20								
								Refusal at 9'.

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**BORING NUMBER: TB-30**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** Refer to Site Plan

**Drilling Contractor:** Zebra Environmental

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Track-mounted Geoprobe

**Start Date:** 4/19/00

**Completion Date:** 4/19/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 2¼"

**Borehole Depth:** 9.0 feet

**Completion Method:** Backfilled with soil cuttings

**Water Level:** Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	SS-1	0-4	50	NA	0.0		Brown Sand, Silt, Ash, Organics, damp (FILL).
2						0.0		Brown Sand, Silt, trace Clay, Ash, Gravel, damp (FILL).
3						0.0		
4						0.0		
5	SS-2	4-8	50	50		0.0		Light Brown Silty SAND and GRAVEL, moist.
6						0.0		
7						0.0		
8						0.0		
9						0.0		Refusal at 9'.
10						0.0		
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								



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**BORING NUMBER: B-1 (MW-12)**

**Project:** Haags Alley, Rochester, NY  
**DAY Representative:** J. Joseph Dorety  
**Drilling Contractor:** Nothnagle Drilling  
**Drilling Rig:** Skid-mount 35  
**Sampling Method:** Direct Push, HQ coring  
**Completion Method:** 2" PVC Monitoring Well

**Project No:** 2089S-99  
**Boring Location:** See Site Plan  
**Top of PVC Elevation:** 99.32'      **Datum:** 100.00'  
**Start Date:** 8/10/00      **Completion Date:** 8/10/00  
**Borehole Diameter:** 3"      **Borehole Depth:** 12.7 feet  
**Water Level:** 6.8 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.3		2" Asphalt
2	NA	S-1	0-4	60	NA	0.4		Dark brown Sand, Silt, Gravel, Brick, Clay, damp (FILL).
3						0.4		Brown medium to coarse SAND and GRAVEL, some Silt, trace Clay, moist.
4						1.3		
5						2.7		
6		S-2	4-7.7	80		39.4		Olive/tan Silty SAND, some Gravel, trace Clay.
7						12.2		...2" seam of Clay at 6'.
8						132		... wet at 6.8', dark staining, strong sweet petroleum like odor, heavy sheen, brown/gold product globules.
9						506		Refusal at 7.7'. Gray DOLOMITE with several pits. Fracture at 8.0'.
10		C-1	7.7-12.7	88	59	0.3		Heavy fracturing from 10.0' to 11.1'. Vertical fracture from 10.7' to 11.0'.
11						0.7		... between the 4' and 5' depth of the core run, drill water coming up around casing turned dark brown with a heavy petroleum sheen and strong odor.
12						0.5		Black sediments in fractures.
13						0.6		
14								BOH at 12.7'
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: B-2**

**Project:** Haags Alley, Rochester, NY

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** See Site Plan

**Drilling Contractor:** Nothnagle Drilling

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Skid-mount 35

**Start Date:** 8/10/00

**Completion Date:** 8/10/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 3"

**Borehole Depth:** 10.4 feet

**Completion Method:** Backfilled with cuttings

**Water Level:** 6.2 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.7		Dark brown and black Asphalt, Sand, Gravel, Silt, Cinders, Ash, Brick, damp (FILL).
2	NA	S-1	0-4	60	NA	1.8		Brown Sand, Silt, Gravel, Ash, Brick, Clay, Coal, damp (FILL).
3						0.6		
4						0.4		
5						0.6		Brown Silty SAND and GRAVEL, trace Clay, moist.
6		S-2	4-8	85		0.4		
7						26.8		... dark gray to black staining with strong odor.
8						385		
9		S-3	8-10.4	65		1139		... weathered Rock fragments, wet.
10						1708		... black petroleum with very strong odor.
11						1401		
12						1228		
13								Refusal at 10.4'
14								
15								
16								
17								
18								
19								
20								

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**BORING NUMBER: B-3**

**Project:** Haags Alley, Rochester, NY

**Project No:** 2089S-99

**DAY Representative:** J. Joseph Dorety

**Boring Location:** See Site Plan

**Drilling Contractor:** Nothnagle Drilling

**Ground Surface Elevation:** NA

**Datum:** NA

**Drilling Rig:** Skid-mount 35

**Start Date:** 8/10/00

**Completion Date:** 8/10/00

**Sampling Method:** Direct Push

**Borehole Diameter:** 3"

**Borehole Depth:** 11.1 feet

**Completion Method:** Backfilled with cuttings

**Water Level:** 7.1 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						13.3		Black and brown Asphalt, Gravel, Sand, Silt, Brick, Clay, damp (FILL). Slight petroleum odor.
2	NA	S-1	0-4	50	NA	13.8		Dark brown Sand, Silt, Gravel, Clay, moist (FILL).
3						10.1		Brown Silty SAND and GRAVEL, trace Clay, moist.
4						3.3		
5						0.9		
6		S-2	4-8	30		0.7		
7						0.7		
8								... black staining, strong sweet petroleum like odor, Dolomite fragments.
9						12.7		
10		S-3	8-11.1	40		297		
11						26.2		... wet at 10.5'. slight sheen.
12								Refusal at 11.1'
13								
14								
15								
16								
17								
18								
19								
20								



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**BORING NUMBER: MW-6**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Jeffrey A. Danzinger/Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 101.72'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 4/26/00

**Completion Date:** 4/27/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 8"± soil

**Borehole Depth:** 15.2 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 8.4 feet at 8:00AM on 5/1/00

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	27 14 12 11	SS-1	0-2	25	26	0.0		Brown Silt, little Brick, concrete and coal, trace ash, (FILL), no odor. Damp.
2								
3	30 22 12 10	SS-2	2-4	5	34	0.0		Brown Silt and Sand, trace Brick and Gravel (FILL), no odor. Moist.
4								
5	4 2 12 18	SS-3	4-6	55	14	0.0		Red brown SILT, some fine Sand, trace Gravel, little Clay, no odor, very moist.
6								Brown SILT, little fine Sand, Some Clay, trace Gravel.
7	35 24 24 41	SS-4	6-8	50	48	0.0		... little Gravel.
8								
9	20 17 21 26	SS-5	8-10.2	50	38	230.0		... some petroleum odor and little Gray/black staining at 10' BGS.
10								Auger refusal at 10.2'.
11								Gray, Massive LOCKPORT DOLOMITE highly fractured (weathered at fractures). Approximately 400 gallons of water lost. [NOTE: Used HQ core, then reamed with 3 7/8" roller bit.]
12	NA	C-1	10.2-14.2	70	10	0.0		
13								
14	NA	C-2	14.2-15.2	50	100	0.0		collapse to 13.1'
15								Bottom at 15.2'
16								
17								
18								
19								
20								

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**BORING NUMBER: MW-7**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 100.10'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 5/1/00

**Completion Date:** 5/1/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 8"± soil

**Borehole Depth:** 15.2 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 5.68 feet at 8:15AM on 5/2/00

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	30 12 10 11	SS-1	0-2	30	22	0.0		Brown Silt, little Brick, little Gravel, (FILL). Damp.
2								
3	11 9 9 11	SS-2	2-4	30	18	0.0		...fine Sand, little Cinders (FILL).
4								
5	3 4 4 6	SS-3	4-6	40	8	0.0		Brown SILT, some Clay, little fine Sand, Wet
6								
7	8 9 13 22	SS-4	6-8	30	22	98.8		...petroleum odor, gray/black staining.
8								
9	32 19 15 11	SS-5	8-10	30	34	152		...some Gravel
10								...black staining, oil globules
11	18 100-2"	SS-6	10-10.7	20	100+	106		Auger refusal at 10.2'.
12								Gray LOCKPORT DOLOMITE highly fractured 10.2'-13.2'; gravel zone at approximately 13', becoming more competent 13.2'-15.2'. Approximately 250 gallons water lost, oil on drill water. [NOTE: Used HQ core, then reamed with 3 7/8" roller bit.]
13	NA	C-1	10.7-15.2	80	43.8	0.0		collapse to 11.8'
14								
15								
16								Bottom at 15.2'
17								
18								
19								
20								

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**BORING NUMBER: MW-8**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 99.38'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 5/2/00

**Completion Date:** 5/2/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 10"± soil

**Borehole Depth:** 16.0 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 7.8 feet BGS at 9:15AM on 5/3/00

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	10 10 10 11	SS-1	0-2	50	20	17.0		Brown Silt, trace Coal, trace Brick (FILL). Damp, slight sweet odor.
2								
3	8 4 5 7	SS-2	2-4	50	9	13.2		
4								
5	8 18 10 9	SS-3	4-6	30	28	0.0		Brown SILT, some Clay, trace Sand, trace Gravel, damp.
6								
7	5 5 6 5	SS-4	6-8	40	11	0.0		...little Clay, little Sand, wet.
8								
9	12 25 36 48	SS-5	8-10	25	61	0.0		Brown Fine SAND, Rock fragments, wet, petroleum odor 9'-10'. Auger refusal at 8.5'.
10						219		
11								LOCKPORT DOLOMITE ...Rock becomes competent at approximately 11.0'.
12								
13	NA	NA	10-16	NA	NA	0.0		Lost approximately 1200 gallons of water during drilling. [NOTE: drilled from 8.5' to 16' using 3 7/8" roller bit.]
14								
15								collapse to 13'
16								Bottom at 16.0'
17								
18								
19								
20								

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**BORING NUMBER: MW-9**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 98.57'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 5/3/00

**Completion Date:** 5/3/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 8"± soil

**Borehole Depth:** 15.0 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 7.1 feet BGS at 8:50AM on 5/4/00

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	NA	NA	0-1	NA	NA			Asphalt and Silt and Gravel (FILL).
2	6 15	SS-1	1-2	10	NA	0.0		...some Sand (FILL).
3	19 21 35 30	SS-2	2-4	10	56	0.0		...Sand and Gravel (FILL).
4								
5	35 64 37 42	SS-3	4-6	10	100+	0.0		...Sand and Gravel (FILL).
6								
7	6 5 5 8	SS-4	6-8	30	10	0.0		Brown SILT, little Clay, little Sand. Damp-wet.
8								...wet
9	5 6 12 50-2"	SS-5	8-9.7	30	18	0.0		Auger refusal at 8.5'.
10								LOCKPORT DOLOMITE
11								...lost water circulation, void at 10.5'-11.0', lost approximately 700 gallons during drilling.
12								[NOTE: drilled from 8.5' to 15' using 3 7/8" roller bit.]
13	NA	NA	9.7-15	NA	NA			
14								collapse to 14.0'.
15								Bottom at 15.0'
16								
17								
18								
19								
20								

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**BORING NUMBER: MW-10**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 97.76'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 5/4/00

**Completion Date:** 5/4/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 8"± soil

**Borehole Depth:** 15.0 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 7.2 feet BGS at 2:00PM on 5/4/00

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	5 4 2	SS-1	0-2	50	6	0.0		Brown Silt, Gravel, dry (FILL).
2								Brown Sand, damp (FILL).
3	3 3 2 4	SS-2	2-4	50	5	0.0		...Silt, trace Sand, damp (FILL).
4								Brown SILT, little Clay, trace Sand, trace Gravel, damp.
5	3 3 4 6	SS-3	4-6	60	7	0.0		
6								
7	8 14 23 42	SS-4	6-8	30	37	0.0		...reddish brown, damp-wet.
8								Gray-black SAND and Rock Fragments, strong petroleum or volatile odor.
9	37 32 100-2"	SS-5	8-9.2	-	100+	563.0		Auger refusal at 8.9'.
10								LOCKPORT DOLOMITE, Driller notes that rock is competent.
11								
12	NA	NA	9.2-15	NA	NA	0.0		...lost water circulation at approximately 11.5' (approximately 700 gallons lost).
13								[NOTE: Drilled from 8.0' to 15' using 3 7/8" roller bit.]
14								collapse to 14.5'
15								Bottom at 15.0'
16								
17								
18								
19								
20								

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**BORING NUMBER: MW-11**

**Project:** Phase II Study

**Project No:** 2089S-99

**DAY Representative:** Dennis M. Peck

**Boring Location:** See Site Plan

**Drilling Contractor:** Earth Dimensions, Inc.

**Top of PVC:** 97.64'

**Datum:** 100.00'

**Drilling Rig:** Diedrich D-50

**Start Date:** 5/4/00

**Completion Date:** 5/4/00

**Sampling Method:** 2" Split Spoons, HQ Core

**Borehole Diameter:** 8"± soil

**Borehole Depth:** 15.0 feet

**Completion Method:** 2" PVC Monitoring Well

**Water Level:** 7.2 feet BGS at 2:00PM on 5/4/00

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1	32 56 48 37	SS-1	0-2	0	100+	NA		Brown Silt, some Gravel, little Brick, dry (FILL).
2								...Brown-tan SILT, little Clay, damp (FILL).
3	3 3 3 3	SS-2	2-4	50	6	0.0		Brown-tan SILT, little Clay, damp.
4								
5	6 4 5 6	SS-3	4-6	30	9	0.0		
6								
7	9 9 10 100-4"	SS-4	6-7.9	5	19	0.0		...gray Rock fragments.
8								Auger refusal at 8.4'.
9								LOCKPORT DOLOMITE
10								...No water recirculation, lost approximately 700 gallons.
11	NA	NA	7.9-15	NA	NA	0.0		Driller notes rock is competent. [NOTE: drilled from 8.4' to 15' using 3 7/8" roller bit.]
12								
13								
14								collapse to 14.7'
15								Bottom at 15.0'
16								
17								
18								
19								
20								

**APPENDIX E**

**Well Development Logs and Well Sampling Logs**



**WELL DEVELOPMENT DATA  
MW-2**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charl'ofie Street, Rochester N.Y.

DATE/ TIME	4/24/00 15:00	15:03	15:05	15:11	15:18	15:27	15:35
EVACUATION METHOD	3' Bailer						
PID (PPM)	0.0						
DEPTH OF WELL (FT)	10.24						
STATIC WATER LEVEL (SWL) FT	6.16						
VOLUME EVACUATED (GAL)	0	0	0.25	0.25	0.25	0.25	0.25
TOTAL VOLUME EVACUATED (GAL)	Initial	0	0.25	0.50	0.75	1.0	1.25
TEMPERATURE (°F)	-	12.5	11.7	11.9	11.1	10.8	10.8
pH	-	7.01	7.75	7.70	7.40	7.39	7.39
Eh	NC	-	-	-	-	-	-
CONDUCTIVITY (umho/cm)	-	792	803	812	775	941	939
TURBIDITY (NTU)	NC	-	-	-	-	-	-
VISUAL OBSERVATION	Clear	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy

LEGEND: NC = Not Collected  
ND = Not Detected

Day Environmental, Inc.  
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Rochester, New York 14623

**WELL DEVELOPMENT DATA  
MW-3**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/TIME	4/24/00 15:41	15:48	15:56	16:07	16:12	16:17	16:19	16:21
EVACUATION METHOD	3' Bailor							
PID (PPM)	7.8							
DEPTH OF WELL (FT)	10.60							
STATIC WATER LEVEL (SWL) FT	6.61							
VOLUME EVACUATED (GAL)	0	0.25	0.25	0.25	0.25	0.25	0.25	0.25
TOTAL VOLUME EVACUATED (GAL)	Initial	0.25	0.50	0.75	1.0	1.25	1.50	1.75
TEMPERATURE (°F)	11.4	10.9	10.7	10.5	10.2	10.3	10.1	10.0
pH	7.80	7.75	7.32	7.28	7.34	7.29	7.21	7.18
Eh	NC	-	-	-	-	-	-	-
CONDUCTIVITY (umho/cm)	581	680	665	690	705	688	690	688
TURBIDITY (NTU)	NC	-	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA  
MW-4**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/ TIME	4/26/00 10:08	10:28	10:39	11:18	11:21	11:29	11:38
EVACUATION METHOD	3' Bailer						
PID (PPM)	0.0						
DEPTH OF WELL (FT)	7.83						
STATIC WATER LEVEL (SWL) FT	6.14						
VOLUME EVACUATED (GAL)	0	0.25	0.25	0.25	0.25	0.25	0.25
TOTAL VOLUME EVACUATED (GAL)	Initial	0.25	0.50	0.75	1.0	1.25	1.50
TEMPERATURE (°F)	9.5	8.1	8.9	9.4	9.7	10.0	9.7
pH	8.20	7.85	7.74	7.73	7.93	8.17	8.00
Eh	NC	-	-	-	-	-	-
CONDUCTIVITY (umho/cm)	523	677	697	749	776	840	807
TURBIDITY (NTU)	NC	-	-	-	-	-	-
VISUAL OBSERVATION	Cloudy/Muddy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy/Clear

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

WELL DEVELOPMENT DATA  
MW-5

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/TIME	4/26/00 11:48	12:08	12:12						
EVACUATION METHOD	3' Bailor								
PID (PPM)	0.0								
DEPTH OF WELL (FT)	8.90								
STATIC WATER LEVEL (SWL) FT	6.23								
VOLUME EVACUATED (GAL)	0	0.25	0.25	0.25	0.25				
TOTAL VOLUME EVACUATED (GAL)	Initial	0.25	0.5	0.75	0.75				
TEMPERATURE (°F)	8.8	9.2	9.3	9.1	9.1				
pH	7.80	7.98	7.86	7.73	7.73				
Eh	NC	-	-	-	-				
CONDUCTIVITY (umho/cm)	812	836	812	800	800				
TURBIDITY (NTU)	NC	-	-	-	-				
VISUAL OBSERVATION	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy				

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA  
MW-6**

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y. JOB#: 2089S-99

DATE/TIME	5/10/00 13:40	13:43	13:45	13:48	13:51	14:01	
EVACUATION METHOD	Centrifugal Pump						
PID (PPM)	389						
DEPTH OF WELL (FT)	12.97					12.97	
STATIC WATER LEVEL (SWL) FT	8.71					11.93	
VOLUME EVACUATED (GAL)	0	1.0	1.0	1.0	1.0	1.0	
TOTAL VOLUME EVACUATED (GAL)	Initial	1.0	2.0	3.0	4.0	5.0 (DRY)	
TEMPERATURE (°F)	19.1	17.1	16.2	18.1	19.3	19.6	
pH	8.04	8.02	7.89	7.70	7.61	7.62	
Eh	NC	-	-	-	-	-	
CONDUCTIVITY (umho/cm)	638	556	567	639	667	705	
TURBIDITY (NTU)	NC	-	-	-	-	-	
VISUAL OBSERVATION	Muddy	Petrol odor/ Sheen				Clearing	

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA**  
**MW-7**

SITE LOCATION: 14-60 Charlotte Street, Rochester N.Y.

JOB#: 2089S-99

DATE/TIME	5/10/00 14:10	14:25	14:28		14:35	14:39
EVACUATION METHOD	Centrifugal Pump					
PID (PPM)	144 (Slow)					
DEPTH OF WELL (FT)	10.89					12.17
STATIC WATER LEVEL (SWL) FT	7.52					7.84
VOLUME EVACUATED (GAL)	0	1.5	1.5	1.0	2.5	1.0
TOTAL VOLUME EVACUATED (GAL)	Initial	1.5	3.0	4.0	7.5	8.5
TEMPERATURE (°F)	19.7	15.5	14.4	14.2	13.4	14.4
pH	8.21	7.62	7.34	7.34	7.29	7.24
Eh	NC	-	-	-	-	-
CONDUCTIVITY (umho/cm)	482	673	790	786	807	861
TURBIDITY (NTU)	NC	-	-	-	-	-
VISUAL OBSERVATION	Muddy, Heavy Sheen					

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA  
MW-8**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/TIME	5/10/00 15:10	15:27	15:31	15:35	15:38	15:42	15:50
EVACUATION METHOD	Centrifugal Pump						
PID (PPM)	263						
DEPTH OF WELL (FT)	13.09						13.09
STATIC WATER LEVEL (SWL) FT	7.82						8.09
VOLUME EVACUATED (GAL)	0	1.0	1.5	1.0	1.5	1.5	1.0
TOTAL VOLUME EVACUATED (GAL)	Initial	1.0	2.5	3.5	5.0	6.5	8.5
TEMPERATURE (°F)	15.8	17.7	18.1	15.3	13.9	15.9	15.3
pH	7.74	7.61	7.64	7.65	7.57	7.46	7.46
Eh	NC	-	-	-	-	-	-
CONDUCTIVITY (umho/cm)	1,001	1,063	956	758	734	830	861
TURBIDITY (NTU)	NC	-	-	-	-	-	-
VISUAL OBSERVATION	Muddy, Slight Sheen						

LEGEND: NC = Not Collected  
ND = Not Detected

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WELL DEVELOPMENT DATA  
MW-9

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/TIME	5/10/00 16:10	16:17	16:20	16:24	16:26	16:30	16:31	
EVACUATION METHOD	Centrifugal Pump							
PID (PPM)	14.4							
DEPTH OF WELL (FT)	14.23						14.33	
STATIC WATER LEVEL (SWL) FT	7.08						7.22	
VOLUME EVACUATED (GAL)	0	1.0	1.0	1.5	1.0	1.0		
TOTAL VOLUME EVACUATED (GAL)	Initial	1.0	2.0	3.5	4.5	5.5		
TEMPERATURE (°F)	16.3	14.3	17.5	15.6	15.8	16.0		
pH	7.51	7.48	7.40	7.43	7.41	7.39		
Eh	NC	-	-	-	-	-		
CONDUCTIVITY (umho/cm)	946	916	980	949	928	941		
TURBIDITY (NTU)	NC	-	-	-	-	-		
VISUAL OBSERVATION	Muddy							

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623



**WELL DEVELOPMENT DATA**  
**MW-10 con't**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/TIME									10:40			
EVACUATION METHOD		Centrifugal Pump										
PID (PPM)												
DEPTH OF WELL (FT)												
STATIC WATER LEVEL (SWL) FT									7.43			
VOLUME EVACUATED (GAL)	1.0		1.0		1.0				1.5			
TOTAL VOLUME EVACUATED (GAL)	8.0		9.0		10.0				11.5			
TEMPERATURE (°F)	16.4		17.2		14.9				14.7			
pH	7.05		7.03		7.07				7.08			
Eh	NC		-		-				-			
CONDUCTIVITY (umho/cm)	4,290		722		686				678			
TURBIDITY (NTU)	NC		-		-				-			
VISUAL OBSERVATION	-		-		-				-			

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA  
MW-11**

JOB#: 2089S-99

SITE LOCATION: 14-60 Charlotte Street, Rochester, N.Y.

DATE/ TIME	5/10/00 12:35	12:37	12:40	12:44	12:47	12:50	12:53	12:57
EVACUATION METHOD	Centrifugal Pump							
PID (PPM)	133							
DEPTH OF WELL (FT)	14.25							14.26
STATIC WATER LEVEL (SWL) FT	6.85							6.96
VOLUME EVACUATED (GAL)	0	1.0	1.0	1.0	1.0	2.0	1.0	
TOTAL VOLUME EVACUATED (GAL)	Initial	1.0	2.0	3.0	4.0	6.0	7.0	
TEMPERATURE (°F)	16.3	16.6	17.6	15.3	14.9	13.1	14.3	
pH	7.40	7.34	7.35	7.38	7.33	7.32	7.31	
Eh	NC	-	-	-	-	-	-	
CONDUCTIVITY (umho/cm)	925	968	932	948	926	883	904	
TURBIDITY (NTU)	NC	-	-	-	-	-	-	
VISUAL OBSERVATION	Muddy			Clearing				

LEGEND: NC = Not Collected  
ND = Not Detected

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Rochester, New York 14623

**WELL DEVELOPMENT DATA**

**MW-12**

SITE LOCATION 14-60 Charlotte Street.

JOB#: 2089S-99

DATE/TIME	8/17/00 10:05	11:10	14:15	8/18/00 08:30	10:53	15:10	
EVACUATION METHOD	Isco Pump	"	"	"	"	"	
PID/FID (PPM)	25.6	-	-	-	-	-	
DEPTH OF WELL (FT)	12.0	-	-	7.40	-	-	
STATIC WATER LEVEL (SWL) FT	7.05	-	-	-	-	-	
VOLUME EVACUATED (GAL)	0	20	20	0	20	23	
TOTAL VOLUME EVACUATED (GAL)	0	20	40	40	60	83	
TEMPERATURE (°F)	-	20.0	18.4	-	17.5	18.3	
pH	-	6.25	6.31	-	6.49	6.94	
Eh	-	NC	-	-	-	-	
CONDUCTIVITY (umho/cm)	-	1,700	NC	-	1,197	1,090	
TURBIDITY (NTU)	-	-	-	-	-	-	
VISUAL OBSERVATION	-	Slightly Cloudy	Slightly Cloudy	-	Slightly Cloudy	Slightly Cloudy	

LEGEND: NC = Not Collected  
ND = Not Detected

Day Environmental, Inc.  
2144 Brighton-Henrietta Town Line Road  
Rochester, New York 14623



**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-1

**SECTION 1**

<b>SITE LOCATION:</b> <u>Charlotte St.</u>	<b>JOB# :</b> <u>2089S-99</u>
<b>PROJECT NAME:</b> <u>Subsurface Investigation</u>	<b>DATE :</b> <u>5/15/00</u>
<b>SAMPLE COLLECTOR(S):</b> <u>J. Dorety, K. Hampton</u>	
<b>WEATHER CONDITIONS:</b> <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

<b>DEPTH OF WELL [FT]:</b> <u>9.09</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
<b>STATIC WATER LEVEL (SWL) [FT]:</b> <u>6.76</u>	(MEASURED FROM T.O.C.)
<b>DEPTH OF WATER COLUMN [FT]:</b> <u>2.33</u>	(DEPTH OF WELL - SWL)
<b>CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:</b> <u>0.15</u>	
<small>CALCULATIONS:  CASING DIA. (FT)    WELL CONSTANT (GAL/FT)    CALCULATIONS  2" (0.1667)        0.1632        VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  1.25 (0.1042)     0.0638        X WELL CONSTANT</small>	
<b>CALCULATED PURGE VOLUME [GAL]:</b> <u>0.45</u>	(3 TIMES CASING VOLUME)
<b>ACTUAL VOLUME PURGED [GAL]:</b> <u>~0.50</u>	
<b>PURGE METHOD:</b> <u>3' Bailer</u>	<b>PURGE START:</b> <u>12:10</u> <b>END:</b> <u>12:18</u>

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W1-01	5/15/00 15:30	3'Bailer	8260 TCL+STARS/ TPH 310.13	Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.79	12.6	7.29	11.62ms	NC	Cloudy	1.1/0.5

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-2

SECTION 1	
SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>5/16/00</u>
SAMPLE COLLECTOR(S): <u>J. Dorety, K. Hampton</u>	
WEATHER CONDITIONS: <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

DEPTH OF WELL [FT]: <u>10.20</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
STATIC WATER LEVEL (SWL) [FT]: <u>6.69</u>	(MEASURED FROM T.O.C.)
DEPTH OF WATER COLUMN [FT]: <u>3.51</u>	(DEPTH OF WELL - SWL)
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL]: <u>.22</u>	
<small>CALCULATIONS:  CASING DIA. (FT) WELL CONSTANT (GAL/FT)      CALCULATIONS  2" (0.1667)      0.1632      VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  1.25 (0.1042)      0.0638      X WELL CONSTANT</small>	
CALCULATED PURGE VOLUME [GAL]: <u>.67</u>	(3 TIMES CASING VOLUME)
ACTUAL VOLUME PURGED [GAL]: <u>1.0</u>	
PURGE METHOD: <u>3'Bailer</u> PURGE START: <u>9:25</u> END: <u>9:40</u>	

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W2-01	5/16/00 10:27	3'Bailer	8260 TCL+STARS/ TPH 310.13	Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.89	12.0	7.13	966us	NC	Cloudy	2.3/1.0

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-3

**SECTION 1**

**SITE LOCATION:** Charlotte St. **JOB# :** 2089S-99  
**PROJECT NAME:** Subsurface Investigation **DATE :** 5/15/00  
**SAMPLE COLLECTOR(S):** J. Dorety, K. Hampton  
**WEATHER CONDITIONS:** Partly Cloudy ~50°

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 10.59 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 6.84 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 3.75 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.24

**CALCULATIONS:**

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT (GAL/FT)</b>	<b>CALCULATIONS</b>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
1.25 (0.1042)	0.0638	

**CALCULATED PURGE VOLUME [GAL]:** 0.72 (3 TIMES CASING VOLUME)

**ACTUAL VOLUME PURGED [GAL]:** ~1.0

**PURGE METHOD:** 3' Bailer **PURGE START:** 11:42 **END:** 11:55

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W3-01	5/15/00 14:45	3'Bailer	8260 TCL + STARS/ TPH 310.13	Cloudy, Fines

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.86	11.8	6.71	722us	NC	Cloudy	1.2/0.0

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-4

**SECTION 1**

<b>SITE LOCATION:</b> <u>Charlotte St.</u>	<b>JOB# :</b> <u>2089S-99</u>
<b>PROJECT NAME:</b> <u>Subsurface Investigation</u>	<b>DATE :</b> <u>5/16/00</u>
<b>SAMPLE COLLECTOR(S):</b> <u>J. Dorety, K. Hampton</u>	
<b>WEATHER CONDITIONS:</b> <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

<b>DEPTH OF WELL [FT]:</b> <u>7.98</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
<b>STATIC WATER LEVEL (SWL) [FT]:</b> <u>6.13</u>	(MEASURED FROM T.O.C.)
<b>DEPTH OF WATER COLUMN [FT]:</b> <u>1.85</u>	(DEPTH OF WELL - SWL)
<b>CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:</b> <u>0.11</u>	
<small>CALCULATIONS:  CASING DIA. (FT)    WELL CONSTANT (GAL/FT)    CALCULATIONS  2" (0.1667)            0.1632            VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  1.25 (0.1042)            0.0638            X WELL CONSTANT</small>	
<b>CALCULATED PURGE VOLUME [GAL]:</b> <u>.33</u>	(3 TIMES CASING VOLUME)
<b>ACTUAL VOLUME PURGED [GAL]:</b> <u>.33</u>	
<b>PURGE METHOD:</b> <u>3' Bailer</u>	<b>PURGE START:</b> <u>9:51</u> <b>END:</b> <u>10:00</u>

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W4-01	5/16/00 10:44	3'Bailer	8260 TCL + STARS/ TPH 310.13	Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.71	12.3	7.31	803us	NC	Cloudy	1.0/0.0

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-5

**SECTION 1**

**SITE LOCATION:** Charlotte St. **JOB# :** 2089S-99  
**PROJECT NAME:** Subsurface Investigation **DATE :** 5/15/00  
**SAMPLE COLLECTOR(S):** J. Dorety, K. Hampton  
**WEATHER CONDITIONS:** Partly Cloudy ~50°

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 8.90 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 6.07 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 2.83 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.18

**CALCULATIONS:**

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT (GAL/FT)</b>	<b>CALCULATIONS</b>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
1.25 (0.1042)	0.0638	X WELL CONSTANT

**CALCULATED PURGE VOLUME [GAL]:** 0.54 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** APX. 1.0  
**PURGE METHOD:** 3'Bailer **PURGE START:** 13:30 **END:** 13:40

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W5-01	5/15/00	3'Bailer	8260 TCL + STARS/ TPH 310.13	Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.08	11.6	7.46	1,248us	NC	Cloudy	2.0/2.4

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-6

**SECTION 1**

**SITE LOCATION:** Charlotte St. **JOB# :** 2089S-99  
**PROJECT NAME:** Subsurface Investigation **DATE :** 5/15/00  
**SAMPLE COLLECTOR(S):** J. Dorety, K. Hampton  
**WEATHER CONDITIONS:** Partly Cloudy ~50°

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 12.97 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 8.06 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 4.91 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.80

**CALCULATIONS:**

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT (GAL/FT)</b>	<b>CALCULATIONS</b>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
1.25 (0.1042)	0.0638	X WELL CONSTANT

**CALCULATED PURGE VOLUME [GAL]:** 2.40 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** 3.0  
**PURGE METHOD:** Centrafugal Pump **PURGE START:** 12:35 **END:** 12:41

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W6-01	5/15/00 15:15	3'Bailer	8260 TCL + STARS/ TPH 310.13	Slightly Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.11	11.3	7.20	669us	NC	Slightly Cloudy	32.1/89.2

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-7

**SECTION 1**

**SITE LOCATION:** Charlotte St. **JOB# :** 2089S-99

**PROJECT NAME:** Subsurface Investigation **DATE :** 5/15/00

**SAMPLE COLLECTOR(S):** J. Dorety, K. Hampton

**WEATHER CONDITIONS:** Partly Cloudy ~50e

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 12.91 (MEASURED FROM TOP OF CASING - T.O.C.)

**STATIC WATER LEVEL (SWL) [FT]:** 6.99 (MEASURED FROM T.O.C.)

**DEPTH OF WATER COLUMN [FT]:** 5.92 (DEPTH OF WELL - SWL)

**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.97

**CALCULATIONS:**  

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)	CALCULATIONS
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
1.25 (0.1042)	0.0638	X WELL CONSTANT

**CALCULATED PURGE VOLUME [GAL]:** 2.91 (3 TIMES CASING VOLUME)

**ACTUAL VOLUME PURGED [GAL]:** ~3.50

**PURGE METHOD:** Centrafugal Pump **PURGE START:** 12:43 **END:** 12:50

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W7-01	5/15/00 15:45	3'Bailer	8260 TCL + STARS/ TPH 310.13	Cloudy w/product

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.09	11.3	7.36	847us	NC	Cloudy w/product	65.3/29.4

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-8

SECTION 1	
SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>5/15/00</u>
SAMPLE COLLECTOR(S) : <u>J. Dorety, K. Hampton</u>	
WEATHER CONDITIONS: <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

DEPTH OF WELL [FT]: <u>13.0</u>	(MEASURED FROM TOP OF CASING - T.O.C.)									
STATIC WATER LEVEL (SWL) [FT]: <u>7.19</u>	(MEASURED FROM T.O.C.)									
DEPTH OF WATER COLUMN [FT]: <u>5.81</u>	(DEPTH OF WELL - SWL)									
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL]: <u>.95</u>										
<small>CALCULATIONS:</small> <table style="width:100%; border: none;"> <tr> <td style="border: none;"><small>CASING DIA. (FT)</small></td> <td style="border: none;"><small>WELL CONSTANT (GAL/FT)</small></td> <td style="border: none;"><small>CALCULATIONS</small></td> </tr> <tr> <td style="border: none;"><small>2" (0.1667)</small></td> <td style="border: none;"><small>0.1632</small></td> <td style="border: none;"><small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small></td> </tr> <tr> <td style="border: none;"><small>1.25 (0.1042)</small></td> <td style="border: none;"><small>0.0638</small></td> <td style="border: none;"><small>X WELL CONSTANT</small></td> </tr> </table>		<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>	<small>2" (0.1667)</small>	<small>0.1632</small>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small>	<small>1.25 (0.1042)</small>	<small>0.0638</small>	<small>X WELL CONSTANT</small>
<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>								
<small>2" (0.1667)</small>	<small>0.1632</small>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small>								
<small>1.25 (0.1042)</small>	<small>0.0638</small>	<small>X WELL CONSTANT</small>								
CALCULATED PURGE VOLUME [GAL]: <u>2.85</u> (3 TIMES CASING VOLUME)										
ACTUAL VOLUME PURGED [GAL]: <u>~3.50</u>										
PURGE METHOD: <u>Centrifugal Pump</u> PURGE START: <u>13:10</u> END: <u>13:15</u>										

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W8-01 2089-ms/msd-01	5/15/00 16:10	3'Bailer	8260 TCL + STARS/ TPH 310.13	Slightly Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.20	11.7	7.22	984us	NC	Slightly Cloudy	40.0/10.3

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-9

**SECTION 1**

**SITE LOCATION:** Charlotte St. **JOB# :** 2089S-99  
**PROJECT NAME:** Subsurface Investigation **DATE :** 5/15/00  
**SAMPLE COLLECTOR(S):** J. Dorety, K. Hampton  
**WEATHER CONDITIONS:** Partly Cloudy ~50°

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 14.40 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 6.55 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 7.85 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 1.28

**CALCULATIONS:**

<b>CASING DIA. (FT)</b>	<b>WELL CONSTANT (GAL/FT)</b>	<b>CALCULATIONS</b>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
1.25 (0.1042)	0.0638	X WELL CONSTANT

**CALCULATED PURGE VOLUME [GAL]:** 3.84 (3 TIMES CASING VOLUME)  
**ACTUAL VOLUME PURGED [GAL]:** ~4.0  
**PURGE METHOD:** Centrafugal Pump **PURGE START:** 12:21 **END:** 12:26

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W9-01	5/15/00 14:55	3'Bailer	8260 TCL + STARS/ TPH 310.13	Slightly Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.60	12.8	7.06	797us	NC	Slightly Cloudy	0.9/0.0

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-10

**SECTION 1**

<b>SITE LOCATION:</b> <u>Charlotte St.</u>	<b>JOB# :</b> <u>2089S-99</u>
<b>PROJECT NAME:</b> <u>Subsurface Investigation</u>	<b>DATE :</b> <u>5/15/00</u>
<b>SAMPLE COLLECTOR(S):</b> <u>J. Dorety, K. Hampton</u>	
<b>WEATHER CONDITIONS:</b> <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

<b>DEPTH OF WELL [FT]:</b> <u>14.38</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
<b>STATIC WATER LEVEL (SWL) [FT]:</b> <u>7.13</u>	(MEASURED FROM T.O.C.)
<b>DEPTH OF WATER COLUMN [FT]:</b> <u>7.25</u>	(DEPTH OF WELL - SWL)
<b>CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:</b> <u>1.18</u>	
<small>CALCULATIONS:  CASING DIA. (FT)    WELL CONSTANT (GAL/FT)    CALCULATIONS  2" (0.1667)        0.1632        VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  1.25 (0.1042)        0.0638        X WELL CONSTANT</small>	
<b>CALCULATED PURGE VOLUME [GAL]:</b> <u>3.55</u>	(3 TIMES CASING VOLUME)
<b>ACTUAL VOLUME PURGED [GAL]:</b> <u>4.0</u>	
<b>PURGE METHOD:</b> <u>Centrafugal Pump</u> <b>PURGE START:</b> <u>13:47</u> <b>END:</b> <u>13:53</u>	

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W10-01	5/16/00 16:55	3'Bailer	8260 TCL + STARS/ TPH 310.13	Clear

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.14	11.8	7.36	1,058us	NC	Clear	72.5/49.0

**DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG**

Mw-11

SECTION 1	
SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>5/15/00</u>
SAMPLE COLLECTOR(S): <u>J. Dorety, K. Hampton</u>	
WEATHER CONDITIONS: <u>Partly Cloudy ~50°</u>	

**SECTION 2 - PURGE INFORMATION**

DEPTH OF WELL [FT]: <u>14.23</u>	(MEASURED FROM TOP OF CASING - T.O.C.)									
STATIC WATER LEVEL (SWL) [FT]: <u>6.37</u>	(MEASURED FROM T.O.C.)									
DEPTH OF WATER COLUMN [FT]: <u>7.86</u>	(DEPTH OF WELL - SWL)									
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL]: <u>1.28</u>										
<small>CALCULATIONS:</small> <table style="width:100%; border: none;"> <tr> <td style="border: none;"><small>CASING DIA. (FT)</small></td> <td style="border: none;"><small>WELL CONSTANT (GAL/FT)</small></td> <td style="border: none;"><small>CALCULATIONS</small></td> </tr> <tr> <td style="border: none;"><small>2" (0.1667)</small></td> <td style="border: none;"><small>0.1632</small></td> <td style="border: none;"><small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small></td> </tr> <tr> <td style="border: none;"><small>1.25 (0.1042)</small></td> <td style="border: none;"><small>0.0638</small></td> <td style="border: none;"><small>X WELL CONSTANT</small></td> </tr> </table>		<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>	<small>2" (0.1667)</small>	<small>0.1632</small>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small>	<small>1.25 (0.1042)</small>	<small>0.0638</small>	<small>X WELL CONSTANT</small>
<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>								
<small>2" (0.1667)</small>	<small>0.1632</small>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN</small>								
<small>1.25 (0.1042)</small>	<small>0.0638</small>	<small>X WELL CONSTANT</small>								
CALCULATED PURGE VOLUME [GAL]: <u>3.85</u> (3 TIMES CASING VOLUME)										
ACTUAL VOLUME PURGED [GAL]: <u>4.0</u>										
PURGE METHOD: <u>Centrifugal Pump</u> PURGE START: <u>13:36</u> END: <u>13:41</u>										

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-w11-01	5/15/00 16:40	3'Bailer	8260 TCL + STARS/ TPH 310.13	Clear

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
6.38	11.3	7.43	1,543us	NC	Clear	26.2/44.0



DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Mw-2

SECTION 1

SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>7/25/00</u>
SAMPLE COLLECTOR(S) : <u>K. Hampton</u>	
WEATHER CONDITIONS: <u>Sunny ~75°</u>	

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT] : <u>10.20</u>	(MEASURED FROM TOP OF CASING - T.O.C.)						
STATIC WATER LEVEL (SWL) [FT] : <u>7.73</u>	(MEASURED FROM T.O.C.)						
DEPTH OF WATER COLUMN [FT] : <u>2.47</u>	(DEPTH OF WELL - SWL)						
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL] : <u>.16</u>							
<small>CALCULATIONS:</small> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><small>CASING DIA. (FT)</small></td> <td style="border: none;"><small>WELL CONSTANT (GAL/FT)</small></td> <td style="border: none;"><small>CALCULATIONS</small></td> </tr> <tr> <td style="border: none;"><u>1.25" (0.1042)</u></td> <td style="border: none;"><u>0.0638</u></td> <td style="border: none;"><small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT</small></td> </tr> </table>		<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>	<u>1.25" (0.1042)</u>	<u>0.0638</u>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT</small>
<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>					
<u>1.25" (0.1042)</u>	<u>0.0638</u>	<small>VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT</small>					
CALCULATED PURGE VOLUME [GAL] : <u>.48</u>	(3 TIMES CASING VOLUME)						
ACTUAL VOLUME PURGED [GAL] : <u>1.0</u>							
PURGE METHOD: <u>Isco Pump</u>	PURGE START: <u>13:02</u> END: <u>13:12</u>						

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W2-02	7/26/00 11:18	3'Bailer	8260 TCL+STARS/ TPH 310.13	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY $\mu$ S/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.85	18.5	6.45	1,541	NC	Clear	5.2

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Mw-3

SECTION 1

SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>7/25/00</u>
SAMPLE COLLECTOR(S) : <u>K. Hampton</u>	
WEATHER CONDITIONS: <u>Sunny ~75°</u>	

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT] : <u>10.59</u>	(MEASURED FROM TOP OF CASING - T.O.C.)						
STATIC WATER LEVEL (SWL) [FT] : <u>7.93</u>	(MEASURED FROM T.O.C.)						
DEPTH OF WATER COLUMN [FT] : <u>2.66</u>	(DEPTH OF WELL - SWL)						
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL] : <u>0.17</u>							
<small>CALCULATIONS:</small> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><small>CASING DIA. (FT)</small></td> <td style="border: none;"><small>WELL CONSTANT (GAL/FT)</small></td> <td style="border: none;"><small>CALCULATIONS</small></td> </tr> <tr> <td style="border: none;"><u>1.25 (0.1042)</u></td> <td style="border: none;"><u>0.0638</u></td> <td style="border: none;">VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT</td> </tr> </table>		<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>	<u>1.25 (0.1042)</u>	<u>0.0638</u>	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT
<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>					
<u>1.25 (0.1042)</u>	<u>0.0638</u>	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT					
CALCULATED PURGE VOLUME [GAL] : <u>0.51</u> (3 TIMES CASING VOLUME)							
ACTUAL VOLUME PURGED [GAL] : <u>1.0</u>							
PURGE METHOD: <u>Isco Pump</u> PURGE START: <u>13:19</u> END: <u>13:25</u>							

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W3-02	7/26/00 11:35	3'Bailer	8260 TCL + STARS/ TPH 310.13	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.10	18.0	6.61	1,436	NC	Clear	0.0

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Mw-8

SECTION 1

SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>7/25/00</u>
SAMPLE COLLECTOR(S) : <u>K. Hampton</u>	
WEATHER CONDITIONS: <u>Sunny ~75°</u>	

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT] : <u>13.0</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
STATIC WATER LEVEL (SWL) [FT] : <u>8.55</u>	(MEASURED FROM T.O.C.)
DEPTH OF WATER COLUMN [FT] : <u>4.45</u>	(DEPTH OF WELL - SWL)
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL] : <u>.73</u>	
<small>CALCULATIONS:</small> <small>CASING DIA. (FT) WELL CONSTANT (GAL/FT)      CALCULATIONS</small> <small>2" (0.1667)      0.1632      VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT</small>	
CALCULATED PURGE VOLUME [GAL] : <u>2.19</u>	(3 TIMES CASING VOLUME)
ACTUAL VOLUME PURGED [GAL] : <u>2.5</u>	
PURGE METHOD: <u>Isco Pump</u> PURGE START: <u>13:40</u> END: <u>13:45</u>	

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W8-02	7/26/00 10:55	3'Bailer	8260 TCL + STARS/ TPH 310.13	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.58	7.14	6.85	1,513	NC	Clear	0.5

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Mw-9

SECTION 1

SITE LOCATION: <u>Charlotte St.</u>	JOB# : <u>2089S-99</u>
PROJECT NAME: <u>Subsurface Investigation</u>	DATE : <u>7/25/00</u>
SAMPLE COLLECTOR(S) : <u>K. Hampton</u>	
WEATHER CONDITIONS: <u>Sunny ~75°</u>	

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT] : <u>14.40</u>	(MEASURED FROM TOP OF CASING - T.O.C.)						
STATIC WATER LEVEL (SWL) [FT] : <u>7.85</u>	(MEASURED FROM T.O.C.)						
DEPTH OF WATER COLUMN [FT] : <u>6.55</u>	(DEPTH OF WELL - SWL)						
CALCULATED VOL. OF H <sub>2</sub> O PER WELL CASING [GAL] : <u>1.07</u>							
<small>CALCULATIONS:</small> <table style="width: 100%; border: none;"> <tr> <td style="border: none;"><small>CASING DIA. (FT)</small></td> <td style="border: none;"><small>WELL CONSTANT (GAL/FT)</small></td> <td style="border: none;"><small>CALCULATIONS</small></td> </tr> <tr> <td style="border: none;"><u>2" (0.1667)</u></td> <td style="border: none;"><u>0.1632</u></td> <td style="border: none;">VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X <u>WELL CONSTANT</u></td> </tr> </table>		<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>	<u>2" (0.1667)</u>	<u>0.1632</u>	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X <u>WELL CONSTANT</u>
<small>CASING DIA. (FT)</small>	<small>WELL CONSTANT (GAL/FT)</small>	<small>CALCULATIONS</small>					
<u>2" (0.1667)</u>	<u>0.1632</u>	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN X <u>WELL CONSTANT</u>					
CALCULATED PURGE VOLUME [GAL] : <u>3.21</u>	(3 TIMES CASING VOLUME)						
ACTUAL VOLUME PURGED [GAL] : <u>5.0</u>							
PURGE METHOD: <u>Isco Pump</u> PURGE START: <u>12:45</u> END: <u>12:55</u>							

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
2089-W9-02	7/26/00 11:05	3'Bailer	8260 TCL + STARS/ TPH 310.13	Clear/ Slight Petrol Odor

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.88	18.1	6.51	1,404	NC	Clear	24.0



DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

Mw-12

SECTION 1

SITE LOCATION: 14-60 Charlotte Street JOB# : 2089S-99  
 PROJECT NAME: Phase II Environmental Study DATE : 8/21/00  
 SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton  
 WEATHER CONDITIONS: Sunny, 70°

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT] : 12.0 (MEASURED FROM TOP OF CASING - T.O.C.)  
 STATIC WATER LEVEL (SWL) [FT] : 7.4 (MEASURED FROM T.O.C.)  
 DEPTH OF WATER COLUMN [FT] : 4.6 (DEPTH OF WELL - SWL)  
 CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL] : 0.75

CALCULATIONS:

CASING DIA. (FT) 2" (0.1667) WELL CONSTANT (GAL/FT) 0.1632 CALCULATIONS  
 VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL] : 3.7 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL] : 4.0

PURGE METHOD: Isco Pump PURGE START: 10:45 END: 10:52

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME / DATE	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-12-8-00	8/21/00 11:05	Isco Pump	8260 TCL+STARS/ TPH 310.13	Clear

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.00	20.4	6.62	NC	-	Clear	1.5ppm

**APPENDIX F**

**Analytical Laboratory Data**

**Soil Samples**

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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

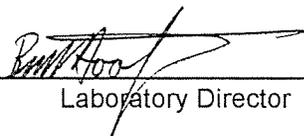
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

Client: **Day Environmental** Lab Project No.: 00-0857  
Client Job Site: Charlotte St Lab Sample No.: 3306  
Client Job No.: N/A Sample Type: Soil  
Field Location: MW-7 (10.0 - 10.7') Date Sampled: 05/01/00  
Field ID No: N/A Date Received: 05/01/00  
Date Analyzed: 05/08/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	23,800,000	82,900

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By:   
Laboratory Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue  
Rochester, NY 14608

(716) 647-2530 \* (800) 724-1997

PROJECT NAME/SITE NAME:  
*Charlotte St*

# CHAIN OF CUSTODY

REPORT TO: *Day Environmental* INVOICE TO: *00-0857*

COMPANY: *Day Environmental* LAB PROJECT #: *00-0857* CLIENT PROJECT #:

ADDRESS: CITY: STATE: ZIP: TURNAROUND TIME: (WORKING DAYS)

PHONE: *292-1090* FAX: *292-0425* CITY: STATE: ZIP: 1 2 3 5

ATTN: *Jeff Danzinger* ATTN: 1 2 3 5

COMMENTS:

## REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/1/00		X	MW-7 (10.0-10.7')	S	1		3306
2								
3								
4								
5								
6								
7								
8								
9								
10								

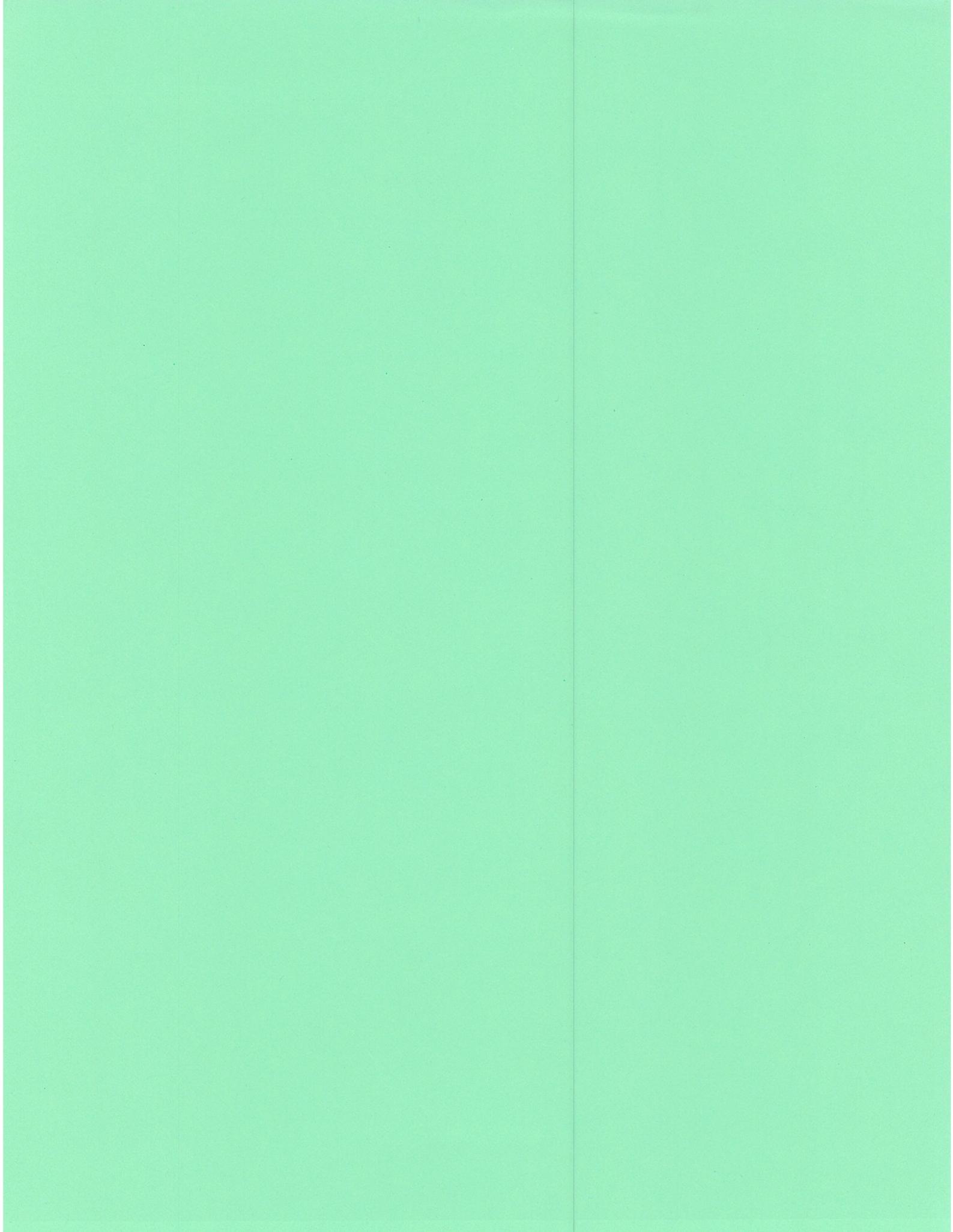
**\*\*LAB USE ONLY\*\***

SAMPLE CONDITION: Check box if acceptable or note deviation:  PRESERVATIONS:  HOLDING TIME:  TEMPERATURE:

Sampled By: *Dennis M. Peck* Date/Time: *5/1/00 4:10* Received By: *[Signature]* Date/Time: *5/1/00 16:15*

Relinquished By: *[Signature]* Date/Time: *5/1/00 10:45* Total Cost:

Relinquished By: *[Signature]* Date/Time: *5/1/00 10:45* P.I.F.



**PARADIGM  
Environmental  
Services, Inc.**

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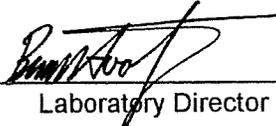
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3026  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/18/00  
**Field Location:** TB-4@7.5' **Date Received:** 04/20/00  
**Field ID No:** 2089-04 **Date Analyzed:** 04/27/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Kerosene	561,000	8,620

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

**Comments:** BDL denotes Below Detection Limit

**Approved By:**   
Laboratory Director

**PARADIGM  
Environmental  
Services, Inc.**

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

**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3027

**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil

**Client Job No.:** 2089S-99 **Date Sampled:** 04/18/00

**Field Location:** TB-7@10.0' **Date Received:** 04/20/00

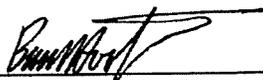
**Field ID No:** 2089-07 **Date Analyzed:** 04/25/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	627,000	7,610

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

**Comments:** BDL denotes Below Detection Limit

**Approved By:** \_\_\_\_\_

  
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

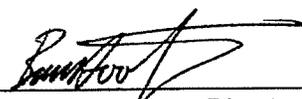
**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3030  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089-S-99 **Date Sampled:** 04/19/2000  
**Date Received:** 04/20/2000  
**Field Location:** TB-16@1.5' **Date Analyzed:** 04/26/2000  
**Field ID No:** 2089-16

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	10,200	9,150
Heavy Weight PHC as Lube Oil	205,000	9,150

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: \_\_\_\_\_

  
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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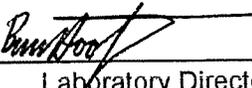
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3031  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/2000  
**Field Location:** TB-17@10.5' **Date Received:** 04/20/2000  
**Field ID No:** 2089-17 **Date Analyzed:** 04/26/2000

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Mineral Spirits	169,000	8,980
Heavy Weight PHC as Lube Oil	178,000	8,980

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

**Comments:** BDL denotes Below Detection Limit

**Approved By:**   
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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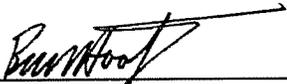
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3032  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/2000  
**Field Location:** TB-18@10.0' **Date Received:** 04/20/2000  
**Field ID No:** 2089-18 **Date Analyzed:** 04/27/2000

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Mineral Spirits	92,800	9,060
Heavy Weight PHC as Lube Oil	22,000	9,060

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By:   
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

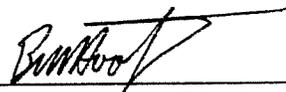
**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3033  
**Client Job Site:** Charlotte Street  
**Sample Type:** Soil  
**Client Job No.:** 2089S-99  
**Date Sampled:** 04/19/2000  
**Field Location:** TB-26@12.0' **Date Received:** 04/20/2000  
**Field ID No:** 2089-26 **Date Analyzed:** 04/27/2000

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Mineral Spirits	98,200	8,920
Heavy Weight PHC as Lube Oil	22,500	8,920

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

**Comments:** BDL denotes Below Detection Limit

**Approved By:** \_\_\_\_\_

  
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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

**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

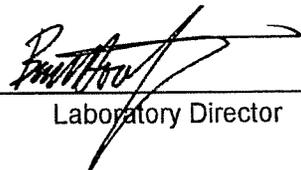
**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3034  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/00  
**Field Location:** TB-29@8.5' **Date Received:** 04/20/00  
**Field ID No:** 2089-29 **Date Analyzed:** 04/27/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Kerosene	17,500	8,640

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: \_\_\_\_\_



Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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**Laboratory Analysis For Petroleum Hydrocarbons in Water**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Client Job Site:** Charlotte Street **Lab Sample No.:** 3035  
Rochester, NY **Sample Type:** Water  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/2000  
**Field Location:** Field Blank **Date Received:** 04/20/2000  
**Field ID No:** 2089-FB **Date Analyzed:** 04/27/2000

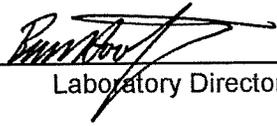
Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Petroleum Hydrocarbon	BDL	250

N.Y.D.O.H. Analytical Method: 310.13

ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: \_\_\_\_\_

  
Laboratory Director

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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

**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

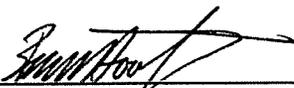
**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3044  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/00  
**Field Location:** TB-23@8' **Date Received:** 04/20/00  
**Field ID No:** 2089-23 **Date Analyzed:** 04/26/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Petroleum Hydrocarbon	BDL	9,000

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL**

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

**SERVICES, INC.**

**SEMI-VOLATILE PHC  
SPIKE RECOVERY SUMMARY FORM**  
Soil Method

Lab Sample ID	Field Location			PHC Spike	Percent Recovery
LCS	N/A			Diesel Fuel #2	55.5
LCS Dup	N/A			Diesel Fuel #2	68.5
3030MS	TB-16@1.5'			Diesel Fuel #2	91.6
3030MSD	TB-16@1.5'			Diesel Fuel #2	68.4
3031MS	TB-17@10.5'			Diesel Fuel #2	64.4
3031MSD	TB-17@10.5'			Diesel Fuel #2	83.2

Comments:

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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

**Polychlorinated Biphenyls Laboratory Analysis Report For Soil/Sludge/Oil**

**Client:** Day Environmental, Inc **Lab Project No.:** 00-0785  
**Lab Sample No.:** 3031  
**Client Job Site:** Charlotte Street  
Rochester, NY **Sample Type:** Soil  
**Client Job No.:** 2089S-99 **Date Sampled:** 04/19/00  
**Field Location:** TB-17@10.5' **Date Received:** 04/20/00  
**Field ID No:** 2089-17 **Date Analyzed:** 04/25/00

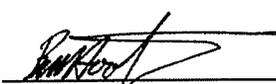
Polychlorinated Biphenyl	Result (mg/Kg)	Reporting Limit (mg/Kg)
PCB 1016	ND	0.52
PCB 1221	ND	0.52
PCB 1232	ND	0.52
PCB 1242	ND	0.52
PCB 1248	ND	0.52
PCB 1254	ND	0.52
PCB 1260	ND	0.52

Analytical Method: EPA 8080

ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: \_\_\_\_\_

  
Laboratory Director

# **PARADIGM**

## **ENVIRONMENTAL**

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

**SERVICES, INC.**

**SEMI-VOLATILE PCB  
SPIKE RECOVERY SUMMARY FORM  
Soil Method**

Lab Sample ID	Field Location			PCB Spike	Percent Recovery
LCS	N/A			PCB 1248	98.2
LCS Dup	N/A			PCB 1248	96.0
3031 MS	TB-17@10.5'			PCB 1248	104
3031 MSD	TB-17@10.5'			PCB 1248	106

Advisory QC Limits:

Spike % Recovery  
50 - 150%

Comments:

**Semi-Volatile Analysis Report For Solids (STARS List)**

Client: **Day Environmental, Inc**

Lab Project No. 00-0785

Lab Sample No. 3026

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/18/00

Field Location: TB-4@7.5'

Date Received: 04/20/00

Field ID No.: 2089-04

Date Analyzed: 04/24/00

COMPOUND	RESULT (ug/Kg)
Naphthalene	6,790
Acenaphthene	ND< 345
Fluorene	ND< 345
Fluoranthene	ND< 345
Anthracene	ND< 345
Phenanthrene	ND< 345
Benzo (a) anthracene	ND< 345
Chrysene	ND< 345
Pyrene	ND< 345
Benzo (b) fluoranthene	ND< 345
Benzo (k) fluoranthene	ND< 345
Benzo (g,h,i) perylene	ND< 345
Benzo (a) pyrene	ND< 345
Dibenz (a,h) anthracene	ND< 345
Indeno (1,2,3-cd) pyrene	ND< 345

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
SERVICES, INC.**

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

## Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental, Inc**

Lab Project No. 00-0785

Lab Sample No. 3027

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/18/00

Field Location: TB-7@10.0'

Date Received: 04/20/00

Field ID No.: 2089-07

Date Analyzed: 04/24/00

COMPOUND	RESULT (ug/Kg)
Naphthalene	766
Acenaphthene	431
Fluorene	584
Fluoranthene	ND< 305
Anthracene	ND< 305
Phenanthrene	1,700
Benzo (a) anthracene	ND< 305
Chrysene	ND< 305
Pyrene	ND< 305
Benzo (b) fluoranthene	ND< 305
Benzo (k) fluoranthene	ND< 305
Benzo (g,h,i) perylene	ND< 305
Benzo (a) pyrene	ND< 305
Dibenz (a,h) anthracene	ND< 305
Indeno (1,2,3-cd) pyrene	ND< 305

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

ENVIRONMENTAL  
SERVICES, INC.

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

## Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental, Inc**

Lab Project No. 00-0785

Lab Sample No. 3028

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/18/00

Field Location: TB-8@6.0'

Date Received: 04/20/00

Field ID No.: 2089-08

Date Analyzed: 04/24/00

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 357
Acenaphthene	ND< 357
Fluorene	ND< 357
Fluoranthene	ND< 357
Anthracene	ND< 357
Phenanthrene	ND< 357
Benzo (a) anthracene	ND< 357
Chrysene	ND< 357
Pyrene	ND< 357
Benzo (b) fluoranthene	ND< 357
Benzo (k) fluoranthene	ND< 357
Benzo (g,h,i) perylene	ND< 357
Benzo (a) pyrene	ND< 357
Dibenz (a,h) anthracene	ND< 357
Indeno (1,2,3-cd) pyrene	ND< 357

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
SERVICES, INC.**

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

## Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental, Inc**

Lab Project No. 00-0785

Lab Sample No. 3029

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/18/00

Field Location: TB-9@11.5'

Date Received: 04/20/00

Field ID No.: 2089-09

Date Analyzed: 04/24/00

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 364
Acenaphthene	ND< 364
Fluorene	ND< 364
Fluoranthene	ND< 364
Anthracene	ND< 364
Phenanthrene	ND< 364
Benzo (a) anthracene	ND< 364
Chrysene	ND< 364
Pyrene	ND< 364
Benzo (b) fluoranthene	ND< 364
Benzo (k) fluoranthene	ND< 364
Benzo (g,h,i) perylene	ND< 364
Benzo (a) pyrene	ND< 364
Dibenz (a,h) anthracene	ND< 364
Indeno (1,2,3-cd) pyrene	ND< 364

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
SERVICES, INC.**

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

## Semi-Volatile Analysis Report For Solids (STARS List)

Client: **Day Environmental, Inc**

Lab Project No. 00-0785

Lab Sample No. 3031

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/19/00

Field Location: TB-17@10.5'

Date Received: 04/20/00

Field ID No.: 2089-17

Date Analyzed: 04/25/00

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 360
Acenaphthene	ND< 360
Fluorene	ND< 360
Fluoranthene	ND< 360
Anthracene	ND< 360
Phenanthrene	ND< 360
Benzo (a) anthracene	ND< 360
Chrysene	ND< 360
Pyrene	ND< 360
Benzo (b) fluoranthene	ND< 360
Benzo (k) fluoranthene	ND< 360
Benzo (g,h,i) perylene	ND< 360
Benzo (a) pyrene	ND< 360
Dibenz (a,h) anthracene	ND< 360
Indeno (1,2,3-cd) pyrene	ND< 360

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
SERVICES, INC.**

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

## Semi-Volatile Analysis Report For Solids (STARS List)

**Client:** Day Environmental, Inc

**Lab Project No.** 00-0785

**Lab Sample No.** 3033

**Client Job Site:** Charlotte Street  
Rochester, NY

**Sample Type:** Soil

**Client Job No.:** 2089S-99

**Date Sampled:** 04/19/00

**Field Location:** TB-26@12.0'

**Date Received:** 04/20/00

**Field ID No.:** 2089-26

**Date Analyzed:** 04/25/00

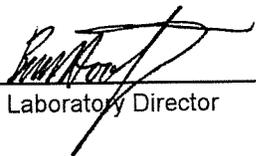
COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 357
Acenaphthene	ND< 357
Fluorene	ND< 357
Fluoranthene	ND< 357
Anthracene	ND< 357
Phenanthrene	ND< 357
Benzo (a) anthracene	ND< 357
Chrysene	ND< 357
Pyrene	ND< 357
Benzo (b) fluoranthene	ND< 357
Benzo (k) fluoranthene	ND< 357
Benzo (g,h,i) perylene	ND< 357
Benzo (a) pyrene	ND< 357
Dibenz (a,h) anthracene	ND< 357
Indeno (1,2,3-cd) pyrene	ND< 357

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# **PARADIGM**

**ENVIRONMENTAL**  
**SERVICES, INC.**

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

## **Semi-Volatile Analysis Report For Solids (STARS List)**

**Client:** Day Environmental, Inc

**Lab Project No.** 00-0785

**Lab Sample No.** 3034

**Client Job Site:** Charlotte Street  
Rochester, NY

**Sample Type:** Soil

**Client Job No.:** 2089S-99

**Date Sampled:** 04/19/00

**Date Received:** 04/20/00

**Field Location:** TB-29@8.5'

**Date Analyzed:** 04/25/00

**Field ID No.:** 2089-29

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 345
Acenaphthene	ND< 345
Fluorene	ND< 345
Fluoranthene	ND< 345
Anthracene	ND< 345
Phenanthrene	ND< 345
Benzo (a) anthracene	ND< 345
Chrysene	ND< 345
Pyrene	ND< 345
Benzo (b) fluoranthene	ND< 345
Benzo (k) fluoranthene	ND< 345
Benzo (g,h,i) perylene	ND< 345
Benzo (a) pyrene	ND< 345
Dibenz (a,h) anthracene	ND< 345
Indeno (1,2,3-cd) pyrene	ND< 345

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
SERVICES, INC.**

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

## Semi-Volatile Analysis Report For Water (STARS List)

**Client:** Day Environmental, Inc

**Lab Project No.:** 00-0785

**Lab Sample No.:** 3035

**Client Job Site:** Charlotte Street  
Rochester, NY

**Sample Type:** Water

**Client Job No.:** 2089S-99

**Date Sampled:** 04/19/00

**Field Location:** Field Blank

**Date Received:** 04/20/00

**Field ID No.:** 2089-FB

**Date Analyzed:** 04/26/00

COMPOUND	RESULT (ug/L)
Naphthalene	ND< 10.0
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270

NYS ELAP ID No.: 10958

**Comments:** ND denotes Not Detected

**Approved By:** \_\_\_\_\_

Laboratory Director

# **PARADIGM**

**ENVIRONMENTAL**  
**SERVICES, INC.**

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

## **Semi-Volatile Analysis Report For Solids (STARS List)**

**Client:** Day Environmental, Inc

**Lab Project No.** 00-0785

**Lab Sample No.** 3043

**Client Job Site:** Charlotte Street  
Rochester, NY

**Sample Type:** Soil

**Client Job No.:** 2089S-99

**Date Sampled:** 04/18/00

**Date Received:** 04/20/00

**Field Location:** TB-3@9'

**Date Analyzed:** 04/25/00

**Field ID No.:** 2089-03

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 358
Acenaphthene	ND< 358
Fluorene	ND< 358
Fluoranthene	ND< 358
Anthracene	ND< 358
Phenanthrene	ND< 358
Benzo (a) anthracene	ND< 358
Chrysene	ND< 358
Pyrene	ND< 358
Benzo (b) fluoranthene	ND< 358
Benzo (k) fluoranthene	ND< 358
Benzo (g,h,i) perylene	ND< 358
Benzo (a) pyrene	ND< 358
Dibenz (a,h) anthracene	ND< 358
Indeno (1,2,3-cd) pyrene	ND< 358

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

**Comments:** ND denotes Not Detected

**Approved By:** \_\_\_\_\_

  
Laboratory Director

**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  
 Soil Method

Lab Sample ID	Field Location	Percent Recovery										
		Base-Neutrals						Acids				
		Pyrene	1,4-Dichlorobenzene	N-Nitroso-di-n-propylamine	1,2,4-Trichlorobenzene	Acenaphthene	2,4-Dinitrotoluene	2-Chlorophenol	Phenol	4-Chloro-3-methyl phenol	4-Nitrophenol	Pentachlorophenol
LCS	N/A	110	57.8	69.6	62.7	61.1	50.7	N/A	N/A	N/A	N/A	N/A
LCSD	N/A	105	55.6	64.6	61.2	75.0	49.2	N/A	N/A	N/A	N/A	N/A
3031 MS	TB-17@10.5'	104	49.1	46.9	48.2	50.4	45.9	N/A	N/A	N/A	N/A	N/A
3031 MSD	TB-17@10.5'	114	54.9	52.9	52.8	54.6	49.9	N/A	N/A	N/A	N/A	N/A

	<u>BASE-NEUTRALS</u>	{CLP SOW}	{SW846}	<u>ACIDS</u>	{CLP SOW}	{SW846}
LCS Recovery	1,4-Dichlorobenzene	28-104%	20-124%	2-Chlorophenol	25-102%	23-134%
Windows	N-Nitroso-di-n-propylamine	41-126%	D-230	Phenol	26-90%	5-112%
CLP SOW OLM01.0	1,2,4-Trichlorobenzene	38-107%	44-142%	4-Chloro-3-methylphenol	26-103%	22-147%
SW-846 8270	Acenaphthene	31-137%	47-145%	4-Nitrophenol	11-114%	D-132%
	2,4-Dinitrotoluene	28-89%	39-139%	Pentachlorophenol	17-109%	14-176%
	Pyrene	35-142%	52-115%			

**PARADIGM**  
**ENVIRONMENTAL**  
**SERVICES, INC.**

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

**Volatile Organic Compound Laboratory Analysis Report For Soil/Sludge**

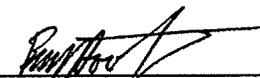
Client: Day Environmental, Inc. Lab Project No: 00-0785  
 Client Job Site: Charlotte Street Lab Sample No: 3026  
 Client Job No: 2089S-99 Rochester, NY Sample Type: Soil  
 Field Location: TB-4 @ 7.5' Date Sampled: 04/18/00  
 Field ID No: 2089-04 Date Received: 04/20/00  
 Date Analyzed: 04/22/00

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 1,660	Benzene	ND< 1,660
Bromomethane	ND< 1,660	Chlorobenzene	ND< 1,660
Bromoform	ND< 1,660	Ethylbenzene	9,010
Carbon tetrachloride	ND< 1,660	Toluene	15,600
Chloroethane	ND< 1,660	m,p - Xylene	36,800
Chloromethane	ND< 1,660	o - Xylene	13,800
2-Chloroethyl vinyl ether	ND< 1,660	Styrene	ND< 1,660
Chloroform	ND< 1,660		
Dibromochloromethane	ND< 1,660		
1,1-Dichloroethane	ND< 1,660		
1,2-Dichloroethane	ND< 1,660		
1,1-Dichloroethene	ND< 1,660		
trans-1,2-Dichloroethene	ND< 1,660		
1,2-Dichloropropane	ND< 1,660		
cis-1,3-Dichloropropene	ND< 1,660		
trans-1,3-Dichloropropene	ND< 1,660		
Methylene chloride	ND< 4,140		
1,1,2,2-Tetrachloroethane	ND< 1,660		
Tetrachloroethene	ND< 1,660		
1,1,1-Trichloroethane	ND< 1,660		
1,1,2-Trichloroethane	ND< 1,660		
Trichloroethene	ND< 1,660		
Vinyl Chloride	ND< 1,660		
		<u>Ketones &amp; Misc.</u>	
		Acetone	ND< 6,620
		Vinyl acetate	ND< 3,310
		2-Butanone	ND< 3,310
		4-Methyl-2-pentanone	ND< 3,310
		2-Hexanone	ND< 3,310
		Carbon disulfide	ND< 3,310

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By   
 Laboratory Director

**Volatile Aromatic Analysis Report For Soil/Sludge**  
(Additional 8260 compounds)

Client: Day Environmental, Inc. Lab Project No.: 00-0785  
Lab Sample No.: 3026  
Client Job Site: Charlotte Street  
Rochester, NY  
Sample Type: Soil  
Client Job No.: 2089S-99  
Date Sampled: 04/18/00  
Field Location: TB-4 @ 7.5'  
Date Received: 04/20/00  
Field ID No.: 2089-04  
Date Analyzed: 04/22/00

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 1,660
Isopropylbenzene	ND< 1,660
n-Propylbenzene	4,600
1,3,5-Trimethylbenzene	10,800
tert-Butylbenzene	ND< 1,660
1,2,4-Trimethylbenzene	35,100
sec-Butylbenzene	ND< 1,660
p-Isopropyltoluene	ND< 1,660
n-Butylbenzene	ND< 1,660
Naphthalene	ND< 1,660

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: \_\_\_\_\_

Laboratory Director



**PARADIGM**  
**ENVIRONMENTAL**  
**SERVICES, INC.**

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

**Volatile Aromatic Analysis Report For Soil/Sludge**  
**(Additional 8260 Compounds)**

**Client:** Day Environmental, Inc.

**Lab Project No.:** 00-0785

**Lab Sample No.:** 3032

**Client Job Site:** Charlotte Street  
Rochester, NY

**Sample Type:** Soil

**Client Job No.:** 2089S-99

**Date Sampled:** 04/19/00

**Field Location:** TB-18 @10.0'

**Date Received:** 04/20/00

**Field ID No.:** 2089-18

**Date Analyzed:** 04/25/00

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 11.1
Isopropylbenzene	ND< 11.1
n-Propylbenzene	ND< 11.1
1,3,5-Trimethylbenzene	ND< 11.1
tert-Butylbenzene	ND< 11.1
1,2,4-Trimethylbenzene	ND< 11.1
sec-Butylbenzene	33.5
p-Isopropyltoluene	ND< 11.1
n-Butylbenzene	ND< 11.1
Naphthalene	ND< 27.9

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: \_\_\_\_\_

Laboratory Director



**PARADIGM**  
**ENVIRONMENTAL**  
**SERVICES, INC.**

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

**Volatile Aromatic Analysis Report For Soil/Sludge**  
(Additional 8260 Compounds)

Client: **Day Environmental, Inc.**

Lab Project No.: 00-0785

Lab Sample No.: 3033

Client Job Site: Charlotte Street  
Rochester, NY

Sample Type: Soil

Client Job No.: 2089S-99

Date Sampled: 04/19/00

Field Location: TB-26 @ 12.0'

Date Received: 04/20/00

Field ID No.: 2089-26

Date Analyzed: 04/25/00

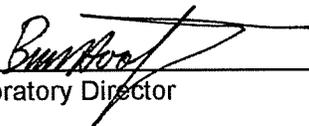
VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 9.63
Isopropylbenzene	ND< 9.63
n-Propylbenzene	ND< 9.63
1,3,5-Trimethylbenzene	ND< 9.63
tert-Butylbenzene	ND< 9.63
1,2,4-Trimethylbenzene	ND< 9.63
sec-Butylbenzene	17.3
p-Isopropyltoluene	ND< 9.63
n-Butylbenzene	ND< 9.63
Naphthalene	ND< 24.1

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: \_\_\_\_\_

  
Laboratory Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue  
Rochester, NY 14608

PROJECT NAME/SITE NAME:  
Charlotte Street  
Rochester, NY

# CHAIN OF CUSTODY

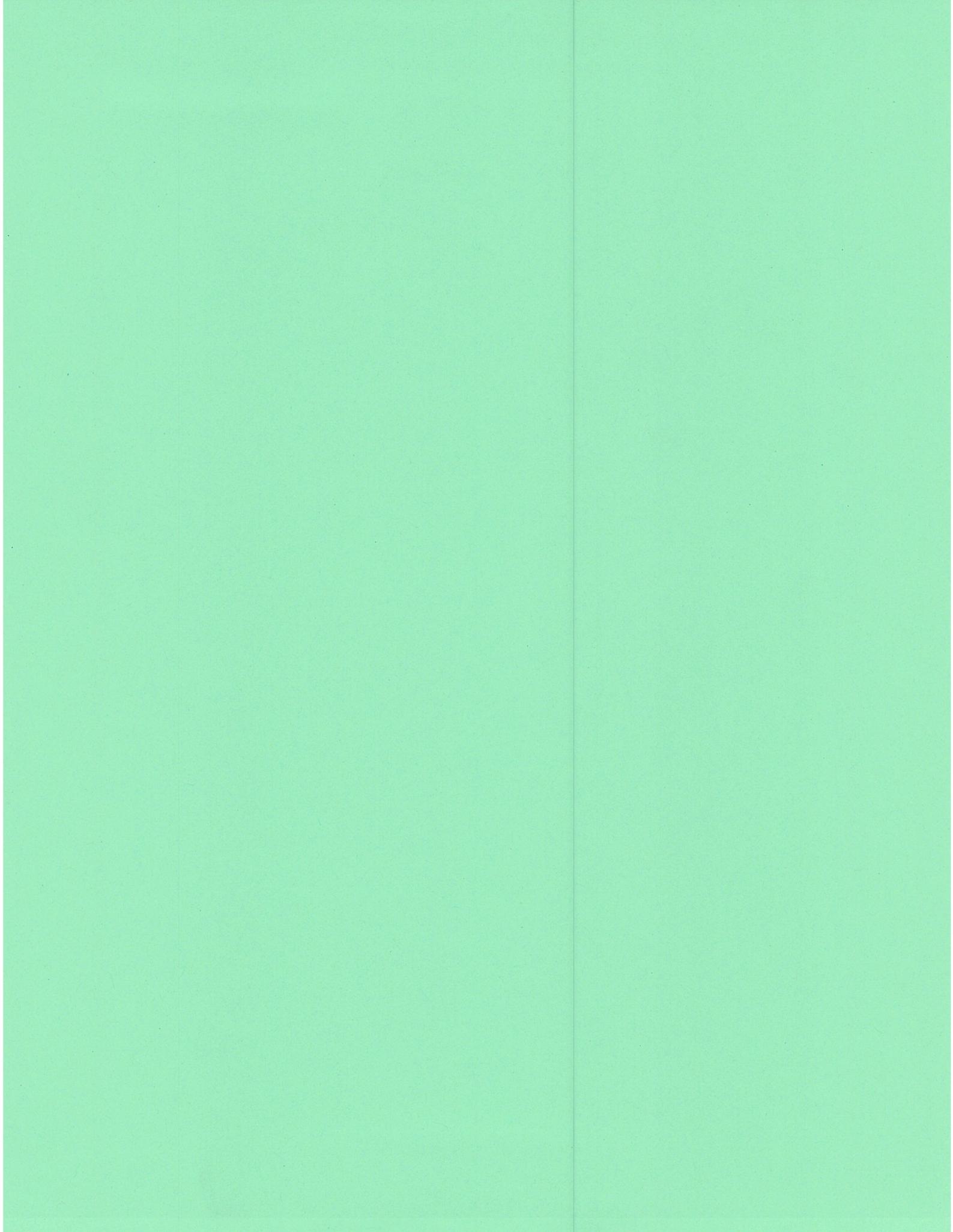
REPORT TO: INVOICE TO: COMPANY: LAB PROJECT #: CLIENT PROJECT #:  
 Jay Environmental, Inc. 10-0785 20895-99  
 ADDRESS: 2144 BHTL Rd. CITY: STATE: ZIP: TURNAROUND TIME: (WORKING DAYS)  
 Rochester 14623 292-0425  
 CITY: STATE: ZIP: ATTN: STD OTHER  
 Jeff Danzinger Joe Doro 4/18 80% 10:50 4-18-00 7 1 2 3 4 5  
 COMMENTS: TB-3, 9A 10:50 4-18-00 7 received  
 TB-2, 8M 11:25 4-19-00 7 at 10:00 ok per Joe Doro

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINERS	8270 STARS	TPH 310.13	PCB's 8080	REMARKS	PARADIGM LAB SAMPLE NUMBER
14/18/00	1125	X	X	TB-4@7.5'/2089-04	Soil	1	X	X			3026
2	1230	X	X	TB-7@10.0'/2089-07		1	X	X			3027
3	1350	X	X	TB-8@6.0'/2089-08		1	X	X			3028
4	1410	X	X	TB-9@11.5'/2089-09		1	X	X			3029
5/19/00	0830	X	X	TB-16@1.5'/2089-16 (MS/MSD)		2	X	X		Composite in lab (Q/A/C)	3030
6	0900	X	X	TB-17@10.5'/2089-17 (MS/MSD)		2	X	X		↓	3031
7	0950	X	X	TB-18@10.0'/2089-18		1	X	X			3032
8	1315	X	X	TB-26@12.0'/2089-26		1	X	X			3033
9	1355	X	X	TB-29@8.5'/2089-29		1	X	X			3034
10	0915	X	X	Field Blank/2089-FB	Water	1	X	X		preserved in 6.5 oz white	3035

**\*\*LAB USE ONLY\*\***

SAMPLE CONDITION: Check box 3 - CONTAINER TYPE: 8 PRESERVATIONS: 3031, TB 23 PH 4.32-4.33 TEMPERATURE: 4  
 if acceptable or note deviation: HOLDING TIME: cool on ice

Received By: Date/Time: Received By: Date/Time: Total Cost:  
 [Signature] 4/20/00 10:30 [Signature] 4/20/00 10:30  
 Retrievished By: Date/Time: Retrievished By: Date/Time:  
 [Signature] (DAY) 4/20/00 11:00 [Signature] 4/20/00 11:00  
 Retrievished By: Date/Time: P.I.F.





**Volatile Aromatic Analysis Report For Soil/Sludge**  
(Additional 8260 Compounds)

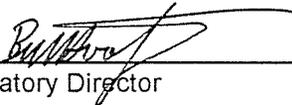
Client: Day Environmental Lab Project No.: 00-0900  
Client Job Site: Charlotte St. Lab Sample No.: 3529  
Client Job No.: N/A Sample Type: Soil  
Field Location: MW-8 (0-2') Date Sampled: 05/02/00  
Field ID No.: N/A Date Received: 05/04/00  
Date Analyzed: 05/09/00

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 7.96
Isopropylbenzene	ND< 7.96
n-Propylbenzene	ND< 7.96
1,3,5-Trimethylbenzene	ND< 7.96
tert-Butylbenzene	ND< 7.96
1,2,4-Trimethylbenzene	ND< 7.96
sec-Butylbenzene	ND< 7.96
p-Isopropyltoluene	ND< 7.96
n-Butylbenzene	ND< 7.96
Naphthalene	ND< 19.9

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By:   
Laboratory Director

**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

Lab Sample ID	Field Location	Percent Recovery				
		1,1-Dichloro ethene	Trichloro ethene	Benzene	Toluene	Chloro benzene
LCS	N/A	109	97.3	105	103	98.2
LCS Dup	N/A	118	104	112	112	107
3529 MS	MW-8 (0-2')	94.8	84.1	92.0	93.3	95.4
3529 MSD	MW-8 (0-2')	104	91.1	89.7	95.7	101

LCS Recovery	<u>VOLATILE</u>	<u>{CLP SOW}</u>	<u>{SW846}</u>
Windows	1,2-Dichloroethene	59-172%	D-234%
CLP SOW OLM01.0	Trichloroethene	62-137%	71-157%
SW-846 8240	Benzene	66-142%	37-151%
	Toluene	59-139%	47-150%
	Chlorobenzene	60-133%	37-160%

**PARADIGM**  
**Environmental**  
**Services, Inc.**

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

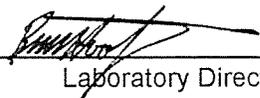
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

Client: Day Environmental Lab Project No.: 00-0900  
Client Job Site: Charlotte St Lab Sample No.: 3529  
Client Job No.: N/A Sample Type: Soil  
Field Location: MW-8 (0-2') Date Sampled: 05/02/00  
Field ID No: N/A Date Received: 05/04/00  
Date Analyzed: 05/11/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	1,250,000	8,280

N.Y.D.O.H. Analytical Method: 310.13 modified ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By:   
Laboratory Director

**PARADIGM**  
**ENVIRONMENTAL**  
**SERVICES, INC.**

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

SEMI-VOLATILE PHC  
 SPIKE RECOVERY SUMMARY FORM  
 Soil Method

Lab Sample ID	Field Location			PHC Spike	Percent Recovery
LCS	N/A			Diesel	55.5
LCS Dup	N/A			Diesel	68.5
3529 MS	MW-8 (0-2')			Lube Oil	NR
3529 MSD	MW-8 (0-2')			Lube Oil	NR

Comments: NR denotes Not Recovered. Sample concentration exceeds recoverable spike concentration

**PARADIGM ENVIRONMENTAL SERVICES, INC.**

**CHAIN OF CUSTODY**

179 Lake Avenue  
 Rochester, NY 14608  
 (716) 647-2530 \* (800) 724-1997

**REPORT TO:** *PALEONTOLOGICAL* **INVOICE TO:** *PALEONTOLOGICAL*

COMPANY: *PALEONTOLOGICAL* LAB PROJECT #: *2100* CLIENT PROJECT #:  
 ADDRESS: CITY: STATE: ZIP: TURNAROUND TIME: (WORKING DAYS)  
 CITY: STATE: ZIP: PHONE: FAX: STD  1  2  3  5 OTHER   
 PHONE: *716 647 2530* FAX: ATTN: *Tom F. Longino*  
 COMMENTS: *1*

PROJECT NAME/SITE NAME: *179 Lake Avenue*

DATE	TIME	COMPOSITE	GRA B	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAMINERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
1-26-98	9:15		X	110'g (1-2)	5	1	10'g (1-2) 110'g (1-2)	35199
2-19-98	9:15		X	110'g (1-2)	5	1	10'g (1-2) 110'g (1-2)	35200
3							10'g (1-2) 110'g (1-2)	35201
4								
5								
6								
7								
8								
9								
10								

**\*\*LAB USE ONLY\*\***

SAMPLE CONDITION: Check box if acceptable or note deviation:  PRESERVATIONS:  CONTAINER TYPE:  HOLDING TIME:  TEMPERATURE:

Sampled By: *[Signature]* Date/Time: *1/26/98 11:00* Received By: *[Signature]* Date/Time: *1/26/98 11:00*  
 Relinquished By: *[Signature]* Date/Time: *1/26/98 11:00* Received By: *[Signature]* Date/Time: *1/26/98 11:00*  
 Relinquished By: *[Signature]* Date/Time: *1/26/98 11:00* Received By: *[Signature]* Date/Time: *1/26/98 11:00*

Total Cost:

P.I.F.