

**PHASE II STUDY**

**200 EAST AVENUE  
62-64 SCIO STREET  
ROCHESTER, NEW YORK**

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

**Prepared For:** Mr. Mark Gregor  
Environmental Specialist  
City of Rochester  
30 Church Street  
Rochester, New York 14614

**Project No.:** 0577S-95

**Date:** August, 1995



## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION AND PURPOSE</b>	<b>1</b>
1.1	Site Setting	1
1.2	Previous Studies	1
1.3	Purpose and Scope of Work	3
<b>2.0</b>	<b>FIELD ACTIVITIES</b>	<b>5</b>
2.1	Dye Testing & Observation of Below-Grade Structures	5
2.2	Magnetic Locator Survey	5
2.3	Evaluation of Existing Tanks	5
2.4	Soil Gas Survey	6
2.5	Test Pit Trench	6
2.6	Geoprobe Test Borings	7
2.7	Groundwater Monitoring Wells	7
2.8	Monitoring Well Development	9
2.9	Surveying, Static Water Level Measurements, and Groundwater Flow Direction	9
<b>3.0</b>	<b>FINDINGS</b>	<b>10</b>
3.1	Dye Testing & Observation of Below-Grade Structures	10
3.2	Magnetic Locator Survey	10
3.3	Evaluation of Tanks	10
3.4	Soil Gas Survey	12
3.5	Test Pit Trench	14
3.6	Geoprobe Test Borings	15
3.7	Test Borings & Groundwater Monitoring Wells	17
3.8	Adjacent Spill - 68 Scio Street	18
<b>4.0</b>	<b>SAMPLING PROGRAM AND ANALYTICAL RESULTS</b>	<b>19</b>
4.1	Soil Samples	19
4.2	Sediment/Sludge Samples	21
4.3	Groundwater Sampling - Overburden Wells	22
4.4	Groundwater Sampling - Overburden/Bedrock Interface Wells	23
4.5	Suspect Asbestos-Containing Materials	24
<b>5.0</b>	<b>DISCUSSION OF ANALYTICAL RESULTS</b>	<b>30</b>
5.1	Soils/Fill Materials/Sediments	30
5.2	Groundwater	31
<b>6.0</b>	<b>CONCLUSIONS AND RECOMMENDATIONS</b>	<b>32</b>
<b>7.0</b>	<b>ESTIMATED COSTS FOR CORRECTIVE ACTIONS</b>	<b>38</b>
7.1	Permanent Closure of Aboveground and Underground Storage Tanks	38
7.2	Disposal of Waste Materials	38
7.3	Asbestos Abatement	39
7.4	Subsurface Study near Underground Storage Tank at 62-64 Scio Street	39

**TABLE OF CONTENTS (Cont.)**

7.5	Diesel Fuel-Contaminated Soils in Northern Parking Lot . . . . .	39
7.6	Fill Materials In Northern Parking Lot . . . . .	40
7.7	Petroleum-Contaminated Soils Beneath Service Garage . . . . .	41
7.8	Contaminated Groundwater Near Service Garage . . . . .	43

Appendix A - Drawings

Appendix B - Monitoring Well Logs

Appendix C - Well Development Logs

Appendix D - Groundwater Elevations

Appendix E - Lab Results

## **1.0 INTRODUCTION AND PURPOSE**

In accordance with the Day Environmental, Inc. ("DAY") proposal, dated June 8, 1995, DAY conducted studies on behalf of the City of Rochester to evaluate environmental conditions on the properties located at 200 East Avenue and 62-64 Scio Street, Rochester, New York. A project locus map, included as Drawing SR-1 in Appendix A, illustrates the location of the subject properties ("Site").

### **1.1 Site Setting**

The 200 East Avenue parcel is generally bound by Gable Alley and then a warehouse to the north, Winthrop Street and then a commercial office space, a body shop, vacant lot and a parking lot to the east, East Avenue and then a television station to the south, and Mathews Street and then Speedy's Dry Cleaners, a warehouse, a parking lot, and the 62-64 Scio Street property.

The 62-64 Scio Street parcel is bound by E. G. Snyder Co. to the north, Mathews Street and then a parking lot for the 200 East Avenue parcel to the east, Speedy's Dry Cleaners plant to the south, and Scio Street and then parking ramp to the west.

The 200 East Avenue parcel is a 2.3-acre parcel that contains a 33,000-square foot, 2-story building constructed around 1910. The 62-64 Scio Street parcel is a 0.25-acre parcel that contains a 22,000-square foot, 2-story brick building built around 1920. Both parcels are relatively level and slope gently to the north. The building on the 62-64 Scio Street parcel occupies the complete parcel, and the 200 East Avenue parcel contains a small parking lot on the southeast side of the building, and a larger parking lot on the north side of the building.

The 200 East Avenue parcel is currently used for the storage of automobiles and as a parking lot. The 62-64 Scio Street parcel is currently used for the storage of automobiles and records. Past land uses include a gasoline station and an automobile sales and service dealership for the 200 East Avenue parcel, and the 62-64 Scio Street parcel was formerly used as a warehouse.

### **1.2 Previous Studies**

Rizzo Associates, Inc. (Rizzo) performed a Phase I and Phase II study at the Site. The results of the Rizzo study are included in a report entitled "Investigation of Former Hallman Chevrolet Properties, dated May 21, 1993. The City of Rochester developed a Schedule A, Supplemental Phase II Investigation Scope of Work document identifying the general supplemental Phase II scope-of-work to be performed at the Site. Based on the review of the Rizzo report and the City of Rochester Schedule A document, several potential environmental concerns were identified, including:

- four abandoned, out-of service underground storage tanks (USTs) located at the 200 East Avenue Site;

- one former waste oil UST filled-in-place inside the 200 East Avenue repair garage, and a former heating oil UST filled-in-place inside the parts warehouse building at 62-64 Scio Street;
- petroleum-contaminated groundwater detected on the 200 East Avenue site, (the extent of groundwater contamination was not delineated);
- the potential for soil and/or groundwater contamination beneath the former repair garage located at 200 East Avenue and the former parts warehouse located on 62-64 Scio Street; and
- unknown subsurface conditions in the parking lot behind the former repair garage located on 200 East Avenue.

DAY completed a Phase I ESA on the Site on behalf of the City of Rochester (File #0525E-95) in May, 1995. DAY's Phase I ESA identified the following additional environmental concerns:

- suspect asbestos-containing material (SACM) located inside the 200 East Avenue and 62-64 Scio Street buildings;
- two additional suspect underground storage tanks located inside the building at 200 East Avenue (subsurface conditions unknown);
- one suspect underground storage tank located in the southwestern parking lot on the 200 East Avenue Site (subsurface conditions unknown);
- floor drains/sumps with suspect contents located inside the 200 East Avenue building (discharge location and integrity unknown);
- approximately 19 in-ground hydraulic floor lifts and associated pits (most of the lift pits were observed to contain oil-like liquid) located inside the 200 East Avenue building (subsurface conditions and integrity unknown);
- a compressor room with evidence of oil-like staining on the floor, walls, etc. and a 5-gallon container of unknown liquid located in the basement of the 200 East Avenue building (subsurface conditions and liquid in container unknown);
- a lacquer spraying/oil house area formerly located inside the 200 East Avenue building (subsurface conditions unknown);
- a spill on an adjoining property next to the 62-64 Scio Street Site (potential impact on that Site unknown); and

- unknown pipes on the exterior of the 62-64 Scio Street building (function/use of the pipes unknown).

### **1.3 Purpose and Scope of Work**

As outlined in DAY's June 8, 1995 proposal, the purpose of the studies completed by DAY was to evaluate the potential environmental concerns at the Site and to provide recommendations for additional investigation and/or remediation. If remediation is warranted, identify potential remedial options, estimated remedial costs, and the approximate remedial schedules to complete the specified remedial measures.

To achieve the above-stated purpose, DAY performed the following tasks:

#### 200 East Avenue

- dye tested interior floor drains/sumps to determine their point of discharge;
- evaluated the integrity and contents of 19 hydraulic lift pits and one sump filled with sediments;
- evaluated four underground tanks, one aboveground tank, and identified a tank in a below-grade vault;
- retained a subcontractor to excavate a 650 foot continuous test pit trench in the northern parking area to evaluate the Site's subsurface conditions in this area;
- advanced 12 Geoprobe System test borings inside the building and two Geoprobe System test borings east of the building;
- advanced 23 soil gas survey probe holes on the southeastern and northern sides of the building;
- retained a subcontractor to install four overburden/bedrock interface monitoring wells;
- monitored Site explorations and made in-situ measurements to characterize conditions;
- collected five soil/fill and four sediment/sludge samples for analytical testing;
- developed the monitoring wells and measured the static groundwater levels in the wells to assess groundwater flow at the Site;

- collected groundwater samples from six of the seven on-site monitoring wells for analytical testing;
- collected 12 samples of suspect asbestos-containing materials for analytical testing.

#### 62-64 Scio Street

- reviewed NYSDEC documentation regarding a spill on an adjoining property to the north of 62-64 Scio Street parcel to evaluate the potential impact of the adjacent spill on the Site;
- evaluated the unknown pipes on the exterior of the 62-64 Scio Street building to determine their potential function/use;
- advanced four soil gas probe holes and one Geoprobe test boring in an area where a UST was reportedly filled in place; and
- collected four samples of suspect asbestos-containing materials for analytical testing.

DAY also evaluated and interpreted the data generated during this study, and prepared this report summarizing primary findings, conclusions, and recommendations.



## **2.0 FIELD ACTIVITIES**

This section describes the field activities performed and the techniques utilized to evaluate the below-grade structures, evaluate the existing and potential tanks, excavate the test pit trench, advance the Geoprobe test borings, perform the soil gas survey, install, construct, and develop the monitoring wells, and collect static water level measurements.

### **2.1 Dye Testing & Observation of Below-Grade Structures**

On June 13, 1995, DAY representatives dye tested the floor drains and sumps present in the service garage located at 200 East Avenue in order to evaluate their discharge location. DAY representatives introduced a water soluble colored dye into the floor drains and sumps and flushed the dye with water. DAY representatives then monitored the downgradient sewer system for evidence of the colored dye.

DAY representatives also observed and documented the type of construction and integrity of the floor drains/sumps and in-ground hydraulic floor lifts. As part of this evaluation, DAY representatives noted the general condition and the type and quantity of the contents (e.g., fluids and/or sediments/sludge) within the drains/sumps or hydraulic lift pits. Section 3.0 of this report discusses the findings of the dye testing and the evaluation of the below-grade structures.

### **2.2 Magnetic Locator Survey**

On June 19, 1995, DAY representatives conducted a magnetic locator survey on the 200 East Avenue parcel in those areas where UST's are suspected of having been located based on the a review of Sanborn fire insurance maps, and the information obtained during DAY's Phase I ESA. A magnetic locator is a portable instrument that is used to detect the presence of buried metallic objects, such as underground tanks, beneath the ground surface.

The two areas surveyed included the interior of the existing building in an area where USTs were shown on a Sanborn map, and in the southeastern parking lot where USTs were illustrated according to City of Rochester records. DAY representatives used a Schonstedt Model GA-52B Magnetic locator to conduct the survey. Magnetic readings above background were recorded. Section 3.0 of this report discusses the findings of the magnetic locator survey.

### **2.3 Evaluation of Existing Tanks**

Based on the information obtained from the Rizzo report and DAY's Phase I ESA, the two Sites contain a total of four existing USTs and two aboveground storage tanks (ASTs). One of the ASTs is located in a garage building that was not accessible at the time of the Phase I ESA or the Phase II Study. The total volume of product, water, and sludge in each UST/AST was estimated utilizing petroleum/water detection paste and a measuring stick. Section 3.0 summarizes the pertinent findings of the UST and AST inventory.

## 2.4 Soil Gas Survey

DAY representatives performed a soil gas survey on June 16, 1995. The instruments utilized to screen the soil gases/vapors during the soil gas survey included a Photovac Microtip model HL-2000 photoionization detector equipped with a 10.6 Ev lamp and a Century Foxboro Model GC128 flame ionization detector. The PID was calibrated to benzene prior to the soil gas survey. The PID meter is capable of detecting total organic vapors/gases, such as those constituents typically found in petroleum products and many solvents. The FID can also detect naturally-occurring vapors/gases (e.g., methane) and some semi-volatile constituents.

Soil gas probe holes were advanced using the Geoprobe rods to create an approximate one-inch diameter open probe hole. Probe hole depth ranged from between three and five feet below grade. A pre-cleaned, reusable teflon tube was inserted into the probe hole following removal of the Geoprobe rods, and the top of the resulting annulus between the teflon tube and probe hole was sealed at the ground surface using a mixture of bentonite clay and water. Air from the hole was purged through the tube for 40-60 seconds using an external vacuum pump (BGI Model BF-1). After each hole was purged, a stopcock on the pump inlet tube was closed and the pump was disconnected from the tube. The PID and FID readings were then obtained by connecting the probe directly to the tube and opening the stopcock to draw the sample. The probe was allowed to draw the sample until a peak reading was obtained and recorded. The probe hole locations are illustrated on Drawing SR-2 and SR-4, included in Appendix A of this report.

A total of 28 probe holes was advanced as part of the soil gas survey, with 23 soil gas probe holes advanced on the 200 East Avenue parcel, and four soil gas probe holes advanced on the 62-64 Scio Street parcel. The PID/FID readings and pertinent field observations (e.g., odors) obtained during the soil survey are summarized in Table 2.0. Section 3.0 of this report discusses the findings of the soil gas survey.

## 2.5 Test Pit Trench

A test pit trench was excavated on the Site June 24 and 25, 1995. The test pit trench was in the areas where future development may occur as indicated in the City of Rochester conceptual redevelopment plan. The test pit was excavated in the parking lot that is bound by Winthrop Street, Gable Alley, Mathews Street, and the repair garage at 200 East Avenue. Prior to excavation, DAY established stations at 100-foot intervals around the perimeter of the test trench (i.e., Sta 0+00 through 6+95). Drawing SR-2, which is included in Appendix A of this report, illustrates the approximate location of the test pit trench and selected station locations/designations.

DAY retained Tom Morrison Excavating, Inc. to provide the excavator and operator to excavate and backfill the test pit trench. A DAY representative was present to observe, photograph and document the soils and/or fill materials encountered in each test pit. During the test pit excavations, the soils and fill materials were screened in the field using a Photovac

Microtip Model HL-2000 photoionization detector (PID) equipped with a 10.6 eV lamp. The results of the test pit trench excavation are discussed further in Section 3.0.

## **2.6 Geoprobe Test Borings**

As part of DAY's studies, 14 hand test borings (TB-1 through TB-14) were advanced by DAY representatives on June 13 and 14, 1995, utilizing a Geoprobe System (Geoprobe) soil sampling equipment. Twelve of the Geoprobe test borings were advanced inside the service garage building in vicinity of the below-grade hydraulic lift pits, floor trench drains, former USTs that reportedly have been filled in place, and near a sump that contained oily sediments. One Geoprobe test boring (SG-25) was advanced inside the warehouse at 62-64 Scio Street in the vicinity of the UST that has been reportedly filled in place. Drawing SR-2 and SR-4 in Appendix A of this report illustrates the Geoprobe test boring locations.

The Geoprobe test borings were advanced using a hand-held Bosch electric rotary hammer-drill. The Geoprobe System was configured to collect discrete soil samples in two foot increments by utilizing a retractable sample head and a removable inner sample barrel that contains a dedicated plastic sample liner. The recovered soil samples were evaluated and screened with the PID/FID. In addition, if the boring remained open, down-hole PID/FID measurements were collected from some borings. DAY representative recorded PID/FID readings, and pertinent observations (e.g., staining, petroleum-like odors). Select samples were also collected for laboratory testing. Section 4.0 of this report discusses the sample and analytical program.

## **2.7 Groundwater Monitoring Wells**

As part of DAY's studies, four test borings were advanced by Earth Dimensions, Inc. (EDI) using 4 1/4-inch diameter augers. Each of the test borings were advanced through the overburden and approximately five feet into bedrock. Following drilling, each of the four test borings were converted into monitoring wells. Drawing SR-2, in Appendix A of this report, illustrates the location of the monitoring wells installed as part of this study.

The test borings/wells were installed in the following locations:

- MW-1: along the northeastern property line.
- MW-2: north of the service building.
- MW-3: along the northwestern property line.
- MW-4: in the southeastern parking lot, south of the service building.

Continuous split spoon samples were collected ahead of the augers in general accordance with ASTM 1586. Soils were sampled using split spoon samples driven by a 140-pound hammer free-falling 30 inches (Standard Penetration Test). Each of the test borings was sampled to refusal (suspected top of rock).

Continuous split spoon samples were recovered during the advancement through the overburden, and the recovered split spoon samples were visually examined by a DAY representative for evidence of suspect contamination (e.g., staining, unusual odors). The recovered split spoon samples were also screened with a PID, and select samples were screened with a FID in order to assist in determining if VOCs were present in the split spoon samples recovered. The depth and split spoon number, blow counts, percent recovery, PID/FID readings, and a description of the materials encountered are summarized in a test boring log for each the four test borings advanced. The test boring/well logs are included in Appendix B of this report.

The augers, drilling equipment, split spoons, and sampling tools were decontaminated after completing each test boring by steam cleaning in order to preclude cross contamination between successive test borings. Decontamination fluids and well development waters were contained in New York State Department of Transportation approved 55-gallon drums, that are staged on-site as of the date of this report.

The four monitoring wells installed by EDI were constructed of two-inch I.D., threaded, flush-jointed, No. 10 slot (0.01-inch), schedule 40 PVC screen with riser casing. The well screen was installed in each well to screen the water-bearing zone encountered within the bedrock, or at the interface of the overburden and weathered bedrock. The well screen in each well was 10 feet in length, with five feet of screen extending into the overburden and the remaining five feet of screen extending below the top of the rock. A sand pack was placed around the well screens, and the sand pack extends approximately one foot above and one foot below the bottom of each screen. A one to two-foot thick bentonite seal was placed above the sand pack in each well, and the remaining annulus was filled with a cement bentonite grout. The riser of each well was equipped with a cap, and a curb box was cemented in place over each well level with existing grade. The monitoring well logs included in Appendix B illustrate the construction details of the four monitoring wells installed by DAY.

## **2.8 Monitoring Well Development**

Development of the wells was conducted by DAY representatives on July 20, 1995. The well development was performed in order to remove the fine particles and sediment that accumulated during drilling of the well and to prepare the wells for sampling.

Well development was performed utilizing dedicated polyethylene bailers with dedicated polyethylene rope. Static water level measurements were collected during development so that the volume of water within each well could be calculated.

Well development measurements include the following:

- PID well headspace readings,
- temperature,
- pH,
- turbidity,
- specific conductance,
- evacuation volume measurements, and
- a visual identification of water clarity.

Well development was conducted until the well development measurements stabilized. The well development measurements are summarized in Appendix C of this report.

## **2.9 Surveying, Static Water Level Measurements, and Groundwater Flow Direction**

The elevations of the monitoring wells were surveyed by Mr. James M. Parker, Licensed Surveyor, on August 2, 1995. The top of casing elevation for each well was established based on the surface elevations presented in the Rizzo report.

Static water levels were measured in the monitoring wells by DAY representatives on July 20 and 24, 1995 by using an electronic tape water level meter. Based on the top of casing elevations and the depth to static water level measurements, the groundwater elevation for each well was calculated, and a groundwater potentiometric map was prepared illustrating the apparent groundwater flow direction beneath the subject property (see Drawings SR-5 and SR-6 in Appendix A).

The static water level measurements and groundwater elevations are summarized in Appendix D of this report.

### **3.0 FINDINGS**

#### **3.1 Dye Testing & Observation of Below-Grade Structures**

Each of the floor drains and sumps dye tested were confirmed to discharge to the combined storm/sanitary sewer system located under Winthrop Street, east of the 200 East Avenue parcel. A fill port located on the southeastern interior wall of the service garage was also dye tested and determined to discharge to the 2,000-gallon UST located in the southeastern parking lot.

DAY representatives also observed the type of construction, general integrity, and contents of the floor drains/sumps and in-ground hydraulic floor lifts. The 19 hydraulic lift pits evaluated (designated [1] through [19] on Drawing SR-2) extended to a depth of approximately 7.2 to 7.9 feet below grade and were observed to be constructed of concrete block and motor. The hydraulic oil reservoir cylinder/tank was located inside each of the lift pits. The bottom of most of the lift pits appeared flat and hard; however, sediments present in the bottom of most of the lift pits prevented a complete assessment. Most of the hydraulic lifts appeared to be intact; however, evidence of damage was observed in some of the lift pits (e.g., cracks in the concrete block, sections of motor were missing, etc.). Sixteen of the 19 hydraulic lift pits (i.e., #2 through #17) contained black, oily liquids and sediments (i.e., sludge) that exhibited a petroleum-like odor. FID readings collected from the air space within the lift pits ranged from non-detect to 64 parts per million (ppm), and PID readings ranged from non-detect to 19 ppm.

A round sump located in the eastern corner of the service garage located at 200 East Avenue (see Drawing SR-2) contained 9.5 inches of oily sediments and liquids which exhibited a strong petroleum and chemical-like odor. The sump was approximately 18 inches in diameter and 30 inches deep, and appeared to be composed of clay tile with a hard bottom. The contents of sump yielded FID and PID readings of 82 ppm and 24.8 ppm, respectively. The sump contained an outlet, which was confirmed to discharge to the combined sewer system.

#### **3.2 Magnetic Locator Survey**

On June 19, 1995 DAY representatives conducted a magnetic locator survey on the 200 East Avenue parcel in those areas where UST's are suspected of having been located based on the a review of Sanborn fire insurance maps, and the information obtained during DAY's Phase I ESA. Magnetic readings indicating the potential presence of an underground storage tank(s) were not encountered during the survey.

#### **3.3 Evaluation of Tanks**

Table 1.0, on the next page, summarizes DAY's evaluation of tanks and their contents. The approximate location and designation of these tanks are presented on Drawing SR-2.

TABLE 1.0

**TANK INVENTORY  
200 EAST AVENUE  
ROCHESTER, NEW YORK**

TANK ID	UST/AST	APPROXIMATE CAPACITY (GAL)	LOCATION	APPARENT CONTENTS	COMMENTS
1	AST	275	Southeast portion of service area.	~100-gallon of waste oil	Tank appeared in good to fair condition.
2	AST	275	Northwest wooden garage/storage area.	No access	Tank visible through window. Tank appeared in good to fair condition.
3	Tank in underground vault	1,000	Southeast portion of service area in vault.	No access	Tank is located in vault beneath the concrete floor. Reportedly former transmission fluid tank, filled in place.
4	UST	2,000	Southeast parking lot.	~35-gallon (3") of waste oil	Former gasoline UST converted to waste oil according to the Rizzo report & City of Rochester records.
5	UST	1,000	North side of building in southern portion of parking lot.	~25-gallon (3") of motor oil	Tank reportedly contained virgin motor oil product (southern most tank).
6	UST	1,000	North side of building in southern portion of parking lot.	~15-gallon (2") of motor oil	Tank reportedly contained virgin motor oil product (middle tank).
7	UST	1,000	North side of building in southern portion of parking lot.	~5-gallon of water	Tank reportedly contained virgin motor oil product (northern most tank).
8	UST	1,000	East side of former cashiers office in service area.	No contents, former waste oil tank filled in place.	Reportedly closed in place with concrete based on information from Rizzo report.

During the Phase II Study, DAY representatives encountered a tank beneath a metal plate in the service garage floor that was not previously identified. Removing the metal plate revealed an underground vault beneath the garage floor containing what appears to be a 1,000-gallon metal tank. The air space inside the vault was monitored, and yielded a PID reading of 12 ppm and a petroleum/volatile odor. The tank in the vault contained a fill port that has been filled with concrete, and thus could not be accessed. The vault did not contain a ladder or other means of entry, and therefore, DAY representative did not enter the vault to evaluate the tank and the tank contents. Information obtained from a former Hallman Chevrolet employee reported that the tank in the vault formerly contained transmission fluid, and was filled in place with a concrete slurry. Also, a second fillport filled with concrete is present near this vault, indicating that a second UST may exist in this area.

### **3.4 Soil Gas Survey**

Twenty-three soil gas probe holes were advanced on the 200 East Avenue parcel, and four soil gas probe holes were advanced on the 62-64 Scio Street parcel in the following locations:

- o the four soil gas probe holes on the 200 East Avenue parcel were advanced inside the former parts department building, in the area where USTs were illustrated in Sanborn fire insurance maps,
- o 12 soil gas probe holes were advanced on the 200 East Avenue parcel in the southeastern parking lot in the area of a former "filling" (i.e. gasoline) station, and in areas where USTs are presently or were formerly located,
- o six soil gas probe holes were advanced on the 200 East Avenue parcel in the northern parking lot immediately north of the service garage, and
- o four soil gas probe holes were advanced inside the building located at 62-64 Scio Street parcel in the vicinity of a UST that reportedly has been filled in place with concrete.

The PID/FID readings and pertinent field observations (e.g., odors) obtained during the soil survey are summarized in Table 2.0 (see page 13 and 14). As Table 2.0 illustrates, soil gas survey PID readings collected from probe holes advanced in the southeastern parking lot area and inside the former parts department building (SG-1 through SG-16) ranged from non-detect to 9.1 ppm. FID readings ranged from non-detect to 20 ppm, with only two FID readings equal to or greater than 10 ppm. Petroleum-like odors were not noted during the purging of the soil gas probe hole advanced in these areas.



**TABLE 2.0**  
**SOIL GAS SURVEY RESULTS**  
**200 EAST AVENUE**  
**62-64 SCIO STREET**  
**ROCHESTER, NEW YORK**

PROBE HOLE #	DEPTH (ft.)	PID/FID READING (ppm)	COMMENTS
Southeastern Parking Lot - 200 East Ave.			
SG-1	4.0	ND / 8.5	Geoprobe refusal @ 4.0'.
SG-2	4.5	ND / 28	No odors.
SG-3	4.5	ND / 0.8	No odors.
SG-4	3.8	ND / 8.2	No odors.
SG-5	5.0	ND / 20	Musty/fill odor.
SG-6	5.0	2.4 / ND	Musty/fill odor.
SG-7	3.0	9.1 / 9.0	Musty/fill odor
SG-8	4.5	ND / 7.6	No odors.
SG-9	5.0	1.0 / 10	No odors.
SG-10	4.5	ND / 0.2	No odors.
SG-11	4.3	ND / 0.8	Refusal @ 4.3'.
SG-12	5.0	ND / 18.0	Musty/fill odor.
SG-13	5.0	ND / 9.0	No odors.
SG-14	5.0	ND / 7.5	Musty odor.
SG-15	5.0	ND / 1.0	Musty odor.
SG-16	5.0	ND / 9.5	Must, earthy odor.
SG-17	3.9	ND / 7.5	Musty odor.
Northern Parking Lot - 200 East Ave.			
SG-18	5.0	ND / 9.8	Musty odor.
SG-19	5.0	1.0 / 1.0	Musty odor.
SG-20	4.5	15.2 / 10	Slight petroleum odor.
SG-21	5.0	1.7 / 7.2	Musty odor.
SG-22	5.0	2.2 / 32.0	Musty damp odor.

**TABLE 2.0 (Cont.)**

<b>PROBE HOLE #</b>	<b>DEPTH (ft.)</b>	<b>PID/FID READING (ppm)</b>	<b>COMMENTS</b>
SG-23	5.0	8.1 / 7.0	Musty odor.
Inside Warehouse - 62-64 Scio St.			
SG-24	4.5	1.2 / 2.2	Refusal at 4.5'. No odors.
SG-25	5.0	7.2 / 10.5	No odors.
SG-26	4.0	ND / 5.5	Refusal at 4.0'. No odors.
SG-27	2.5	4.9 / 5.5	Refusal at 2.5'. No odors.

Note: PID = Photovac Model HL-2000 with a 10.6 eV lamp.  
 ND = Not detected.

PID readings obtained from the soil gas survey probe holes advanced immediately north of the service garage (SG-17 through SG-23) ranged from non-detect to 15.2 ppm. FID readings ranged from 1.0 to 32 ppm, with two FID readings equal to or greater than 10 ppm. Petroleum-like odors were noted during the purging of the soil gas probe hole SG-20, which advanced near the three motor oil USTs. Based on the PID/FID readings and the observation of a petroleum odor, evidence of contamination was encountered in soil gas survey probe hole SG-20.

PID readings obtained from the soil gas survey probe holes advanced at the 62-64 Scio Street parcel (SG-24 through SG-27) ranged from non-detect to 7.2 ppm. FID readings ranged from 2.2 to 10.5 ppm. Petroleum-like odors were not noted during the purging of the soil gas probe holes advanced in this area.

### **3.5 Test Pit Trench**

In general, the test pit trench encountered various fill materials and native soils. Typically, the test pit trench was excavated vertically to refusal at a depth believed to represent the top of bedrock; however, due to the depth (8-10 feet) of the test pit and the slumping of the test pit trench walls, the bottom of the test pit trench could not be observed. The fill materials encountered included a heterogeneous mixture of reworked soils (gravel and silt), cinders, slag, ash, solid waste (e.g., glass bottles, porcelain dishes), and construction and demolition debris (e.g., bricks, concrete, scrap metal). The thickness of the fill materials varied. In the southwestern corner of the test pit trench, more than 5.5 feet of fills were encountered. Samples of the fill materials were collected from station numbers 3+47, 5+74, and 6+28 (TP-02/04/05) for analytical testing. Section 5.0 of this report discusses the analytical results.

Groundwater was encountered along the western, northern and northwestern portions of the test pit trench. Groundwater with a slight petroleum-sheen was encountered at station number 2+30, 3+32 and 3+47, located on the northeastern portion of the test pit trench. Black, petroleum-stained soils with an odor characteristic of diesel fuel were encountered at station number 2+13 through 2+45 from a depth of approximately 4 to 8.5 feet below grade. A soil sample (TP-01) was collected from station number 2+15, and the analytical results are discussed in Section 4.0 of this report.

Stained soils with a petroleum and/or volatile odor were encountered at station numbers 5+29 and 5+57, located on the southwestern portion of the test pit trench. The stained soils were encountered at station number 5+29 at 8-9 feet below grade, and in station number 5+47 at a depth of 5-8 feet below grade. The soils in these two areas yielded PID readings of 100 ppm and greater than 300 ppm respectively. A soil sample was collected from station number 2+15 (TP-03), and the analytical results are discussed in Section 4.0 of this report.

### **3.6 Geoprobe Test Borings**

Table 3.0, on the next page, summarizes the pertinent information obtained from the Geoprobe test borings, including the total depth of the test borings, peak PID/FID readings obtained from screening of the recovered soil samples, and comments regarding staining and/or unusual odors. The field observations and measurements are further discussed following the table. Drawing SR-2 in Appendix A illustrates the Geoprobe test boring locations.

**TABLE 3.0**

**GEOPROBE TEST BORING RESULTS  
PEAK FID/PID READINGS FROM RECOVERED SOIL SAMPLES**

**200 EAST AVENUE  
ROCHESTER, NEW YORK**

<b>Test Boring No.</b>	<b>Total Depth (ft)</b>	<b>Peak FID Reading (ppm)</b>	<b>Peak PID Reading (ppm)</b>	<b>Comments</b>
TB-1	10.9	75 @ 10'	31.1 @ 10'	Black, oily-stained soil with petroleum-like odor from 6-10.9'. Free petroleum product at 10.5'.
TB-2	8.7	550 @ 6-8'	4.5 @ 8-8.7'	Black, oily-stained soil with a petroleum odor from 4-8.7'. Free petroleum product at 6-7'.
TB-3	11.0	75 @ 8-10'	6.6 @ 4.6'	Black, oily-stained soils with petroleum odor from 6-10'.
TB-4	7.9	9.0 @ 6-8'	6.9 @ 6-8'	Grayish-black stained soil with a petroleum-like odor.
TB-5	10.0	72 @ 6-8'	43.7 @ 9-10'	Black, oily-stained soil with a petroleum-like odor from 4-10'.
TB-6	8.7	20 @ 8-8.7'	7.5 @ 8-8.7'	Black, oily-stained soil with a petroleum-like odor from 7.5-8.7'. Apparent weathered rock at end of boring.
TB-7	7.75	1.0 @ 6-7.75'	9.5 @ 7.8'	Black stained soil in last two inches of recovered sample, petroleum-like odor. Apparent weathered rock in sample at end of boring.
TB-8	8.75	5.0 @ 8-8.75'	1.9 @ 8-8.75'	Black, oily-stained soil with a petroleum odor from 8-8.75'.
TB-9	6.33	1.0 @ 6-6.33'	11.4 @ 6-6.33'	Black, oily-stained soil with a petroleum-like odor from 5.8 to 6.33'.
TB-10	6.0	1.0 @ 0.4'	3.2 @ 0.2'	No staining or unusual odors.
TB-11	7.4	1.2 @ 6-7.4'	5.4 @ 6-7.4'	Slight staining and sweet odor from 6-7.4'.
TB-12	6.75	0.3 @ 2-4'	ND	No staining or unusual odors. Apparent rock in end of sampler.
TB-13	4.1	ND	ND	Downhole soil gas reading with PID = 24.1 ppm. Downhole soil gas reading with FID = 0.5 ppm. No staining or unusual odors.
TB-14	4.0	ND	3.0 @ 1.5-2'	Downhole PID = 73.7 ppm Downhole FID=10.0 ppm. No staining or unusual odors.
SG-25	7.0-8.8	1.0	0.2	Test boring at soil gas location SG-25 inside warehouse at 62-64 Scio Street. Refusal at 8.8 feet.

Each of the 15 Geoprobe test borings were advanced to refusal, believed to represent the top of bedrock. Refusal for the 12 test borings advanced inside the building (TB-1 through TB-12) ranged from 6.75 feet below grade in TP-12 to 11.0 feet below grade in TP-3. Refusal was encountered in the two exterior test borings (TB-13 and TB-14) at approximately four feet below grade (note, the service garage appears to be several feet higher in elevation than the surrounding grade).

Black, oil-stained soil and fill materials were encountered in 10 of the 12 test borings advanced inside the service garage (i.e., no apparent staining was observed in TB-10 and TB-12). No evidence of stained soils were observed on the soils recovered from the test borings advanced along the eastern side of the service garage. The recovered soil samples from the 10 test borings that contained visibly stained and discolored soils exhibited a distinct weathered petroleum-like odor. Free petroleum product was observed in test borings TP-1 and TB-2. FID readings ranged from 550 ppm to 0.3 ppm, with soil samples from five test borings yielding FID readings of 20 ppm or greater. PID readings ranged from non-detect to 43.7 ppm, with three test borings yielding PID readings of 10.0 ppm or greater.

Petroleum-stained soils and free petroleum product were encountered in each of the seven test borings (TB-1 through TB-7) advanced between or in the vicinity of the hydraulic lift pits. The petroleum-stained soils were initially encountered in these seven test borings at a depth of six feet below grade or deeper and extended to the top of bedrock. Petroleum-stained soils in some of the test borings was encountered as thin layer of staining present immediately on top of bedrock.

The subsurface materials encountered in the Geoprobe borings advanced inside the service garage included various fill materials, consisting of reworked native soils, brick fragments, cinders, slag, and some ash. The fill materials generally were encountered from below the garage floor to approximately four to six feet below grade. Native soils encountered during the Geoprobe test borings generally consisted of fine to coarse textured sand, fine gravel, and some silt. The fill materials generally appeared dry, and the native soils appeared moist to wet from six feet below grade to the top of rock.

### **3.7 Test Borings & Groundwater Monitoring Wells**

As illustrated on the test boring logs (Appendix B), evidence of petroleum-contaminated soils was encountered at a depth of 9.5 feet below grade to the top of bedrock (10.3 feet) during the drilling of well MW-1, installed along the northeastern property line. The soils recovered from this interval appeared black, oil-stained, exhibited a petroleum-like odor characteristic of diesel fuel, and yielded PID readings of 8-10 ppm. Groundwater was encountered during the drilling at approximately 8.0-8.5 feet below grade.

Evidence of petroleum-contaminated soils was encountered during the drilling of well MW-2, installed on the north side of the service garage. Black, oil-stained soils were encountered in well MW-2 from 7.8 feet below grade to auger refusal (top of bedrock) at 8.5 feet below grade. The soils recovered from this interval exhibited a petroleum-like odor characteristic of hydraulic oil, and yielded PID readings of 5.4 to 32.4 ppm.

Evidence of petroleum-contaminated soils was also encountered during the drilling of well MW-4, installed on the southeast side of the service garage. Black, stained soils were encountered in well MW-2 from 8.3 feet below grade to auger refusal (top of bedrock) at 8.9 feet below grade. The soils recovered from this interval exhibited a petroleum-like odor characteristic of gasoline, and yielded PID readings of 9.4 ppm to 200 ppm. Groundwater was encountered at 8.4 feet below grade during the drilling.

Evidence of suspect contamination (e.g., staining, unusual odors, PID readings greater than 3.0 ppm) was not encountered during the drilling of well MW-3. Since each of the test borings were converted into monitoring wells, soil samples for laboratory testing were not collected from any of the four test borings.

Bedrock was encountered in each of the test borings advanced as part of this study. The upper bedrock present at the interface of the overburden appeared fresh in wells MW-1, MW-2 and MW-3, and slightly weathered in well MW-4. Bedrock was encountered at depths ranging from 8.5 feet below grade in well MW-2, to 10.5 feet below grade in well MW-3. The bedrock consisted of a moderately hard grey dolomite that contained vugs (i.e., small, sometimes mineral-filled solution cavities) and stylolitic partings. Some of the recovered bedrock contained small (i.e., less than 1.0 inch) near-horizontal fractures filled with silt and clay. Based on review of local bedrock maps and bedrock descriptions, the bedrock at the Site is the Lockport Dolomite. Groundwater was observed in the monitoring wells at the interface of overburden and bedrock, or within the upper portion of the bedrock. The groundwater flow direction at the Site is generally from the south to the north. The hydraulic gradient was calculated to be approximately 0.01 ft/ft.

### **3.8 Adjacent Spill - 68 Scio Street**

DAY submitted a FOIL to the NYSDEC for records concerning the spill at E.G. Snyder CO., Inc., 86 Scio Street, Rochester, New York (Spill #9105502).

The FOIL information included monitoring well logs, a groundwater flow map, a laboratory report, and correspondences. According to the FOIL information, a 2,000 gallon UST at the E.G. Snyder site containing gasoline was removed in August, 1991. LaBella Associates, P.C. (LaBella) performed a tank pit assessment and determined that soils surrounding the UST were contaminated with gasoline. A soil venting system was installed within the tank pit and three groundwater monitoring wells were installed at the E.G. Snyder site. Groundwater flow elevations were generally flat and level, with groundwater flowing gently to the east. The only well to contain detectable contamination was the well located closest to the 62-64 Scio Street site. This well contained low part per billion concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and TPH at 5,130 ppb. The BTEX was present at concentrations above NYSDEC groundwater standards. The FOIL information does not indicate why petroleum contamination was detected only in the cross gradient well, and not in the other two wells located near the former UST or hydraulically downgradient of the UST.

## **4.0 SAMPLING PROGRAM AND ANALYTICAL RESULTS**

Five soil/fill and four sediment/sludge samples were collected for analytical testing from the test pit trench excavation, from the Geoprobe System (Geoprobe) test borings, the service shop trench drains, sumps, and hydraulic lift pits. Samples were selected based on visual assessment of the soils and fill materials, PID/FID readings, and other physical observations of suspected or observable contamination. Groundwater samples were collected from six of the seven on-site wells. Soil or groundwater samples were not collected for analytical testing from the 62-64 Scio Street parcel. Soil and/or fill material samples were collected from the test pits for subsequent analytical testing. The soil and/or fill material samples were collected using precleaned stainless steel sampling spoons, and the samples were temporarily placed in a cooler with ice packs until they were transported, under chain-of-custody, to the laboratory.

The samples were analyzed by Paradigm Environmental Services, Inc. (Paradigm), and select groundwater samples were also analyzed by General Testing Corporation (GTC). Both Paradigm and GTC are New York State Department of Health certified laboratory. The analytical program and analytical results are discussed below and also in Section 5.0 of this report. The sample locations are illustrated on Drawing SR-3 in Appendix A. Tables 4.0, 5.0, and 6.0 (see pages 26 through 29) list the detected constituents and their respective NYSDEC soil cleanup standards or NYSDEC Class GA groundwater standards. Copies of the laboratory reports provided by Paradigm and GTC are included in Appendix E of this report.

### **4.1 Soil Samples**

Two soil samples (Hall-01 and Hall-02) were collected inside the service garage building, and three soil/fill samples (TP-01, TP-03, and TP-02/04/05) were collected in the northern parking lot during the test pit trench excavation. The analytical program and the analytical results for these five samples are discussed below.

#### **Sample Hall-01 and Sample Hall-02**

Sample Hall-01 was a discrete/grab sample collected from Geoprobe test boring TB-01 at a depth of 10.7 feet below grade. This test boring was advanced between two below-ground hydraulic lifts near the northeastern portion of the service garage. The sample consisted of medium to coarse textured sand which exhibited a weathered petroleum-like odor, possible free petroleum-product. PID readings up to 31.1 ppm, and FID readings up to 75 ppm were measured in the air space above this sample.

Sample Hall-02 was collected from Geoprobe test boring TB-05 at various depths ranging between 4 to 9.8 feet below grade. This test boring was advanced between two below-ground hydraulic lifts near the northwestern portion of the service garage. The sample consisted of fill materials from the 4 to 6 foot interval (reworked sand/silt and black cinders/slag), and native soil consisting of sand and gravel, with some silt. The sample appeared black and oil

stained, and exhibited a petroleum-like odor. PID readings of 43.7 ppm, and FID readings of 72 ppm were measured in the air space above this sample. Samples TB-01 and TB-05 were analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260, for TPH via Method 310.13, PCBs via Method 8080, NYSDEC STARS semi-VOCs via Method 8270, and the TCLP metals lead, cadmium, and chromium.

According to the laboratory results, semi-VOCs, PCBs, and TCLP metals were not detected in either soil sample. Sample Hall-01 contained six VOCs ranging in concentration from an estimated 236 ug/kg (parts per billion [ppb]) of naphthalene to 2,176 ppb of 1,3,5-trimethylbenzene. Sample Hall-02 contained 10 VOCs ranging in concentration from an estimated 222 ppb of 1,3-dichlorobenzene to 6,095 ppb of 1,2,4-trimethylbenzene. Each of the VOCs detected in these two soil samples are volatile aromatic compounds typically associated with petroleum-based fuels or lubricants (e.g., hydraulic oil). Sample Hall-01 contained 7,071,307 ppb of TPH, and sample Hall-02 contained 2,620,327 ppb of TPH. Table 4.0 lists the constituents detected and their respective concentrations.

#### Sample TP-01 and Sample TP-03

Sample TP-01 was a discrete/grab sample collected from the test pit trench excavated north of the service garage. The sample was collected at station number 2+15 at a depth of approximately 4.2 feet below grade. The sample consisted of petroleum-stained soil which exhibited a petroleum-like odor. This sample was analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260, semi-VOCs via Method 8270, PCBs via Method 8080, and for TPH via Method 310.13.

Sample TP-03 was a discrete/grab sample collected from the test pit trench excavated north of the service garage. The sample was collected at station number 5+47 at a depth of approximately 5 to 8 feet below grade. The sample exhibited a volatile/petroleum-like odor, and elevated PID readings of 300 ppm above background. This sample was analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260.

According to the analytical results, eight VOCs were detected in sample TP-01, ranging in concentration from 14.4 ppb of 1,4,5-trimethylbenzene, to 401.4 ppb of n-propylbenzene. Four VOCs were detected in sample TP-03, ranging in concentration from 19.5 ppb of p-isopropyltoluene to 51.7 ppb of sec-butylbenzene. Each of the VOCs detected in these two soil samples are volatile aromatic compounds typically associated with petroleum-based fuels or lubricants. Sample TP-01 contained 1,487,425 ppb of TPH quantified as diesel fuel. Sample TP-01 also contained six semi-VOCs, ranging in concentration from 430 ppb of acenaphthalene to 6,942 ppb of 2-methylnaphthalene. PCBs were not detected in sample TP-01. Table 4.0 lists the constituents detected and their respective concentrations.



### Sample TP-02/04/05

Sample TP-02/04/05 was a three to one composite sample collected from the test pit trench excavated north of the service garage. Samples were collected at station numbers 3+47, 5+74, and 6+28 and composited by the laboratory into one sample for analysis. The sample consisted of heterogeneous fill materials including cinders, slag, ash, and reworked petroleum-stained soil and gravel. This sample was analyzed for pH, acid extractable and base neutral semi-VOCs via Method 8270, and for total RCRA metals.

According to the analytical results, sample TP-02/04/05 had a pH of 7.59 and contained eight semi-VOCs ranging in concentration from an estimated of 193 ppb of benzo(b)fluoranthene to 513 ppb of fluoranthrene. This sample also contained detectable concentrations of seven of the eight RCRA metals. Tables 4.0 and 5.0 lists the constituents detected and their respective concentrations.

## **4.2 Sediment/Sludge Samples**

Four sediment/sludge samples (Lift-01, Sump-01, Trench-01 and CR-01) were collected inside the service garage from the hydraulic lift pits, a sump, trench floor drains, and from the compressor room in the basement. The analytical program and the analytical results for these four samples are discussed below.

### Sample Lift-01

This sample consisted of three to one composite sample collected from three below grade hydraulic lift pits (Lift #4, #9, and #15 on Drawing SR-2) located in the service garage. The sample consisted of black, oil-stained sediments and liquids which exhibited a petroleum-like odor. This sample was analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260, PCBs via Method 8080, the TCLP metals lead, cadmium and chromium, and for TPH via Method 310.13.

According to the laboratory results, PCBs and TCLP metals were not detected. Four VOCs were detected ranging in concentration from an estimated 369 ppb of toluene to 1,662 ppb of m,p-xylene. Each of the four VOCs detected were volatile aromatic organic compounds typically associated with petroleum-based fuels and/or lubricants. This sample contained 65,844,286 ppb of TPH quantified as heavy weight lube oil. Table 4.0 lists the constituents detected and their respective concentrations.

### Sample Trench-01

This sample consisted of three to one composite sample collected from three below grade floor trench drains (trench drain #1, #2, and #3 on Drawing SR-2) located in the service garage. The sample consisted of black, oil-stained sediments which exhibited a slight petroleum-like

odor. This sample was analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260, PCBs via Method 8080, the TCLP metals lead, cadmium and chromium, and for TPH via Method 310.13.

According to the laboratory results, PCBs and TCLP metals were not detected. Seven VOCs were detected ranging in concentration from 286 ppb of toluene to 1,707 ppb of m,p-xylene. The VOCs detected are volatile aromatic organic compounds typically associated with petroleum-based fuels and/or lubricants. This sample contained 4,030,549 ppb of TPH identified as heavy weight lube oil. Table 4.0 lists the constituents detected and their respective concentrations.

#### Sample Sump-01

This sample consisted of grab/discrete sample collected from a circular sump located in the eastern portion of the service garage. The sample consisted of black, oil-stained sediments which exhibited a petroleum and chemical-like odor. This sample was analyzed for total TCL and NYSDEC STARS VOCs via USEPA Method 8260, PCBs via Method 8080, the TCLP metals lead, cadmium and chromium, and for TPH via Method 310.13.

According to the laboratory results, PCBs and TCLP metals were not detected. Seventeen VOCs were detected ranging in concentration from an estimated 1,539 ppb of 1,3-dichlorobenzene to 214,701 ppb of m,p-xylene. This sample contained three halogenated VOCs (tetrachloroethene, 1,1,1-trichloroethane, and 1,1-dichloroethane) at concentrations ranging from 6,751 to 48,242 ppb. The remaining VOCs were volatile aromatic organic compounds typically associated with petroleum-based fuels and/or lubricants. This sample contained 31,935,969 ppb of TPH quantified as heavy weight lube oil, and 9,412,574 ppb of TPH identified as gasoline. Table 4.0 lists the constituents detected and their respective concentrations.

#### Sample CR-01

Sample CR-01 consisted of two to one composite sludge sample collected from the floor of the basement compressor room. The sample consisted of black, oil-stained sediments which exhibited a slight petroleum-like odor. This sample was analyzed for PCBs via Method 8080. According to the laboratory results, PCBs were not detected.

### **4.3 Groundwater Sampling - Overburden Wells**

Two of the three overburden wells (Riz-1 and Riz-7) were sampled on June 21-23, 1995 by DAY representatives. Well Riz-2 was dry at the time of the sampling event, and thus, could not be sampled. A thin (i.e., less than 0.25 inches) layer of free petroleum product that exhibited a petroleum-like odor characteristic of weathered motor and/or hydraulic oil was observed floating on the groundwater in well Riz-1. The groundwater collected from well Riz-

7 also exhibited a petroleum-like odor; however, no free petroleum product or sheen were observed in this well.

Prior to sampling, the wells were purged by evacuating three casing volumes of water or to dryness. After allowing the wells to recharge, one groundwater sample was collected from each well with dedicated teflon bailers and with dedicated polyethylene rope. The DAY monitoring well sampling logs are included in Appendix B of this report. The groundwater samples were analyzed by Paradigm for TCL and NYSDEC STARS VOCs via USEPA Method 8260 and for TPH via Method 310.13.

According to the analytical results, VOCs were not detected in the sample collected from Riz-01, and ten VOCs were detected in the sample collected from well Riz-7. The VOCs detected in the sample collected from well Riz-7 ranged from 26.8 ug/l (ppb) of n-butylbenzene to 2,056.4 ppb of m,p-xylene. Benzene was detected in this sample at a concentration of 119.5 ppb. The sample collected from well Riz-1 contained 68,253 ppb of TPH identified as heavy weight lube oil, and the sample collected from well Riz-7 contained 6,352 ppb of TPH identified as gasoline. Table 6.0 lists the constituents detected and their respective concentrations.

#### **4.4 Groundwater Sampling - Overburden/Bedrock Interface Wells**

The four overburden/bedrock interface wells installed by DAY were sampled on July 24, 1995 by DAY representatives.

Prior to sampling, the wells were purged by evacuating at least three casing volumes of water from each well. After allowing the wells to recharge, one groundwater sample was collected from each well with dedicated teflon bailers and with dedicated polyethylene rope. During the sampling event, the groundwater collected from well MW-2 displayed a prominent yellow-green coloration and an organic/chemical odor. The groundwater collected from well MW-4 also exhibited an organic/petroleum odor. The DAY monitoring well sampling logs are included in Appendix C of this report. The groundwater samples were analyzed by Paradigm for TCL and NYSDEC STARS VOCs via USEPA Method 8260 and for TPH via Method 310.13. The sample collected from well MW-2 was also analyzed for ethylene glycol.

According to the analytical results, VOCs were not detected in the samples collected from wells MW-1 and MW-4. The sample collected from MW-2 contained one VOC, 1,1-dichloroethane at a concentration of 5.0 ppb. The sample collected from MW-3 contained seven VOCs ranging in concentration from 4.3 ppb of n-propylbenzene to an estimated 1.1 ppb of benzene and ethylbenzene. The VOC 1,1-dichloroethane was the only halogenated VOC detected, and the remaining VOC were volatile aromatic organic compounds typically associated with petroleum-based fuels and/or lubricants. TPH was detected in well MW-2 at a concentration of 283 ppb, and identified as a heavy weight lube oil. The three other samples did not contain TPH above the laboratory detection limit of 250 ppb. Ethylene glycol was not

detected in the sample collected from well MW-2. Table 6.0 lists the constituents detected and their respective concentrations.

A second round of sampling for wells MW-2 and MW-4 was conducted by DAY on July 28 and 31, 1995. The samples collected from these two wells were analyzed for TCL and NYSDEC STARS VOCs via USEPA Method 8260 and for TPH via Method 310.13. The sample collected from well MW-2 was also analyzed for ethylene glycol via a modified 8015 method, and for semi-VOCs via Method 8270. According to the analytical results, 6.3 ppb of methylene chloride was detected in the sample collected from well MW-2. Ethylene glycol semi-VOCs, and TPH were not detected in the sample collected from MW-2. A library search conducted on the semi-VOC data indicated 12 tentatively identified compounds (TICs) ranging in concentration from an estimated 4.0 ppb to 37 ppb. The laboratory could not positively identify any of the TICs.

Six VOCs were detected in the sample collected from MW-4, ranging in concentration from 5.5 ppb of toluene, to 58 ppb of 1,2,4-trimethylbenzene. Benzene was detected at a concentration of 6.2 ppb. TPH reported as gasoline were detected at a concentration of 2,570 ppb. Table 6.0 lists the constituents detected and their respective concentrations.

#### **4.5 Suspect Asbestos-Containing Materials**

The following suspect asbestos-containing materials (SACM) were observed in damaged and/or friable condition during DAY's Phase I ESA:

- 1,500 lineal feet of thermal system insulation and mudpack joints
- 3,000 - 5,000 square feet of vinyl floor tiles
- 3,500 square feet of acoustical ceiling tiles

On June 19, 1995 a DAY EPA/NYS-accredited Asbestos Inspector collected samples of the SACM described above. Twelve samples were collected from the building located at 200 East Avenue, and four samples were collected from the warehouse building located at 62-64 Scio Street. Note, this survey should not be considered a complete asbestos inspection, or one which would satisfy the requirements for an AHERA audit or a pre-demolition asbestos survey.

The samples were submitted to a Paradigm, a New York State Department of Health-certified laboratory using standard chain-of-custody protocol. The friable (easily damaged by hand pressure) samples were analyzed via NYS ELAP Method 198.1 (polarized light microscopy). The non-friable organically-bound (NOB) samples (e.g., vinyl floor tile) were analyzed via Gravimetric Reduction and NYS ELAP Method 198.1, and two of the NOB samples were also analyzed by NYS ELAP Method 198.4 (transmission electron microscopy).

New York State Code Rule 56 defines an asbestos-containing material (ACM) as any material which contains greater than 1 percent asbestos by weight. Twelve of the SACM samples contained asbestos at concentrations greater than 1 percent by weight. The ACM include:

200 East Avenue:

- thermal pipe insulation in the basement;
- mudpack joints in the basement;
- blue 12" x 12" vinyl floor tiles in the former Parts Room; and
- tan 9" x 9" vinyl floor tiles in the former Parts Room.

62-64 Scio Street:

- thermal pipe insulation in the basement and main level; and
- mudpack joints in the basement.

TABLE 4.0

200 EAST AVENUE  
ROCHESTER, NEW YORK

DETECTED ORGANIC CONSTITUENTS - SOIL/SLUDGE/SEDIMENTS  
(µg/kg or ppb)

	Hall-01 (TB-01)	Hall-02 (TB-05)	Lift-01 (Lift #s 4, 9, and 15)	Sump-01 (Southeastern Sump)	Trench-01 (Station #2+15)	TP-01	TP-02/TP-04/TP-05 (Station #s 3+47, 5+74, 6+38)	TP-03 (Station #5+47)	NYSDEC SOIL CLEANUP OBJECTIVE
sec-butylbenzene	ND	466		5,062	ND	347.0	NA	51.7	100(')
n-butylbenzene	395	1,535	527	27,079	ND	304.8	NA	39.1	100(')
ethylbenzene	ND	ND	450J	55,789	451	ND	NA	ND	100(')
isopropylbenzene	ND	ND	ND	5,949	ND	250.7	NA	ND	100(')
2-methyl-2-pentance (MIBK)	ND	ND	ND	ND	ND	ND	NA	ND	1000(')
naphthalene	236J	ND	965	33,817	312	77.8	NA	42.7	200(')
p-isopropyltoluene	ND	ND	ND		ND	ND	NA	19.5	100(')
n-propylbenzene	458	342	316J	24,745	ND	401.4	NA	ND	100(')
1,3,5-trimethylbenzene	2,176	1,733	1,055	77,157	480	14.4	NA	ND	100(')
1,2,4-trimethylbenzene	ND	6,095	3,421	202,436	1,442	16.0	NA	ND	100(')
toluene	ND	ND	369J	30,660	286	ND	NA	ND	100(')
tert-butylbenzene	464	ND	ND		ND	90.5	NA	ND	100(')
m,p-xylene	260J	371	1,662	214,701	1,707	ND	NA	ND	100(')
o-xylene	ND	235J	801	73,587	627	ND	NA	ND	100(')
1,3-dichlorobenzene	ND	222J	ND	1,539J	ND	ND	NA	ND	1,600(')
1,4-dichlorobenzene	ND	379	ND	5,048J	ND	ND	NA	ND	8,500(')
1,2-dichlorobenzene	ND	894	ND	10,983	ND	ND	NA	ND	7,900(')
indeno(1,2,3cd)pyrene	ND	ND	NA	NA	NA	ND	250J	NA	0.04(')
benzo(a)pyrene	ND	ND	NA	NA	NA	ND	291J	NA	0.04(')

TABLE 4.0 (CONTINUED)

	Hall-01 (TB-01)	Hall-02 (TB-05)	Lift-01 (Lift #s 4, 9, and 15)	Sump-01 (Southeastern Sump)	Trench-01 (Station #2-15)	TP-01	TP-02/TP-04/TP-05 (Station #s 3+47, 5+74, 6+38)	TP-03 (Station #5+47)	NYSDEC SOIL CLEANUP OBJECTIVE
chrysene	ND	ND	NA	NA	NA	ND	460J	NA	0.04(')
pyrene	ND	ND	NA	NA	NA	ND	442J	NA	1,000(')
benzo(b)fluoranthene	ND	ND	NA	NA	NA	ND	193J	NA	0.04(')
2-methylnaphthalene	ND	ND	NA	NA	NA	6,942	ND	NA	36,000(?)
acenaphthene	ND	ND	NA	NA	NA	850	ND	NA	50,000(?)
acenaphthylene	ND	ND	NA	NA	NA	430	ND	NA	41,000(?)
dibenzofuran	ND	ND	NA	NA	NA	824	ND	NA	6,200
fluorene	ND	ND	NA	NA	NA	1,714	ND	NA	1,000(')
anthracene	ND	ND	NA	NA	NA	4,925	ND	NA	1,000(')
fluoranthene	ND	ND	NA	NA	NA	ND	ND	NA	1,000(')
benzo(k)fluoranthene	ND	ND	NA	NA	NA	ND	ND	NA	0.04(')
benzo(g,h,i)perylene	ND	ND	NA	NA	NA	ND	ND	NA	0.04(')
Total Petroleum Hydrocarbons	7,071,307 <sup>(3)</sup>	2,620,327 <sup>(3)</sup>	65,844,286 <sup>(3)</sup>	31,935,969 <sup>(3)</sup> 9,412,574 <sup>(4)</sup>	4,030,540 <sup>(3)</sup>	1,487,425 <sup>(5)</sup>	NA	NA	Not listed

Notes: J

Estimated Value

ND Not Detected

NA Not Analyzed

(1) Soil Guidance Value as listed in STARS Memo #1 Petroleum Contaminated Soil Guidance Policy, August, 1992.

(2) Soil Cleanup Objective/levels listed in NYSDEC TAGM #4046, Determination of Soil Cleanup Objectives and Cleanup Levels, January, 1994.

(3) Heavy weight petroleum hydrocarbon as lube oil

(4) Light weight petroleum hydrocarbon as gasoline

(5) Diesel fuel

**TABLE 5.0**  
**200 EAST AVENUE**  
**ROCHESTER, NEW YORK**  
**TP-02, TP-04 AND TP-05**

**METALS AND pH**  
**(mg/kg or ppm)**

<b>PARAMETER</b>	<b>RESULT</b>	<b>NYSDEC CLEAN-UP OBJECTIVE</b>	<b>EASTERN USA BACKGROUND</b>
pH	7.95	Not listed	Neutral Ph is considered 7.0
arsenic	16.5	7.5 or SB	3 to 12****
barium	174	300 or SB	15 to 600
cadmium	1.49	1.0 or SB**	0.1 to 1.0
chromium	20.9	10 or SB***	1.5 to 40
lead	2,490	SB	Not listed *
mercury	0.684	0.1	0.001 to 0.2
selenium	1.24	2 or SB	0.1 to 3.9

SB = Site background

\* = Average background levels in metropolitan, suburban areas or near highways typically range from 200 to 500 ppm according to NYSDEC TAGM #4046

\*\* = According to NYSDEC TAGM #4046, the NYSDEC has proposed a 10.0 ppm clean-up objective for cadmium

\*\*\* = According to NYSDEC TAGM #4046, the NYSDEC has proposed a 50.0 ppm clean-up objective for chromium

\*\*\*\* =According to NYSDEC TAGM #4046, New York State background



TABLE 6.0

200 EAST AVENUE  
ROCHESTER, NEW YORK  
DETECTED CONSTITUENTS - GROUNDWATER  
( $\mu\text{g/l}$  or ppb)

	Riz-1	Riz-7	MW-1	MW-2 7/24/95	MW-2 7/28/95	MW-3	MW-4 7/24/95	MW-4 7/28/95	NYSDEC CLASS GA GROUNDWATER STANDARD <sup>(1)</sup>
methylene chloride	ND	ND	ND	ND	6.3	ND	ND	ND	5.0
1,1-dichloroethane	ND	ND	ND	5.0	ND	2.1	ND	ND	5.0
sec-butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	5.0
n-butylbenzene	ND	26.8	ND	ND	ND	1.3J	ND	ND	5.0
ethylbenzene	ND	310	ND	ND	ND	1.1J	ND	ND	5.0
naphthalene	ND	390	ND	ND	ND	ND	ND	ND	10.0
isopropylbenzene	ND	ND	ND	ND	ND	2.4	ND	ND	5.0
n-propylbenzene	ND	ND	ND	ND	ND	4.3	ND	ND	5.0
1,3,5-trimethylbenzene	ND	428	ND	ND	ND	ND	ND	20	5.0
1,2,4-trimethylbenzene	ND	1878	ND	ND	ND	ND	ND	58	5.0
toluene	ND	200.4	ND	ND	ND	ND	ND	5.5	5.0
tert-butylbenzene	ND	213	ND	ND	ND	ND	ND	ND	5.0
m,p-xylene	ND	2056.4	ND	ND	ND	2.0	ND	42	5.0
o-xylene	ND	291.1	ND	ND	ND	ND	ND	13	5.0
benzene	ND	119.5	ND	ND	ND	1.1J	ND	6.2	0.7
Total petroleum hydrocarbons (TPH)	68,253 <sup>(2)</sup>	6,352 <sup>(3)</sup>	ND	283 <sup>(2)</sup>	ND	ND	ND	2570	Not Listed

Notes: ND = Not Detected

NA = Not Analyzed

(1) = NYSDEC TOGS 1.1.1

(2) Heavy Weight PHC as Lube Oil

(3) Gasoline

## 5.0 DISCUSSION OF ANALYTICAL RESULTS

### 5.1 Soils/Fill Materials/Sediments

The NYSDEC has developed a soil guidance document that addresses the handling and disposal of petroleum-contaminated soils. This document, entitled *Proposed New York State Petroleum Contaminated-Soil Guidance, STARS Memo #1, 1992*, contains soil guidance values for select VOCs and semi-VOCs based on human health standards and the protection of the environment and groundwater resources.

The NYSDEC has also developed a Technical and Administrative Guidance Memorandum (TAGM #4046) that addresses soil contaminated by non-petroleum constituents. This TAGM, entitled *Determination of Soil Cleanup Objectives and Cleanup Levels, dated January 24, 1994*, provides a basis and procedure to determine soil cleanup objectives at State and Federal Superfund sites. The final cleanup goal is based on the most stringent of the following criteria: (1) human health based criteria for Class C carcinogens based on the Environmental Protection Agency (EPA) May, 1989 RCRA Facility Investigation (RFI) Guidance Report; (2) human health based criteria for systemic toxicants based on the 1989 EPA RFI Report; (3) soil-water partitioning criteria which are protective of groundwater/drinking water quality (organics only), and (4) background values for metals. Note, background samples were not collected as part of this study. The NYSDEC TAGM also lists the eastern USA background for most metals.

Table 4.0 compares the VOCs and semi-VOCs detected in soil, fill material, and sediment samples analyzed to the NYSDEC STARS and the TAGM #4046 soil cleanup objectives (standards). As illustrated in Table 4.0, VOCs were detected at concentrations that exceed NYSDEC soil cleanup standards in the following samples:

- Hall-01 (TB-01)
- Hall-02 (TB-02)
- Lift-01
- Sump-01
- Trench-01
- TP-01

As illustrated in Table 4.0, semi-VOCs were detected at concentrations that exceed NYSDEC soil cleanup standards in the following samples:

- TP-01
- TP-02/04/05

The field observations and analytical results indicate that the contaminated soils present beneath the service building (samples Hall-01 and Hall-02) and along the northeastern property line (TP-01) warrant some type of remedial action. Based on the analytical testing performed as part of this study, the contaminated soils in these two area appear to be a non-hazardous petroleum-contaminated (e.g., hydraulic oil and diesel fuel).

The waste sediments and sludge were confirmed to contain constituents above NYSDEC soil standards. Based on the analytical characterization performed as part of this study, the waste materials in the hydraulic lift pits and trench floor drains should be able to be disposed of as a non-hazardous petroleum-contaminated waste. The relatively small quantity (i.e., less than 10 gallons) of waste sediments in the sump may have to be disposed of as a "F" listed or "D" characteristic hazardous waste due to the presence of the halogenated degreasing solvents.

Table 5.0 compares the metals detected in sample TP-02/04/05 to the NYSDEC soil cleanup standards and the eastern USA background value or range (if listed). As Table 5.0 shows, the metals arsenic, cadmium, chromium, and mercury were detected at concentrations that exceed their respective NYSDEC soil standards. It should be noted that the NYSDEC is considering revising the soil cleanup standards for cadmium (10 ppm) and chromium (50 ppm). As Table 5.0 also shows, the metals arsenic, cadmium, mercury, and lead were detected at concentrations that exceed their respective background ranges.

The NYSDEC does not currently have a soil cleanup standard for total petroleum hydrocarbons. TPH soil cleanup standards have been developed for other states, including Maine, Maryland, Massachusetts, Pennsylvania, Kansas, and Indiana. TPH soil cleanup standards for these six states range from 500-100,000 ug/kg.

## **5.2 Groundwater**

Table 6.0 lists the NYSDEC ambient water quality standards and guidance values as presented in the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1., dated October 22, 1993. As Table 6.0 illustrates, each of the ten VOCs that were detected from the sample collected from well Riz-7 were present at concentrations that exceed their respective NYSDEC groundwater standard or guidance value.

The VOC 1,1-dichloroethane was detected in the sample collected from MW-2 at a concentration of 5.0 ppb, which is equal to the NYSDEC groundwater standard. Benzene was detected in the sample collected from well MW-3 at an estimated concentration of 1.1 ppb, which exceeds the NYSDEC groundwater standard of 0.7 ppb. The six other VOCs detected in this sample were present at concentrations which do not exceed their respective NYSDEC groundwater standards.

The NYSDEC does not currently have a groundwater standard or guidance value for total petroleum hydrocarbons. NYSDEC regulations (Part 703.2) state that visible oil or globules of oil are considered contravention of groundwater standards.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

DAY was retained by the City of Rochester to conduct a Phase II Study at the Site. The purpose of the Phase II Study was to evaluate environmental conditions and to provide recommendations for additional investigations and/or remediation, and to provide estimated costs for implementing any additional studies or remedial measures specified. The Phase II Study performed by DAY included:

### 200 East Avenue

- dye testing of interior floor drains to assess their point of discharge;
- evaluation of the integrity of for 19 hydraulic lift pits and one sump filled with sediments;
- evaluation of four underground tanks, one aboveground tank, and identified a tank in a below-grade vault;
- retaining a subcontractor to excavate a 650 foot continuous test pit trench in the northern parking area to evaluate the Site's subsurface conditions;
- advancing 12 Geoprobe System test borings inside the building and two Geoprobe System test borings on the eastern side of the building;
- advancing 23 soil gas survey probe holes on the southeastern and northern sides of the building
- retaining a subcontractor to install four overburden/bedrock interface monitoring wells;
- monitoring site explorations and making in-situ measurements to characterize conditions;
- collecting five soil/fill and four sediment/sludge samples for analytical testing,
- developing the monitoring wells and measuring the static groundwater levels in the wells to assess groundwater flow at the Site;
- collecting groundwater samples from six of the seven on-site monitoring wells for analytical testing;
- collecting 12 samples of suspect asbestos-containing materials for analytical testing.

### 62-64 Scio Street

- reviewing NYSDEC documentation regarding a spill on an adjoining property to the north of the 62-64 Scio Street Site to evaluate the potential impact of the adjacent spill on the Site;

- evaluating unknown pipes on the exterior of the 62-64 Scio Street building to determine their potential function/use;
- advancing four soil gas probe holes and one Geoprobe test boring in an area of a suspected UST; and
- collecting four samples of suspect asbestos-containing materials for analytical testing.

It is DAY's understanding that the City of Rochester is considering the purchase of the Site, and that while specific redevelopment plans have not been defined, the conceptual plan for redevelopment of the 200 East Avenue parcel includes the construction of residential structures (i.e., townhouses with full basements probably to bedrock), and the possible renovation of the former car dealership building. Based on this future land use, and the information obtained during this study, the following conclusions and recommendations are provided.

## **1. Permanent Closure of Aboveground and Underground Storage Tanks**

The Site contains four abandoned underground storage tanks (USTs), two aboveground storage tanks (ASTs), and at least one, and possibly two, underground tanks in a below-grade vault present beneath the service garage floor. In addition, at least two of the USTs have been filled with concrete.

It is recommended that the abandoned UST and AST systems (including piping) be closed via permanent removal in accordance with applicable USEPA and NYSDEC regulations. The tank in the vault may have to be closed in place. The closure efforts should be documented and a tank closure assessment should be performed. If evidence of contamination is identified in the soil and/or groundwater during the removal of the tank systems, it should be reported to the NYSDEC, and remediation of soil and/or groundwater contamination should be performed under NYSDEC guidance.

## **2. Disposal of Waste Materials**

The service building contains 19 hydraulic lift pits, one sump, and about 360 linear feet of floor trench drains. The lift pits contain hydraulic oil reservoir tanks and about 2,000-gallons of oily liquids and sludge. The compressor room contains black oil sediments and a black oily residue on the equipment and walls.

The waste sediments and sludge in the floor drains and lift pits contain constituents above NYSDEC soil standards, and should be removed and properly disposed of off-site in accordance with applicable regulations. Based on the analytical testing performed as part of this study, the waste materials in the hydraulic lift pits and trench floor drains appear to be a non-hazardous petroleum-contaminated waste. The relatively small quantity (i.e., less than 10 gallons) of waste sediments in the sump may have to be disposed of as a "F" listed or "D" characteristic hazardous waste due to the presence of the halogenated degreasing solvents. After removing the waste materials, the lift pits, sumps, floor drains, and compressor room should be cleaned (e.g., power washed or steam cleaned), and the wash water should be disposed of in accordance with applicable regulations.

### **3. Asbestos Abatement**

The site contains approximately 1,500 lineal feet of thermal insulation and mudpack joints, and smaller quantities of vinyl floor tiles that are considered asbestos-containing materials (ACM). While the majority of the ACM is in good condition, some of the ACM is in a damaged or friable condition. The majority of the ACM is present on abandoned or unused pipes. It is recommended that the ACM be abated by a licensed asbestos abatement contractor. If significant renovations are planned, or if demolition of the site buildings is planned, a pre-demolition asbestos survey should be performed, and any ACM materials should be removed by a licensed asbestos abatement contractor. If ACM is to remain, it is recommended that an asbestos management plan be developed and implemented to help prevent inadvertent damage to or removal of the ACM by unauthorized/unlicensed personnel.

### **4. Underground Storage Tank at 62-64 Scio Street**

According to information obtained during the Phase I ESA, a 1,000-gallon underground fuel oil storage tank has been filled in place at 62-64 Scio Street. The underground storage tank (UST) was reportedly installed beneath the floor of the building around 1910 when the building was constructed. Soil gas readings obtained from probe holes advanced in the area of the suspected UST yielded elevated PID/FID readings above background. However, petroleum-like odors were not noted during the purging of these probe holes, and one Geoprobe test boring advanced in the area of the suspected UST did not encounter evidence of contamination (e.g., stained soils). DAY also submitted a FOIL to the NYSDEC for records concerning a spill at an adjoining property to the north. Based on the review of the FOIL information, the only well on the adjoining, off-site property to contain detectable contamination was the well located closest to the 62-64 Scio Street Site. This well contained low part per billion concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) at concentrations that exceed NYSDEC groundwater standards, and TPH at 5,130 ug/l (ppb). The groundwater elevations calculated at the wells installed on the adjoining property suggest a relatively level potentiometric surface, with the groundwater flow direction reported to the east/northeast. While the soil gas survey and the test boring advanced near the reported UST did not indicate significant soil contamination, groundwater studies were not performed.

It is recommended that a well be installed in the area of the reported UST, and that a groundwater sample be collected and analyzed for petroleum constituents to determine if leaks and/or spills from this tank system have impacted groundwater at the Site.

### **5. Diesel Fuel-Contaminated Soils in Northern Parking Lot**

Petroleum-contaminated soils with a diesel fuel odor and groundwater with a slight petroleum-like sheen were encountered along the northeastern and northern property lines during the test pit trench excavation and the installation of the well MW-1. A sample of the petroleum-contaminated soils contained VOCs and semi-VOCs that exceed NYSDEC soil cleanup objectives, and TPH characterized as diesel fuel at a concentration of 1,487,425 ppb. The extent the contamination in this area is not known, and a potential

source of the contamination was not identified during the studies completed to date. It is DAY's understanding that residential development is proposed for the area of where the diesel fuel-contaminated soil was encountered.

Based on the above considerations, it is recommended that the extent of contamination in this area be delineated, and that contaminated soils be remediated. Possible methods to delineate the contaminated soils include a soil gas survey, test borings, or test pits. Potential remedial measures could include excavation and off-site disposal during redevelopment, or on-site remedial measures such as bioremediation.

## **6. Stained Soils in Northern Parking Lot**

Stained soils that yielded elevated PID readings above background and exhibited a petroleum-like odor were encountered during the excavation of the test pit trench advanced on the western portion of the northern parking lot. The stained soils were encountered at station numbers 5+29 and 5+57, and the extent of these stained soils appeared to be limited based on the information obtained during test pit trench excavation. A sample of the stained soils collected from station number 5+57 contained VOCs at concentrations below NYSDEC soil cleanup objectives, thus remediation at this location does not appear warranted at this time.

Since only limited subsurface studies were performed by DAY in the northern parking lot, it is possible that petroleum-contaminated soils will be encountered in other portions of the northern parking lot during redevelopment (e.g., during construction) of the Site. It is recommended that a construction contingency/soil management plan be developed to properly identify, handle and address petroleum-contaminated soils encountered during development. The contingency/soil management plan can be developed concurrently with the soil management plan recommended for the fill materials also present in the northern parking lot (see recommendation #7 listed below).

## **7. Fill Materials In Northern Parking Lot**

The parking lot fill materials consist of a heterogeneous mixture of cinders, slag, and coal fragments, ash, brick fragments, reworked soils, and some solid waste. Based on the test pit excavations and the test borings, the thickness of the fill varies, and exceeds four feet in some areas. According to the laboratory results, some of the parking lot fill materials (e.g., "ash" materials in western portion of the test pit trench) contain total metals (e.g., lead, mercury) that exceed NYSDEC soil cleanup standards.

The fill materials would probably not be regulated as a solid waste if disturbed or relocated on-site; however, due to the presence of the elevated total metals, a soil management and health and safety plan should be developed, and certain construction precautions (e.g., particulate monitoring and dust suppression) should be implemented during construction and redevelopment. If the fill materials are disturbed during redevelopment and subsequently transported off-site, the fill materials should be further characterized (e.g., tested for TCLP metals) in order to determine their proper handling and disposal. If residential redevelopment occurs at the Site, the presence of the total metals may need to

be addressed through remediation (e.g., removal and off-site disposal) or by site development controls (e.g., installing a dedicated paved parking lot over the fill materials of concern to prevent future contact).

## **8. Petroleum-Contaminated Soils Beneath Service Garage**

Petroleum-contaminated soils were encountered in the majority of the test borings advanced inside the service garage in the vicinity of the hydraulic lift pits. The soils in this area appeared to be stained or contained some free petroleum product, exhibited a weathered petroleum-like (hydraulic oil) odor, and yielded elevated FID readings above background. The petroleum-contaminated soils were initially encountered at a depth of about 6 feet or deeper beneath the service garage floor, and extended to the top of bedrock. Soil samples collected from test borings TB-01 and TB-05 indicate that the contaminated soils contain concentrations of volatile aromatic hydrocarbons at concentrations which exceed NYSDEC cleanup objectives, and the soils contain relatively high concentrations of total petroleum hydrocarbons (2,260,327 to 7,071,307 ppb). The probable source of the petroleum-contaminated soils is hydraulic oil and other petroleum products that accumulated within the concrete block lift pits, and subsequently leaked from the lift pit and impacted the surrounding soils. Since the contaminated soils are present in proximity of the groundwater table, the contaminated soils may act as a source of groundwater contamination. It is recommended that the petroleum-contaminated soils in this area be remediated.

It is DAY's understanding that the service garage will not be demolished, therefore it is recommended that an in-situ remedial measure such as bioventing be implemented. In-situ bioventing should be a cost-effective and technically feasible remedial measure. In-situ bioventing involves the injection of atmospheric air (oxygen) into the contaminated soils via a pump and perforated piping. The introduction of oxygen into the contaminated soils will significantly enhance biodegradation of the petroleum contamination, and should eventually treat the contamination to concentrations at or below NYSDEC soil cleanup objectives. Since the Site is located in an urban area that contains several potential contaminant receptors (e.g., sewer systems), it is recommended that soil vapor extraction also be performed in conjunction with the bioventing in order to more effectively control the movement of subsurface vapors, and to mitigate the potential for vapors to move off-site and impact nearby receptors. If the service garage is demolished as part of renovations or redevelopment, the petroleum-contaminated soils could be remediated via excavation and off-site disposal.

## **9. Contaminated Groundwater Near Service Garage**

Groundwater samples collected from wells (Riz-7 and MW-4) installed in the southeastern portion of the Site and south of the service garage contained dissolved VOCs at concentrations that exceed NYSDEC groundwater standards. The dissolved VOCs detected in these two wells are typical constituents of petroleum-based fuels (e.g., gasoline). A thin layer of free floating petroleum product quantified as lube oil was observed in well Riz-1, located immediately north of the service building near the three USTs used to store motor oil. Free floating petroleum product that appeared to be a weathered hydraulic oil was also observed in test boring TB-1 advanced near the eastern end of the service building.



Groundwater with a yellow-green color and an organic odor was observed in well MW-2, which was installed immediately north of the service building. A groundwater sample collected from this well contained 283 ppb of TPH and methylene chloride at a concentration that exceeds NYSDEC groundwater standards.

The groundwater flow direction at the Site appears to be generally from the southwest toward the north and northeast. The redevelopment plan for the 200 East Avenue parcel (and specifically the northern parking lot) includes the construction of residential structures (i.e., townhouses with full basements). The apparent groundwater flow direction the Site could result in contaminated groundwater (and potentially petroleum product) migrating towards the residential structures planned for this area. The infiltration of contaminated groundwater into the basement of the residential structures may result in the accumulation of hydrocarbon vapors and objectionable odors.

Since residential structures with full basements are proposed for the Site, it is recommended that an interceptor trench recovery system be installed to hydraulically control the contaminated groundwater (e.g., free petroleum product) and preclude future impacts upon downgradient receptors. The interceptor trench should be installed downgradient of the source area (i.e., service garage) and positioned to intercept free floating product, and dissolved contamination, if warranted. The recovery trench would be installed north of the service building and excavated into the weathered rock. Free petroleum product entering the trench would be recovered and separated. Prior to designing and installing the groundwater recovery system, additional delineation and aquifer testing (e.g., pump tests) should be performed.

## **7.0 ESTIMATED COSTS FOR CORRECTIVE ACTIONS**

As requested by the City of Rochester, this section presents the estimated costs to implement the corrective actions recommended by DAY. Note, in some cases the estimated costs are based on preliminary data and limited information, and further studies (as specified below) are required to develop a more accurate cost estimate. Table 7.0 (see page 45) summarizes the estimated costs.

### **7.1 Permanent Closure of Aboveground and Underground Storage Tanks**

The Site contains four abandoned underground storage tanks (USTs), two aboveground storage tanks (ASTs), and at least one underground tank in a below-grade vault present beneath the garage floor. It is recommended that the abandoned UST and AST systems (including piping) be closed via permanent removal in accordance with applicable USEPA and NYSDEC regulations. The closure efforts should be documented and a tank closure assessment should be performed.

At DAY's request, three subcontractors provided cost estimates for the permanent closure of the tanks. The cost estimate assumed that the UST inside the service building and the UST inside the warehouse at 62-64 Scio Street have already been closed (filled) in place, and would not be excavated and removed. Based on the three subcontractor cost estimates, DAY recommends a budget amount of \$20,000 for this task. This cost estimate assumes the four USTs, the tank in the vault, and the two ASTs will be removed, cleaned, and decommissioned. This cost also assumes characterization testing prior to disposal, and disposal of the tank contents and wash waters as a non-hazardous waste.

Also, it is possible that contaminated soils will be encountered during the removal of the USTs. To estimate the volume of contaminated soils that may be encountered, DAY assumed that contaminated soils will be excavated and removed around a four to five foot radius of the USTs systems to a depth of five to ten feet below grade. Based on these assumptions, 150 tons of contaminated soils would be removed at a cost of approximately \$50 per ton for transportation and off-site disposal, resulting in an additional \$7,500.

### **7.2 Disposal of Waste Materials**

The service building contains 19 hydraulic lift pits, one sump, and about 360 linear feet of floor trench drains. The lift pits contain hydraulic oil reservoir tanks and about 2,000-gallons of oily liquids and sludge. (Note, since the hydraulic reservoir tanks are a sealed unit, it could not be determined if these tanks contain contents.) The compressor room contains black oil sediments and a black oily residue on the equipment and walls. The waste materials in the hydraulic lift pits and trench floor drains should be able to be disposed of as a non-hazardous petroleum-contaminated waste. The relatively small quantity (i.e., less than 10 gallons) of waste sediments in the sump may have to be disposed of as a "F" listed or "D" characteristic hazardous waste due to the presence of the halogenated degreasing solvents. After removing the waste materials, it is recommended that the lift pits, sumps, floor drains, and compressor room be cleaned (e.g., power washed or steam cleaned).

At DAY's request, three subcontractors provided costs estimates for cleaning, characterization, and disposal of the contents of the hydraulic lift pits, sumps, floor drains and compressor room. Based on the three subcontractor cost estimates, DAY recommends a budget amount of \$20,000 for this task. In addition, engineering oversight and documentation of clean closure (e.g., confirmatory sampling and analysis) is estimated to cost approximately \$5,000. This cost does not include filling the lift pits, sumps or drains with concrete.

### **7.3 Asbestos Abatement**

The site contains approximately 1,500 lineal feet of thermal insulation, and approximately 60 ft<sup>2</sup> of vinyl floor tiles that are considered asbestos-containing materials (ACM). While the majority of the ACM are in good condition, some of the ACM is in a damaged or friable condition. Most of the thermal insulation ACM described above appears to be on abandoned or unused pipes, therefore, it is recommended that both the damaged and undamaged ACM be removed by a licensed asbestos abatement contractor.

At DAY's request, three licensed asbestos abatement contractors provided cost estimates for abatement of the ACM, including the necessary permits and air monitoring. Based on the review of the cost estimates provided by the contractors, DAY recommends a budget amount of \$25,000 for this task.

### **7.4 Subsurface Study near Underground Storage Tank at 62-64 Scio Street**

An underground fuel oil storage tank has been reportedly filled in place. It is recommended that a well be installed in the area of the reported UST, and groundwater samples be collected and analyzed for petroleum constituents to determine if leaks and/or spills from this tank system have impacted groundwater at the Site. DAY estimates a cost of approximately \$3,000 to install one bedrock monitoring well, sample the groundwater for petroleum constituents, and develop a groundwater flow direction map. This cost estimate assumes that the three wells already installed at the adjoining property will be used to determine the groundwater flow direction. This cost estimate does not include subsequent remediation if such work is deemed to be necessary.

### **7.5 Diesel Fuel-Contaminated Soils in Northern Parking Lot**

Petroleum-contaminated soils with a diesel fuel odor and groundwater with a petroleum-like sheen were encountered along the northeastern and northern property lines during the test pit trench excavation and during the installation of the well MW-1. A sample of the petroleum-contaminated soils contained VOCs and semi-VOCs that exceed NYSDEC soil cleanup objectives, and TPH at a concentration of 1,487,425 ppb. The petroleum-contaminated soils were encountered for over a 60-foot section of the test pit trench between depths of about 4.0 to 8.5 feet. The extent the contamination in this area is not known, and the potential source(s) of the contamination has not been identified. It is DAY's understanding that residential development is proposed for the area of where the diesel fuel-contaminated soil was encountered.

It is recommended that the extent of contamination be delineated, and that contaminated soils be remediated. Possible methods to delineate the contaminated soils include soil gas surveys (e.g., Petrex soil gas survey) and/or test borings/test pits. If the extent of contamination is limited to the northeastern portion of the Site, estimated costs to delineate the contamination may range from \$3,000 to \$6,000. The type of soil remediation and remedial costs will depend upon the extent of contamination.

For purposes of estimating potential remedial costs, it was assumed that the contaminated soils would be excavated and disposed of off-site as part of a soil management plan implemented during construction or redevelopment. DAY assumed an area of diesel fuel-contaminated soils are present at the Site from station number 2+13 through 2+47, encompassing an area 30 feet by 35 feet by 4.5 feet thick. Drawing SR-7 in Appendix A illustrates the area assumed to require remediation. Based on these assumptions, a total of 175 cubic yards or approximately 263 tons of contaminated soils may be encountered. Assuming a unit cost of \$50 per ton for transportation and disposal of the petroleum-contaminated soil at an off-site landfill, costs of approximately \$13,150 could be incurred. Engineering oversight and guidance during the excavation, subcontractor costs to excavate and load the contaminated soils, and laboratory costs to characterize the contaminated soils prior to off-site disposal may be an additional \$6,000 to \$7,000. Total estimated costs for delineating, excavating and disposing of the diesel-fuel contaminated soils may range from \$22,000 to \$26,000.

## **7.6 Fill Materials In Northern Parking Lot**

The parking lot fill materials consist of a heterogeneous mixture of cinders, slag, and coal fragments, ash, brick fragments, reworked soils, and some solid waste. Based on the test pit excavations and the test borings, the thickness of the fill exceeds four feet in areas. According to the laboratory results, some of the parking lot fill materials (ash, slag, cinders) contain total metals (e.g., lead, mercury) that exceed NYSDEC soil cleanup standards.

The fill materials would probably not be regulated as a solid waste if disturbed or relocated on-site; however, due to the presence of the total metals, a soil management and health and safety plan should be developed, and certain construction precautions (e.g., particulate monitoring and dust suppression) should be implemented during construction and redevelopment. Costs to develop a soil management and health and safety plan typically range from \$2,000 to \$4,000. This cost assumes that the soil management and health and safety plan would also address any petroleum-contaminated soils that may be encountered during development.

If the fill materials are disturbed during redevelopment and subsequently transported off-site, the fill materials should be further characterized (e.g., tested for TCLP metals) in order to determine their proper handling and disposal. Costs for further characterizing the fill materials may range from \$2,000 to \$4,000. If residential redevelopment occurs at the Site as planned, the presence of the elevated total metals may need to be addressed through remediation (e.g., removal and off-site disposal) or by site development controls (e.g., installing a dedicated paved parking lot over the fill materials of concern). Due to the structural unsuitability of some of the fill materials (e.g., ash, solid waste), reuse on-site during construction may not be possible. Therefore, it appears likely that some of the fill materials will be excavated and disposed of off-site.

For purposes of cost estimation, DAY calculated the approximate volume of fill materials at the Site based on findings of the test pit trench. The northern parking lot was assumed to be 270 feet long by 200 feet wide and the average layer of fill was assumed to be 1.5 feet deep across this area. Based on these assumptions, a total of 3,000 cubic yards or 4,500 tons of fill may be present. Based on the conceptual redevelopment drawing submitted by the City of Rochester, approximately 75 percent of the northern parking lot may be disturbed during redevelopment (e.g., new construction, utility trenches, etc.). Also, the ash, solid waste and other unsuitable fill materials were assumed to represent approximately 15% of total fill materials, resulting in approximately 506 tons of fill requiring disposal. If the fill materials are disposed of off-site as non-hazardous solid waste at \$50 per ton, the estimated costs incurred for disposal are estimated at \$25,300. Since it was assumed that the fill materials would be excavated as part of redevelopment/construction, costs to excavate or load the contaminated soils are not included in this cost estimate.

## **7.7 Petroleum-Contaminated Soils Beneath Service Garage**

Petroleum-contaminated soils and some limited free petroleum product are present beneath the service garage in the vicinity of the hydraulic lift pits. Most of the petroleum-contaminated soils were initially encountered at a depth of about 6 feet or deeper beneath the service garage floor, and extended to the top of bedrock. Soil samples of the contaminated soils indicate the presence of volatile aromatic hydrocarbons at concentrations which exceed NYSDEC cleanup objectives, and relatively high concentrations of TPH. The probable source of the petroleum-contaminated soils may be hydraulic oil and other petroleum products that accumulated within the concrete block lift pits, and subsequently leaked from the lift pit and impacted the surrounding soils. Since the contaminated soils are present in proximity of the groundwater table, the contaminated soils may act as a source of groundwater contamination. DAY recommends that the petroleum-contaminated soils in this area be remediated.

To calculate the approximate volume of petroleum-contaminated soils in this area. It was assumed that the petroleum-contaminated soils are present in those areas of the service building that contain lift pits, and also in the northern parking lot immediately north of the service building, encompassing an area of about 17,200 square feet (see Drawing SR-7 in Appendix A). The typical depth of contaminated soils inside the building ranged from 1.5 and 3.0 feet thick, and thus the approximate volume of contaminated soils in this area was estimated to range from approximately 950 to 1,900 cubic yards, or 1,425 to 2,850 tons.

It is recommended that the contaminated soils be treated on-site via a combination of in-situ remedial techniques. A combination of in-situ bioventing and soil vapor extraction can be used to remediate the contaminated soils without significant disturbance or disruption of the building or the site. Bioventing involves the injection of atmospheric air into contaminated soil and fill materials at relatively low flow rates (i.e., 5-25 CFM) to enhance biodegradation of the contaminants of concern. Bioventing supports microbial activity and enhances biodegradation. Soil vapor extraction (SVE) consists of an extraction blower which induces a vacuum on the soil matrix to create a negative pressure gradient, causing the volatile gasoline vapors to move towards perforated extraction piping. The contaminated vapors are then transported through solid piping

to the surface where vapors are monitored and then discharged to the atmosphere, or treated prior to discharge. The combination of air injection and SVE of will create a synergistic remedial effect and will allow for greater control over movement of subsurface air and vapors, minimizing the potential for receptors to be impacted during treatment. An operation and monitoring (O&M) plan must be developed for each remedial system, and monitoring must be performed on a periodic basis. Monitoring is necessary to ensure that the performance of the remedial system is optimized, to determine if a vapor treatment system is required for the SVES, and to track contaminant removal/degradation. Confirmatory sampling and laboratory analysis should be performed after treatment to determine if the soil has been adequately treated to levels below the site specific cleanup goals.

The design of a bioventing system depends upon the site specific geology and soil lithology, the radius of influence where degradation can occur, the volume of soil to be remediated, initial contaminant concentrations, microbial presence, soil pH and soil moisture content, and the time-frame available to remediate the contamination. The design of a SVES depends upon the site specific geology and soil lithology, the radius of influence that can be induced by the SVES pipe or well, the pipe or wellhead vacuum, the extraction flow rate, the volume of soil to be remediated, the NYSDEC air effluent discharge limits that must be met, initial vapor concentrations, and the time-frame available to remediate the contamination. DAY recommends that a pilot scale study be performed at the Site prior to developing a final SVES and/or bioventing design. Pilot studies involve conducting short-term in-situ tests at the site to obtain site specific data (e.g., radius of influence) that can be used in the design of the full-scale system. For purposes of cost estimating, DAY assumed a radius of influence of 30 feet, resulting in approximately six to seven vertical bioventing wells and three to four SVES wells (note, horizontal injection and extraction wells could also be used due to the relatively shallow depth of contaminated soils). One vacuum pump/blower will be used for the SVES, and one blower will be used to inject air for the bioventing system. DAY also assumed that treatment of the SVES effluent will not be required.

Costs for workplan development (including developing site specific soil cleanup goals), performing a pilot study, remedial system design, construction documentation/oversight, performing one round of confirmatory sampling and laboratory analysis, and developing a closure report may range from \$20,000 to \$25,000. Cost for equipment (e.g., blowers, piping, control valves, etc.), and the subcontractor to install the remedial systems, and restoration are estimated to range from \$25,000 to \$30,000. Annual O&M costs are estimated to range from \$4,000 to \$6,000, and annual electrical costs could range from \$5,000 to \$8,000. It is anticipated that the remedial systems will operate for two or more years. Total costs for bioventing and SVES, including two years of O&M are estimated to range from \$63,000 to \$83,000. Annual O&M costs for subsequent years is estimated to range between \$9,000 and \$14,000.

Although not anticipated, if the service building is demolished as part of renovations or redevelopment, the petroleum-contaminated soils could be remediated via excavation and off-site disposal at a regulated landfill. For purposes of cost comparison, DAY estimated the potential estimated costs associated with excavation and off-site disposal of contaminated soils. If a unit

rate of \$50 per ton is assumed for the disposal and transportation of the contaminated soils and 1,425 tons to 2,850 of contaminated soils are excavated, disposal costs may range from approximately \$71,250 to \$142,500. In addition, costs for excavation, confirmatory soil sampling/analysis, backfill and engineering oversight and monitoring may add another \$30,000 to \$45,000. Total costs for excavation and off-site disposal may range from \$101,000 to \$188,000.

## **7.8 Contaminated Groundwater Near Service Garage**

Groundwater samples collected from wells (Riz-7 and MW-4) installed in the southeastern portion of the Site and south of the service garage contained dissolved VOCs at concentrations that exceed NYSDEC groundwater standards. The dissolved VOCs detected in these two wells are typical constituents of petroleum-based fuels (e.g., gasoline). A thin layer of free floating petroleum product quantified as lube oil was observed in well Riz-1, located immediately north of the service building near the three USTs used to store motor oil. Free floating petroleum product that appeared to resemble a weathered hydraulic oil was also observed in test boring TB-1 and possibly in TB-5 advanced near the eastern end and middle of the service garage. Groundwater with a yellow-green color and an organic odor was observed in well MW-2, which was installed immediately north of the service building. A groundwater sample collected from this well contained 283 ppb of TPH and methylene chloride just above groundwater standards.

The groundwater flow direction at the Site appears to be generally from the southwest toward the north and northeast. The redevelopment conceptual plan for the 200 East Avenue building includes a possible restaurant, and construction of residential structures (i.e., townhouses with basements) in the northern parking lot. The groundwater flow direction at the Site could result in contaminated groundwater (and potential petroleum product) migrating towards the residential structures planned for this area. The infiltration of contaminated groundwater into the basement of the residential structures may result in the accumulation of hydrocarbon vapors and objectionable odors. It is recommended that an interceptor trench groundwater recovery system be installed to hydraulically control the migration contaminated groundwater (e.g., free petroleum product) and prevent future impacts upon downgradient receptors (e.g., townhouses). Since it is recommended that the petroleum-contaminated soils present beneath the service garage be remediated, and since high concentrations of dissolved VOCs have not been detected in the two wells located hydraulically downgradient of the service garage (Riz-1 and MW-2), treatment of dissolved VOCs is not recommended at this time.

The interceptor trench would be installed perpendicular to the groundwater flow direction, and hydraulically downgradient of the service garage in the northern parking lot. The trench would be approximately 150 feet long by 4-6 feet wide and excavated to a depth of approximately 4 feet below the groundwater table into the fractured bedrock. The downgradient side the of trench (north side) would be lined with an impermeable liner. The trench would be backfilled with stone and gently sloped to the east. For the purposes of cost estimation, it is estimated that two recovery pumps equipped with a skimmer or filter separator would be installed within the trench and each well would be pumped at a rate of 2 gallons per minute. The actual rate would be determined

based on pumping tests and system start-up tests. The recovery wells would pump to an oil-water separator with a 6,000-gallon per day capacity that is connected to the sanitary sewer system. The water fraction of the oil-water separator will be a continuous discharge to the sanitary sewer system with periodic monitoring and sampling. Based on the relatively low concentration of dissolved VOCs, it appears unlikely that pre-treatment would be required prior to meet the sewer authority water effluent limit of 2.13 ppm for total toxic organics, thus costs for pretreatment are not included in this cost estimate. A sewer use permit for the discharge must be obtained from the Monroe County Department of Environmental Services.

Costs to install the interceptor trench are estimated to range between \$49,000 and \$56,000. Engineering design and construction oversight is estimated to range between \$9,500 and \$11,500. O&M costs are estimated at \$3,500 to \$5,000 per year which includes electrical costs and costs for the removal and disposal of any oil product recovered (assumed to be 10,000 gallons or less). For purposes of cost estimation, it was assumed that the interceptor trench recovery system will be in operation for a period of two years, resulting in O&M costs of between \$7,000 to \$10,000 for the life of the system. Obtaining a sewer use permit (including baseline sampling and analysis) is estimated to cost approximately \$5,000. Total costs for installation of the interceptor trench recovery system and O&M for two years is estimated to range from \$70,500 to \$82,500.

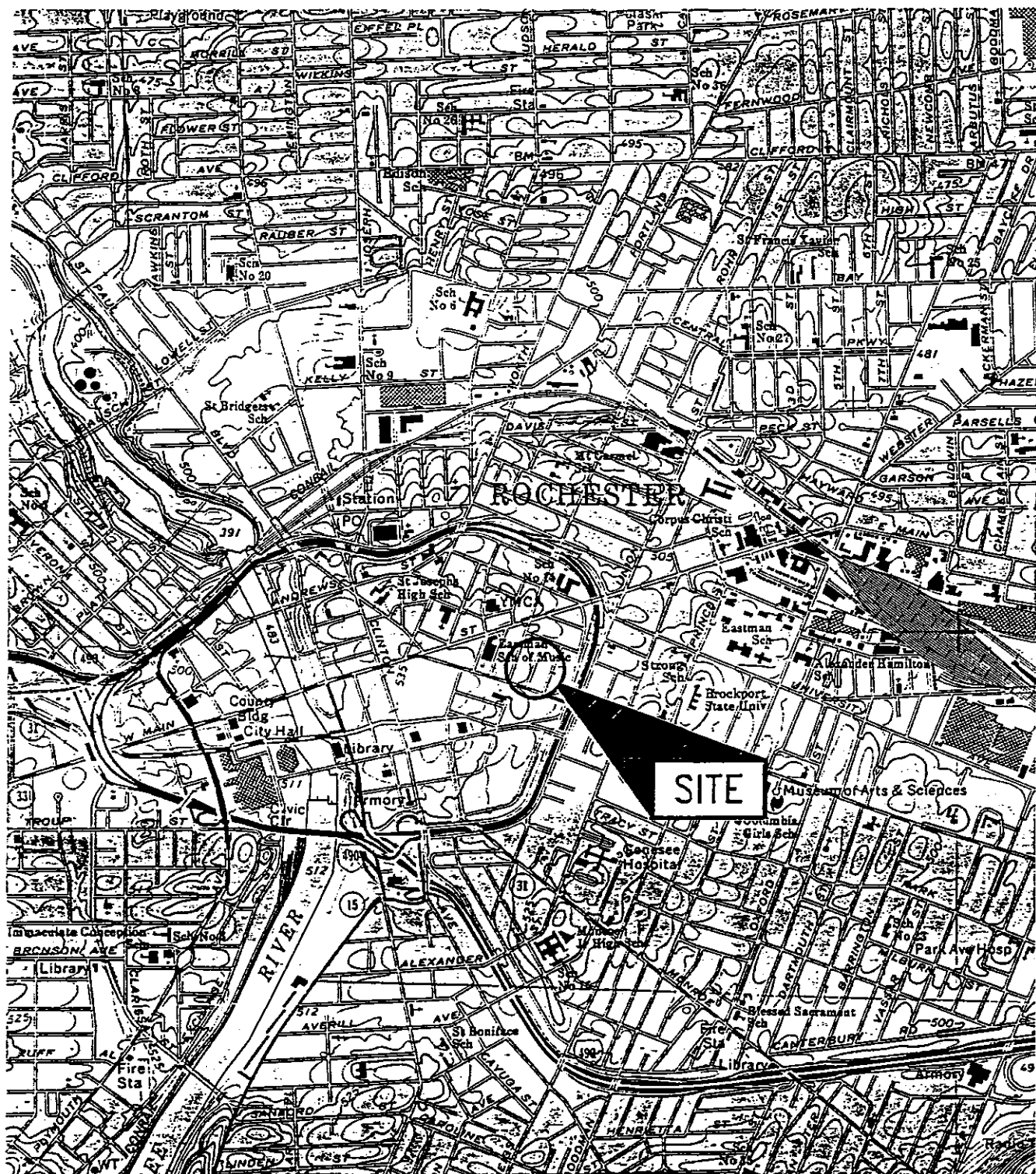


**TABLE 7.0**  
**ESTIMATED POTENTIAL COSTS**

200 East Avenue & 62-64 Scio Street  
Rochester, New York

No.	Description	ESTIMATED QUANTITY	ESTIMATED COST	COMMENTS
7.1	Tank Closures	5 USTs & 2 ASTs 150 Tons of Soil	\$27,500	Estimated cost includes disposal of tanks and tank contents, tank pit assessment removal of 150 tons of soil and closure report, and backfill material.
7.2	Cleaning & Disposing of Contents of 19 Hydraulic Lifts, Trench Drains, 1 sumps, and Compressor Room Floor Sediments	2,800-gallons of non-hazardous liquid & 15 tons of non-hazardous solid material. Less than 10-gallons of "P" or "D" hazardous waste.	\$25,000	Estimated cost includes disposal of material, removal of hydraulic lifts and reservoir tanks/cylinders, power washing of items, and documentation of clean closure.
7.3	ACM Abatement	1,500 LN FT 60 FT <sup>3</sup> VFT	\$25,000	Assumes abatement of damaged/friable and undamaged ACM, also includes disposal fees.
7.4	Subsurface Study - 62-64 Scio St.	1 monitoring well	\$3,000	Cost assumes that the three wells located on the adjoining property will be accessible.
7.5	Delineation and Off-site Disposal of Diesel Fuel-Contaminated Soils in Northern Parking Lot	263 tons	\$22,000 - \$26,000	Cost includes determining extent of contamination and the excavation and disposal of diesel-fuel contaminated soils off-site during redevelopment.
7.6	Off-site disposal of Fill Materials	505 tons	\$29,300 - \$33,300	Cost assumes development of a soil management plan, additional characterization/testing, and disposal of ash and solid waste as a non-hazardous waste during redevelopment.
7.7	Remediation of Petroleum-Contaminated Soils Beneath Service Building	1,425 to 2,850 tons	\$63,000 - \$83,000	Cost assumes on-site treatment via bioventing and soil vapor extraction for two years. O&M for each additional year is estimated at \$9,000 to \$14,000/year.
7.8	Groundwater Recovery System	Interceptor Trench	\$70,500 - \$82,500	Cost assumes O&M for two years. O&M for each additional year for is estimated at approximately \$3,500 to \$5,000/year
TOTAL ESTIMATED COSTS = \$ 265,300 - \$305,300				

## **APPENDIX A**



DRAWING PRODUCED FROM: ROCHESTER, EAST, N.Y.  
N4307.5-W7730/7.5  
1971  
PHOTOREVISED 1978

PROJECT NO.  
0577S-95

DRAWING NO.

SR-1

SHEET 1 OF 1

PROJECT TITLE  
200 EAST AVENUE  
62-64 SCIO STREET  
ROCHESTER, NEW YORK

PHASE II STUDY

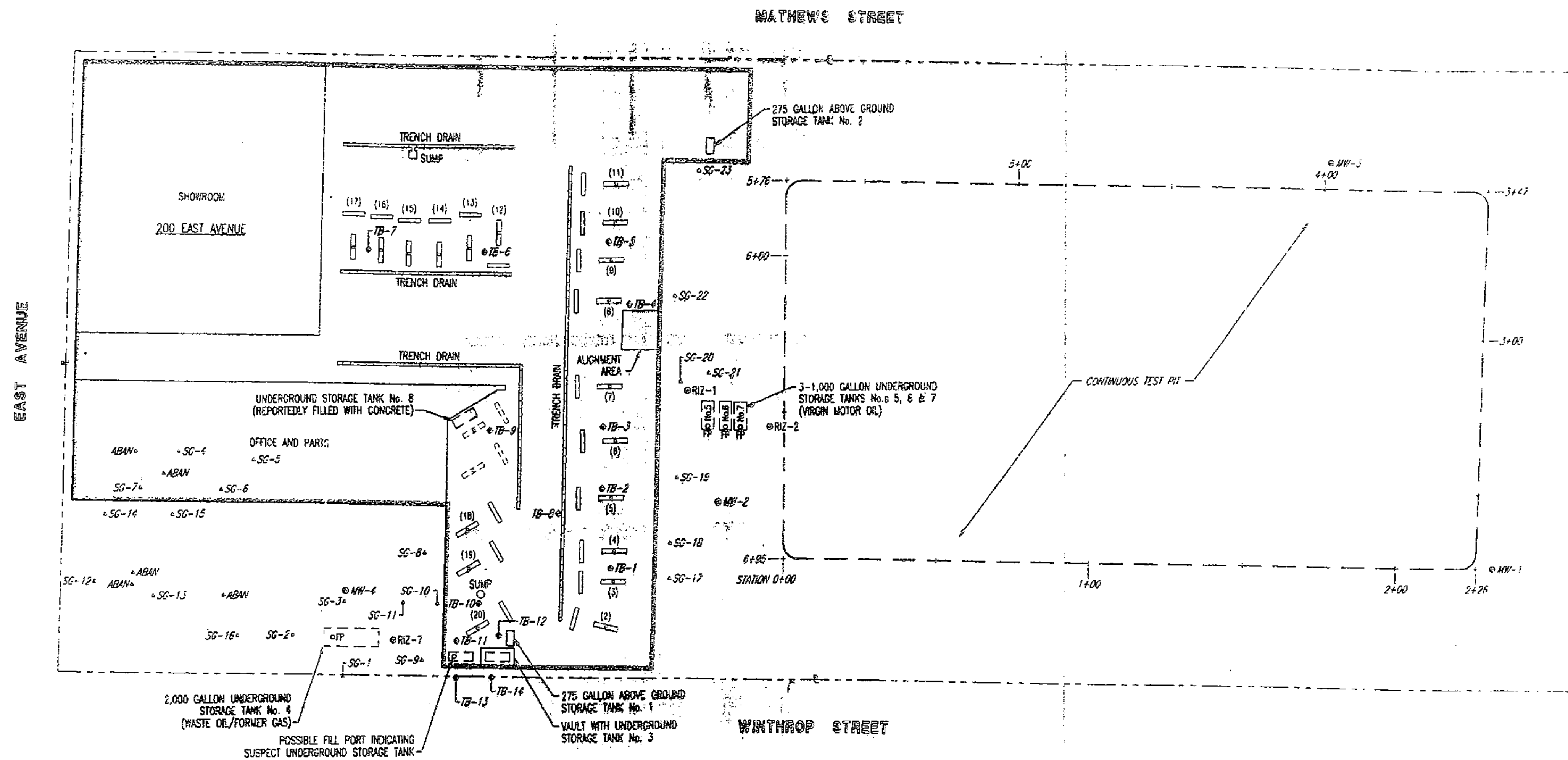
DRAWING TITLE  
PROJECT LOCUS MAP

**DAY ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK

DATE  
8/4/95

DRAWN BY

SCALE  
1" = 2000'



### PARTIAL PLAN

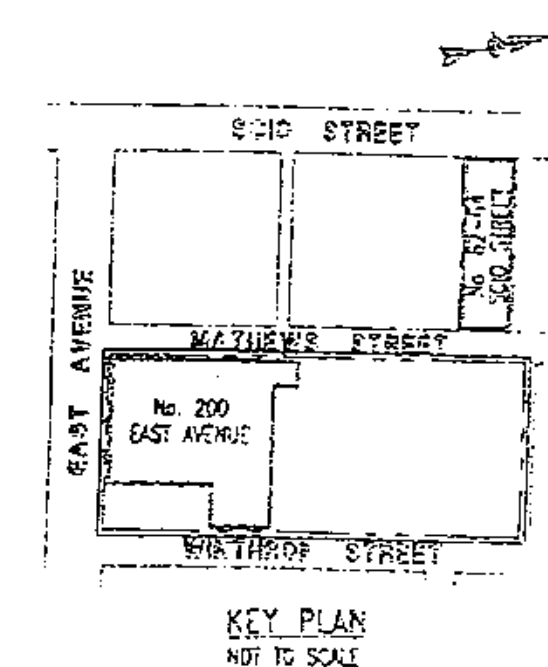
SCALE: 1" = 20'

NOTES:

1. THIS DRAWING WAS PRODUCED FROM A SITE PLAN BY: RIZZO ASSOCIATES, INC., ENTITLED "FIGURE 2: SITE PLAN WITH MONITORING WELL LOCATIONS".
2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

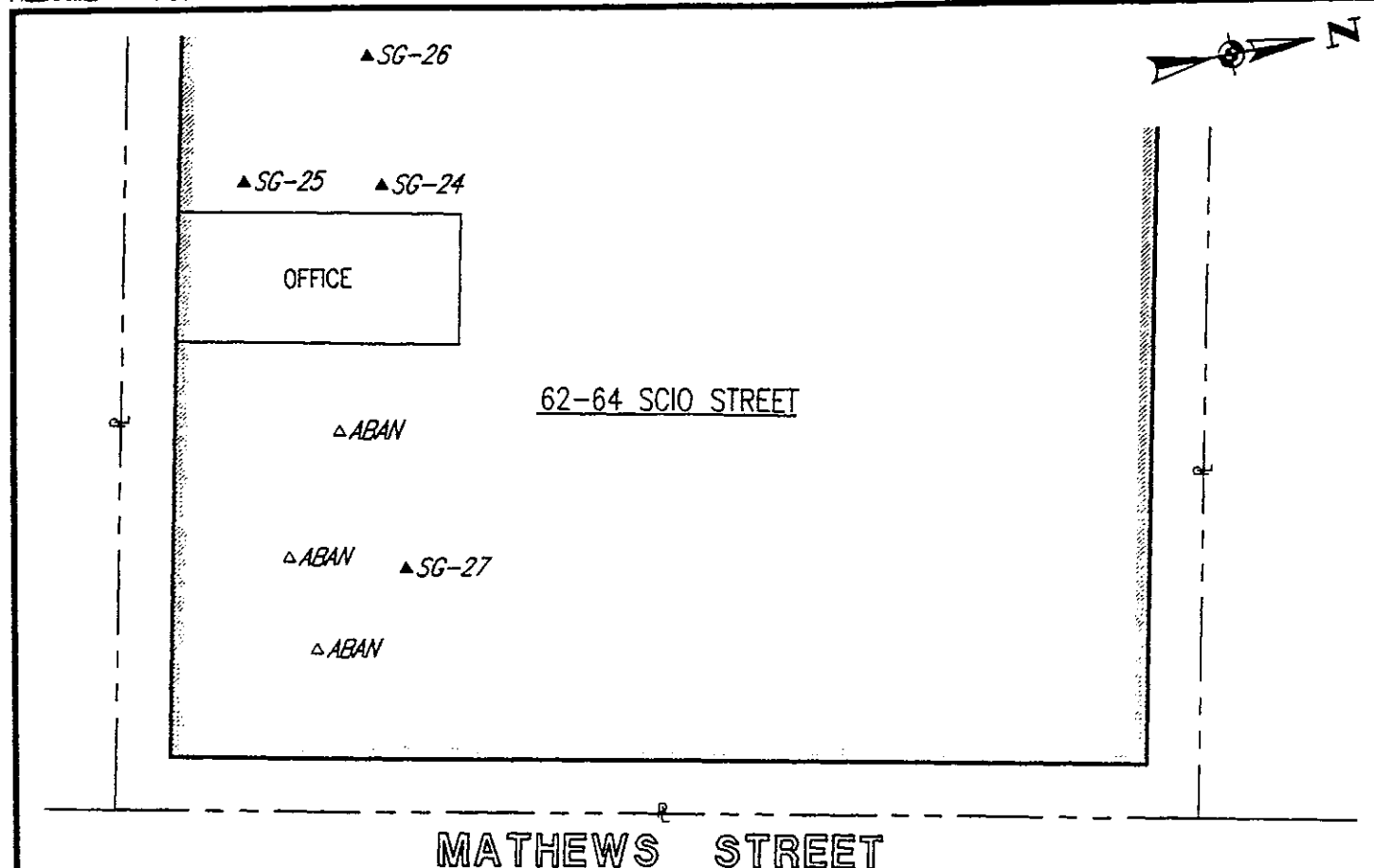
LEGEND

- 450-5 SOIL GAS SURVEY POINT LOCATION  
 4644 SOIL GAS SURVEY POINT LOCATION ABANDONED DUE TO REFUSAL  
 475-16 GEOPHYSIC TEST BORING LOCATION  
 4844-5 BEDROOM MONITORING WELL LOCATION (DAY INSTALLED)  
 4912-7 EXISTING MONITORING WELL LOCATION (RIZZIO INSTALLED)  
 49P UNDERGROUND STORAGE TANK FILL PORT LOCATION  
 ---C--- PROPERTY LINE  
 (4)  
 HYDRAULIC LIFT AND ASSOCIATED LIFT PIT LOCATION  
 --- FORMER HYDRAULIC LIFT LOCATION (FILLED IN PLACE)



PROJECT FILE	PROJECT NO.	DATE	BY
200 EAST AVENUE & 62-64 SCIO STREET ROCHESTER, NEW YORK	05775-85	SR-2	
PHASE of STUDY	THREATING USE	REMARKS	
		EMERGENCY AND FIRST RESPONDING AGENCY	
		WITH APPROPRIATE AGENCIES	





## **PARTIAL PLAN**

SCALE: 1" = 10'

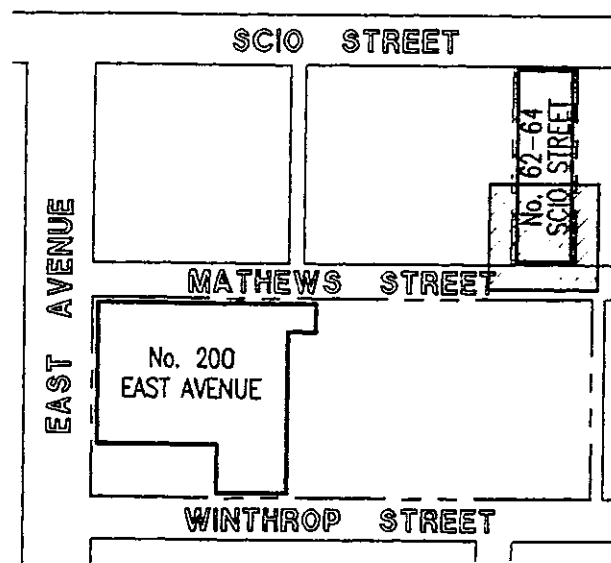
### **NOTES:**

1. THIS DRAWING WAS PRODUCED FROM A SITE PLAN BY: RIZZO ASSOCIATES, INC., ENTITLED "FIGURE 2: SITE PLAN WITH MONITORING WELL LOCATIONS".
2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

### **LEGEND**

- ▲SG-27 SOIL GAS SURVEY POINT LOCATION  
 ▲ABAN SOIL GAS SURVEY POINT LOCATION  
 ABANDONED DUE TO REFUSAL

— — — — — PROPERTY LINE



### **KEY PLAN**

NOT TO SCALE

PROJECT NO.  
**0577S-95**

DRAWING NO.  
**SR-4**

SHEET 1 OF 1

PROJECT TITLE  
**200 EAST AVE. 62-64 SCIO ST.  
 ROCHESTER, NEW YORK**

PHASE II STUDY

DRAWING TITLE  
**62-64 SCIO STREET  
 PARTIAL PLAN**

**DAY ENVIRONMENTAL, INC.**  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK

DATE  
**8/11/95**

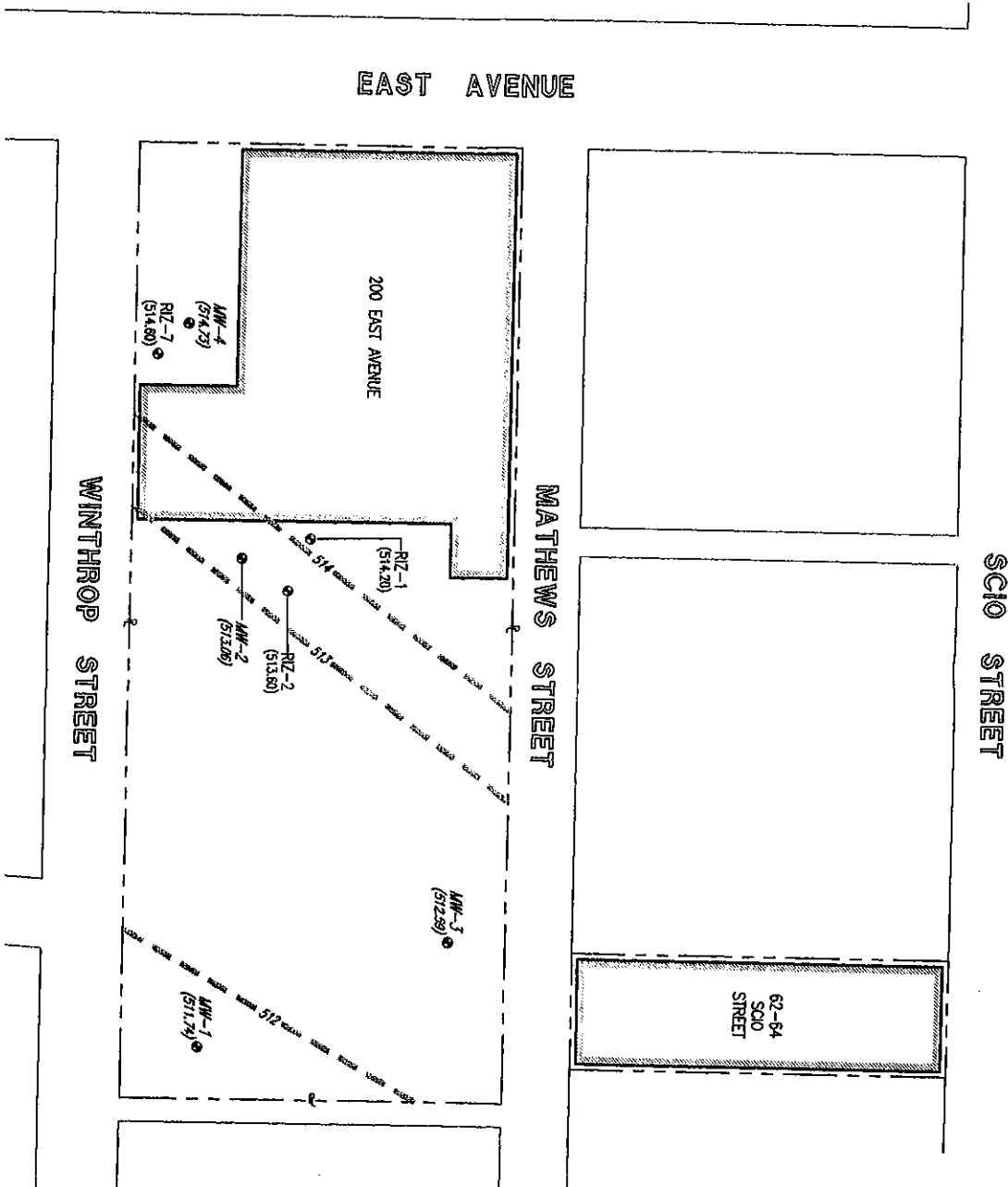
DRAWN BY  
**RJM**

SCALE  
**AS SHOWN**

- NOTE:**
1. THIS DRAWING WAS PRODUCED FROM A SITE PLAN BY: RIZZO ASSOCIATES, INC., ENTITLED "FIGURE 2: SITE PLAN WITH MONITORING WELL LOCATIONS".
  2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

**PLAN**  
 SCALE: 1" = 60'

- LEGEND**
- MW-2 (512.80) BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JULY 20, 1995
  - RIZ-1 (514.20) EXISTING MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JULY 20, 1995
  - APPARENT POTENTIOMETRIC CONTOUR LINE
  - - - - - PROPERTY LINE



PROJECT NO.  
 05775-95  
 DRAWING NO.  
 SR-5  
 SHEET 1 OF 1

PROJECT TITLE  
 200 EAST AVENUE & 62-64 SCIO STREET  
 ROCHESTER, NEW YORK  
 PHASE II STUDY  
 DRAWING TITLE  
 POTENTIOMETRIC CONTOUR MAP  
 FOR JULY 20, 1995

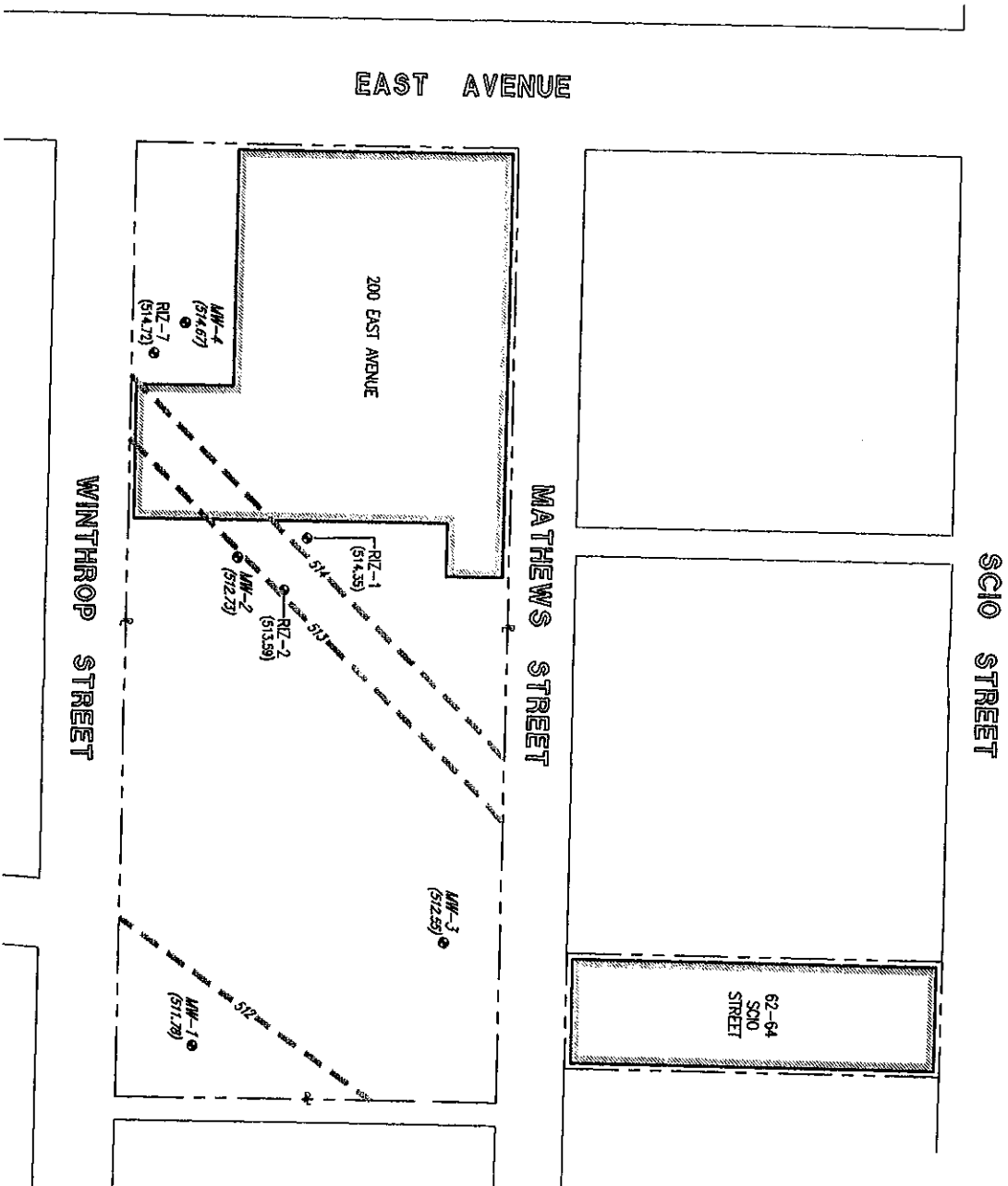
**DAY ENVIRONMENTAL, INC.**  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK

DESIGNED BY JJB	DATE 7/20/95
DRAWN BY RJM	DATE DRAWN 8/11/95
SCALE 1" = 60'	DATE ISSUED 8/11/95

- NOTE:**
1. THIS DRAWING WAS PRODUCED FROM A SITE PLAN BY: RIZZO ASSOCIATES, INC., ENTITLED "FIGURE 2. SITE PLAN WITH MONITORING WELL LOCATIONS".
  2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

**PLAN**  
 SCALE: 1" = 60'

- LEGEND**
- MW-2 (512.23) BEDROCK MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JULY 24, 1995
  - RZ-1 (514.35) EXISTING MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION (FEET) OBTAINED ON JULY 24, 1995
  - APPARENT POTENTIOMETRIC CONTOUR LINE
  - - - PROPERTY LINE



PROJECT NO. 0575-95 DRAWING NO. SR-6 SHEET 1 OF 1	PROJECT TITLE 200 EAST AVENUE & 62-64 SCIO STREET ROCHESTER, NEW YORK
	PHASE II STUDY DRAWING TITLE POTENTIOMETRIC CONTOUR MAP FOR JULY 24, 1995

**DAY ENVIRONMENTAL, INC.**  
 ENVIRONMENTAL CONSULTANTS  
 ROCHESTER, NEW YORK

DESIGNED BY JJB	DATE 7/20/95
DRAWN BY RJM	DATE DRAWN 8/11/95
SCALE 1" = 60'	DATE ISSUED 8/11/95





EAST AVENUE

MATHEWS STREET

WINTHROP STREET

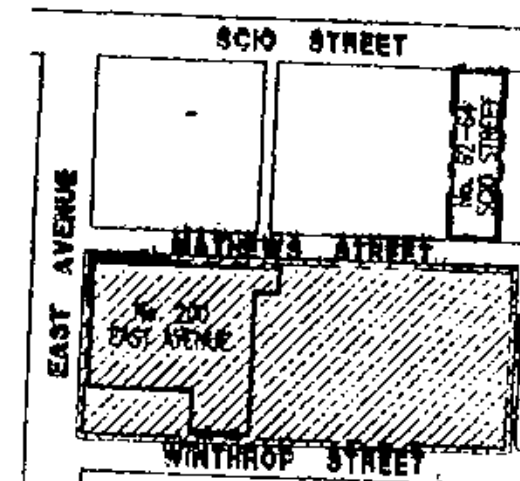
**PARTIAL PLAN**  
SCALE: 1" = 20'

**NOTES:**

1. THIS DRAWING WAS PRODUCED FROM A SITE PLAN BY: RIZZO ASSOCIATES, INC., ENTITLED "FIGURE 2: SITE PLAN WITH MONITORING WELL LOCATIONS".
2. LOCATIONS TAPE MEASURED FROM EXISTING SITE STRUCTURES AND SHOULD BE CONSIDERED ACCURATE TO THE DEGREE IMPLIED BY THE METHOD USED.

**LEGEND**

- TP-01 TEST PIT SAMPLE LOCATION
- LIFT 01-9 HYDRAULIC LIFT PIT SEDIMENT SAMPLE LOCATION
- SUMP-01 SUMP SEDIMENT SAMPLE LOCATION
- TRENCH-01-1 TRENCH DRAIN SEDIMENT SAMPLE LOCATION
- 19-14 GEOPROBE TEST BORING & SAMPLE LOCATION
- MW-1 BEDROCK MONITORING WELL LOCATION (DAY INSTALLED)
- RIZ-7 EXISTING MONITORING WELL LOCATION (RIZZO INSTALLED)
- OFP UNDERGROUND STORAGE TANK FILL PORT LOCATION
- P — PROPERTY LINE
- (1) HYDRAULIC LIFT AND ASSOCIATED LIFT PIT LOCATION
- (2) FORMER HYDRAULIC LIFT LOCATION (FILLED IN PLACE)



KEY PLAN  
NOT TO SCALE

REFERENCE FILES ATTACHED:  
RIZZO ASSOCIATES, INC.  
RIZZO ASSOCIATES, INC.  
RIZZO ASSOCIATES, INC.  
RIZZO ASSOCIATES, INC.  
RIZZO ASSOCIATES, INC.  
RIZZO ASSOCIATES, INC.

REVISIONS  
DATE  
BY  
REASON

DATE	BY	REASON
9/17/95		
9/17/95		
9/17/95		
9/17/95		
9/17/95		
9/17/95		

DATE	BY	REVISIONS
9/17/95		
9/17/95		
9/17/95		
9/17/95		
9/17/95		
9/17/95		

**DAY ENVIRONMENTAL, INC.**  
ENVIRONMENTAL CONSULTANTS  
ROCHESTER, NEW YORK

PROJECT NO.  
200 EAST AVENUE & 62-64 SCIO STREET  
ROCHESTER, NEW YORK

PHASE II STUDY  
LOCATION OF POTENTIAL REMEDIAL AREAS

PROJECT NO.  
0577S-95  
DRAWING NO.  
SR-7  
SHEET 1 OF 1

**APPENDIX B**

# WELL DEVELOPMENT DATA

MW- Riz-1

SITE LOCATION: 200 East Avenue, Rochester, New York

JOB#: 0577S-95

DATE/ TIME	6/13/95 15:00	6/13/95 15:30	6/16/95 09:40	6/16/95 11:20	6/16/95 14:35	6/19/95 11:30
EVACUATION METHOD	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer
PID/FID (PPM)	NC	NC	NC	NC	NC	NC
DEPTH OF WELL (FT)	9.3	9.3	9.3	NC	9.3	NC
STATIC WATER LEVEL (SWL) FT	8.80	NC	8.17	9.03	8.93	8.2
VOLUME EVACUATED (GAL)	1 bailer	2 bailers	2.25 bailers	0.0 bailer too low for bailer to collect	1/2 bailer	2 bailers
TOTAL VOLUME EVACUATED (GAL)	1 bailer	3 bailers	5.25	5.25	5.75	7.75 bailers
TEMPERATURE (°C)	15.8	NC	NC	--	NC	NC
pH	7.46	NC	NC	--	NC	NC
CONDUCTIVITY (umho/cm)	NC	NC	NC	--	NC	NC
TURBIDITY (NTU)	>200	>200	NC	--	NC	<200 (1st bailer very clear)
VISUAL OBSERVATION	oil sheen	sheen	0.3' of product in well (oil)	0.37' of oil on SWL indicator	sheen	sheen

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- R12-2**

SITE LOCATION: 200 East Avenue, Rochester, New York

JOB#: 0577S-95

DATE/ TIME	6/13/95 15:55	6/16/95 09:33	6/16/95 11:25	6/16/95 14:40		
EVACUATION METHOD	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer		
PID/FID (PPM)	NC	NC	NC	NC		
DEPTH OF WELL (FT)	10.2	10.2	NC	NC		
STATIC WATER LEVEL (SWL) FT	8.87	8.94	8.95	8.75		
VOLUME EVACUATED (GAL)	None, not enough water in well to fill bailer	0.0 bailer came up dry	0.0	0.0		
TOTAL VOLUME EVACUATED (GAL)	NC	0.0	0.0	0.0		
TEMPERATURE (°C)	NC	NC	NC	NC		
pH	NC	NC	NC	NC		
CONDUCTIVITY (umho/cm)	NC	NC	NC	NC		
TURBIDITY (NTU)	NC	NC	NC	NC		
VISUAL OBSERVATION	NC	NC	NC	NC		

LEGEND: NC = Not Collected  
ND = Not Detected

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

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

SITE LOCATION: 200 East Avenue, Rochester, New York JOB#: 0577S-95

DATE/ TIME	6/13/95 16:10	6/14/95	6/16/95 10:05	6/16/95 11:30	6/16/95 14:45		
EVACUATION METHOD	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer	1.0' poly bailer		
PID/FID (PPM)	4.9 / 3.0	NC	NC	NC	NC		
DEPTH OF WELL (FT)	9.2	9.2	9.2	9.2	9.2		
STATIC WATER LEVEL (SWL) FT	7.80	NC	7.81	8.35	8.25		
VOLUME EVACUATED (GAL)	1 bailer	approx. 2.5 bailers	1.5 bailers	1" in bailer	1/2 bailer		
TOTAL VOLUME EVACUATED (GAL)	1 bailer	3.5 bailers	6/16 5.0 bailers	5.0 bailers	5 1/2 bailers		
TEMPERATURE (°C)	NC	NC	NC	NC	NC		
pH	NC	NC	NC	NC	NC		
CONDUCTIVITY (umho/cm)	NC	NC	NC	NC	NC		
TURBIDITY (NTU)	>200	>200	NC (>200)	NC	NC >200		
VISUAL OBSERVATION	black with gasoline odors	black with gasoline odors	black with old weathered petro like odor	black with old weathered petro like odor	black with old weathered petro like odor		

LEGEND: NC = Not Collected  
ND = Not Detected

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

**WELL DEVELOPMENT DATA**  
**MW- 01**

JOB#: 0577S-95

SITE LOCATION: 200 East Avenue, Rochester, New York (N/E Corner of Property)

DATE/ TIME	7/20/95 9:35	7/20/95 10:23	7/20/95 10:33	7/20/95 13:22			
EVACUATION METHOD	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer			
PID (PPM)	22.4 (headspace)	ND	ND	NC			
DEPTH OF WELL (FT)	14.95	NC	14.9	NC			
STATIC WATER LEVEL (SWL) FT	8.25	NC	8.5	8.34			
VOLUME EVACUATED (GAL)	1.0	1.0	5.0	1 - bailer			
TOTAL VOLUME EVACUATED (GAL)	1.0	2.0	7.0	7.0			
TEMPERATURE (°C)	18.4	18.2	18.5	18.9			
pH	6.5	6.33	6.2	6.57			
CONDUCTIVITY (umho/cm)	2.92 ms/cm	2.90 ms/cm	2.92 ms/cm	2.96 ms/cm			
TURBIDITY (NTU)	>200	>200	>200	35.1			
VISUAL OBSERVATION	muddy, slight unknown odor	muddy, slight oil odor	muddy, musty odor	clear			

LEGEND: NC = Not Collected  
ND = Not Detected

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

# WELL DEVELOPMENT DATA

MW- 02

SITE LOCATION: 200 East Main Street, Rochester, New York

JOB#: 0577S-95

DATE/ TIME	7/20/95 10:55	7/20/95 11:10	7/20/95 11:20	7/20/95 13:47			
EVACUATION METHOD	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer			
PID/FID (PPM)	14.2 (well headspace)	0.5	NC	NC			
DEPTH OF WELL (FT)	14.43	NC	14.45	NC			
STATIC WATER LEVEL (SWL) FT	8.71	NC	11.61	8.83			
VOLUME EVACUATED (GAL)	1.0	2.0	3.0	1 - bailer			
TOTAL VOLUME EVACUATED (GAL)	1.0	3.0	6.0	6.0			
TEMPERATURE (°C)	19.2	18.4	18.7	18.4			
pH	6.64	6.53	6.61	6.52			
CONDUCTIVITY (umho/cm)	1468 µs/cm	1417 µs/cm	1463 µs/cm	1422 µs/cm			
TURBIDITY (NTU)	>200	>200	>200	12.05			
VISUAL OBSERVATION	1st bailer had greenish hugh/tint - other bailers appeared muddy - septic odor	1st bailer had greenish hugh/tint - other bailers appeared muddy - septic odor	clearing, cloudy, slight greenish tint, septic odor	slight greenish tint, septic odor			

LEGEND: NC = Not Collected  
ND = Not Detected

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

# WELL DEVELOPMENT DATA

MW- 03

JOB#: 0577S-95

SITE LOCATION: 200 East Main Street, Rochester, New York (N/W Portion of Property)

DATE/ TIME	7/20/95 11:35	7/20/95 11:53	7/20/95 11:58	7/20/95 13:37			
EVACUATION METHOD	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer			
PID (PPM)	15.3 (well headspace)	NC	ND	NC			
DEPTH OF WELL (FT)	14.00	NC	NC	14.00			
STATIC WATER LEVEL (SWL) FT	7.89	NC	9.67	7.92			
VOLUME EVACUATED (GAL)	1.0	2.0	3.0	1 - bailer			
TOTAL VOLUME EVACUATED (GAL)	1.0	3.0	6.0	6.0			
TEMPERATURE (°C)	19.1	17.9	17.8	17.6			
pH	6.95	6.96	7.01	7.05			
CONDUCTIVITY (umho/cm)	1874 µs/cm	1747 µs/cm	1727 µs/cm	1684 µs/cm			
TURBIDITY (NTU)	>200	>200	>200	60.4			
VISUAL OBSERVATION	muddy - no unusual odor, 1st bailer cloudy	muddy	muddy	clear			

LEGEND: NC = Not Collected  
ND = Not Detected

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



# WELL DEVELOPMENT DATA

## MW- 04

SITE LOCATION: 200 East Main Street, Rochester, New York (S/E Portion of Property)

JOB#: 0577S-95

DATE/ TIME	7/20/95 12:30	7/20/95 12:37	7/20/95 12:47	7/20/95 12:56	7/20/95 13:57		
EVACUATION METHOD	NA	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer	New 3.0' polyethylene bailer		
PID (PPM)	63.2	0.5	0.2	NC	NC		
DEPTH OF WELL (FT)	13.54	NC	NC	NC	13.54		
STATIC WATER LEVEL (SWL) FT	7.86	NC	NC	7.97	7.87		
VOLUME EVACUATED (GAL)	NA	1.0	2.0	3.0	1 - bailer		
TOTAL VOLUME EVACUATED (GAL)	NA	1.0	3.0	6.0	6.0		
TEMPERATURE (°C)	NA	20.0	19.8	19.8	20.1		
pH	NA	6.68	6.63	6.75	6.64		
CONDUCTIVITY (umho/cm)	NA	1932 µs/cm	1887 µs/cm	1878 µs/cm	1823 µs/cm		
TURBIDITY (NTU)	NA	>200	>200	>200	30.6		
VISUAL OBSERVATION	NA	1st bailer clear - others muddy, slight petroleum odor	muddy, slight petroleum odor	cloudy (improving), slight petroleum odor	clear, slight septic/petroleum odor		

LEGEND:  
NC = Not Collected  
ND = Not Detected  
NA = Not Applicable

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

## **APPENDIX C**

Day Environmental, Inc. Environmental Consultants 2144 Brighton-Henrietta T.L. Rd. Rochester, N.Y. Phone (716) 292-1090 Fax (716) 292-0425		Well No. MW-1		Sheet 1 of 1	
		Phase II Study 200 East Avenue Rochester, New York		Job Number: 0577S-95	
				Logged By: Joe Biondolillo	
Driller: Earth Dimensions, Inc.			GS Elevation: 522.44		
Type of Rig: B-61			Datum: NA		
Drill Method: 4 1/4" I.D. HSA			Start Date: 7/13/95		End Date: 7/13/95
Sample Method: Split Spoon			Weather: Sunny 60° F		

Sample No.	Recovery (%)	Blow Counts (6 in. interval)	N-Value/ RQD (%)	PID (ppm)	Depth (feet)	Geologic Description	Well Construction
SS-1	56	14 15 8 5	23	2.4	1	Reworked coarse and medium Gravel, Silt, brick fragments, ash layer (1.5" thick), slight black staining last 3-4 inches (FILL).	
SS-2	79	5 3 4 15	7	1.5	2	Reworked Silt, Sand, some Gravel, moist (FILL).	
SS-3	77	2 2 3 14	5	1.3	3	Brown to tan Sandy SILT, little Clay, mottled, moist to wet.	
SS-4	54	9 5 5 8	10	0.8	4	Brown fine SAND, some fine to coarse Gravel, weathered/decomposed dolomite chip in end of spoon, wet.	
SS-5	50	4 3 5 12	8	10.0	5	(Black, stained gravel, some silt, petroleum-like odor.)	
SS-6	<25	>100/0.4	>100	8.0	6	Split spoon refusal at 10.4 ft.	
C-1	99	NA	95	ND	11	Gray massive crystalline dolomite, hard, with occasional vugs and stylolitic partings, some horizontal fractures.	
					12		
					13		
					14		
					15		
					16	Bottom of Boring at 15.4'	
					17		
					18		

Notes: PID = Photovac HL-2000 with 10.6 eV lamp.

<b>Day Environmental, Inc.</b> Environmental Consultants 2144 Brighton-Henrietta T.L. Rd. Rochester, N.Y. Phone (716) 292-1080 Fax (716) 292-0425		<b>Well No. MW-2</b>		Sheet 1 of 1	
		Phase II Study 200 East Avenue Rochester, New York		Job Number: 0577S-95	
				Logged By: Steve Mullin	
Driller: Earth Dimensions, Inc.			GS Elevation: 522.15		
Type of Rig: B-61			Datum: NA		
Drill Method: 4 1/4" I.D. HSA			Start Date: 7/13/95		End Date: 7/13/95
Sample Method: Split Spoon			Weather: Sunny 85° F		

Sample No.	Recovery (%)	Blow Counts (6 in. interval)	N-Value/ RQD (%)	PID (ppm)	Depth (feet)	Geologic Description	Well Construction
SS-1	54	27	12	0.2	1	0-3" Asphalt	
		7		0.2	2	3"-7" Stone base	
		7		0.1		Reworked brown Sandy Silt (FILL).	
SS-2	75	2	15	0.3	3	(moist)	
		3		0.3	4	Brown SILT, occasional rock fragments, damp.	
		12		0.3			
SS-3	21	3	12	0.2	5	(some sand and rock fragment stuck in shoe of split spoon)	
		4		0.2	6		
		8					
SS-4	54	6	24	0.4	7	Brown SILT, some Sand, little Gravel, damp.	
		14		1.2	8	Brown SILT, some Sand, black staining (hydraulic oil type odor).	
		10		5.4			
SS-5	83	18	19	7.8	9	Black stained GRAVEL, moist, petroleum-like odor.	
		19		32.4	10	Split spoon refusal at 9.0'	
		0"/50					
C-1	98	NA	73		11	Core Bedrock	
					12	Gray crystalline dolomite, hard, some horizontal fractures.	
					13		
					14		
					15		
							Bottom of Boring at 14.9'

Notes: PID = Photovac HL-2000 with 10.6 eV lamp. ND = Non-Detect

<b>Day Environmental, Inc.</b> Environmental Consultants 2144 Brighton-Henrietta T.L. Rd. Rochester, N.Y. Phone (716) 292-1090 Fax (716) 292-0425		<b>Well No. MW-3</b>		Sheet 1 of 1	
		Phase II Study 200 East Avenue Rochester, New York		Job Number: 0577S-95	
				Logged By: Steve Mullin	
Driller: Earth Dimensions, Inc.			GS Elevation: 520.85		
Type of Rig: B-61			Datum: NA		
Drill Method: 4 1/4" I.D. HSA			Start Date: 7/14/95		End Date: 7/14/95
Sample Method: Split Spoon			Weather: Sunny 75° F		

Sample No.	Recovery (%)	Blow Counts (6 in. interval)	N-Value/ RQD (%)	PID (ppm)	Depth (feet)	Geologic Description	Well Construction
SS-1	75	21 7 9 6	16	0.2 1.6 1.8 1.8	1	0-2" Asphalt 2"-6" Reworked Silt with Gravel intermixed (FILL). 6"-20" Black cinder material (FILL). 20"-24" Brick fragments (FILL).	
SS-2	63	3 2 3 7	5	0.8 0.6 0.8	2	Reworked medium to coarse Sand, some Silt, and fine Gravel (FILL).	
					3		
					4	Reworked brown Sandy Silt, moist, some fine Gravel (FILL).	
SS-3	88	4 7 9 10	16	1.2 1.6 1.6	5	Brown coarse SAND, some Gravel, damp.	
					6		
SS-4	54	10 11 21 13	32	0.6 0.4 0.4	7	Rock fragments, dolomite. (moist to saturated)	
					8		
SS-5	38	6 5 5 3	10	0.4 ND ND	9	(large stone fragment in shoe of split spoon) (wet)	
					10		
SS-6	8	4 2"/50	4 2"/50	3.9	10	Wet Silty SAND, little Gravel.	
					11	Split spoon refusal at 10.5 ft.	
					12	Core bedrock	
C-1	96	NA	61	ND	13	Gray crystalline dolomite, hard, some horizontal fractures.	
					14		
					15		

Notes: PID = Photovac HL-2000 with 10.6 eV lamp.

Day Environmental, Inc. Environmental Consultants 2144 Brighton-Henrietta T.L. Rd. Rochester, N.Y. Phone (716) 292-1090 Fax (716) 292-0425		<b>Well No. MW-4</b>		Sheet 1 of 1	
		Phase II Study 200 East Avenue Rochester, New York		Job Number: 0577S-95	
				Logged By: Steve Mullin	
Driller: Earth Dimensions, Inc.			GS Elevation: 522.99		
Type of Rig: B-61			Datum: NA		
Drill Method: 4 1/4" I.D. HSA			Start Date: 7/14/95		End Date: 7/14/95
Sample Method: Split Spoon			Weather: Sunny 75° F		

Sample No.	Recovery (%)	Blow Counts (6 in. interval)	N-Value/ RQD (%)	PID (ppm)	Depth (feet)	Geologic Description	Well Construction		
SS-1	67	24	11	3.7	1	0-2" Asphalt 2"-10" Stone base			
		5		1.7		Reworked Silt, trace Sand, trace Gravel, damp (FILL). No unusual odors.			
		3		0.8					
SS-2	92	2	4	0.4	2	Brown SILT, some fine Sand, little Gravel, damp.			
		2		ND					
		2		ND					
SS-3	71	3	38	0.2	3	(rock fragments, dolomite)			
		18		0.2					
		20		ND					
SS-4	54	27	38	ND	4	Brown coarse SAND and Gravel, trace Silt, damp.			
		12		0.1					
		26		0.1					
SS-5	90	6	7	1.2	5	Brown coarse SAND between weathered rock (Dolomite) layers, damp to moist.			
		4"/75		4"/75				9.4	
								200	
C-1	78	NA	67		6	(coarse to medium Sand)			
					7	Weathered rock fragments (Dolomite). Black staining, gasoline and petroleum-like odors. Wet, slight sheen.			
					8	Split spoon refusal at 8.8 ft.			
					9	Core bedrock			
					10	Gray crystalline dolomite, hard, some horizontal fractures.			
					11				
					12				
					13				
					14				
					15	Bottom of Boring at 14.9'			

Notes: PID = Photovac HL-2000 with 10.6 eV lamp. ND = Non-Detect

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

MW - ID#: RIZ -1

**SECTION 1**

SITE LOCATION: 200 East Avenue, Roch. NY JOB #: 0577S-95  
 PROJECT NAME: Phase II Study DATE: 6/20/95  
 SAMPLE COLLECTOR(S): S. Mullin / J. Dorety  
 WEATHER CONDITIONS: Sunny, 85°F

**SECTION 2 - PURGE INFORMATION**

DEPTH OF WELL [FT]: 9.3 (MEASURED FROM TOP OF CASING - T.O.C.)  
 STATIC WATER LEVEL (SWL) [FT]: 8.47 (MEASURED FROM T.O.C.)  
 DEPTH OF WATER COLUMN [FT]: 0.83 (DEPTH OF WELL - SWL)  
 CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.15; CASING DIA. 2"  
 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
4" (0.3333)	0.6528	X WELL CONSTANT
6" (0.5000)	1.4688	
8" (0.6667)	2.6110	

CALCULATED PURGE VOLUME [GAL]: 0.45 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
 ACTUAL VOLUME PURGED [GAL]: 3 bailer volumes (dry)  
 PURGE METHOD: New 1.0' Poly Bailer PURGE START: 10:45 END: 10:47

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
Riz-1	10:03	New 1.0' poly disposable bailer	8260 (w/tank list) & TPH	Cloudy

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.53	16.2	7.1	NC	182.8	Cloudy	0.0/0.4

NC = not collected

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

MW - ID#: Riz - 7

SECTION 1

SITE LOCATION: 200 East Avenue, Roch. NY JOB #: 0577S-95  
PROJECT NAME: Phase II Study DATE: 6/20/95  
SAMPLE COLLECTOR(S): S. Mullin / J. Dorety  
WEATHER CONDITIONS: Sunny, 85°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 9.33 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 7.68 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 1.65 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.27; CASING DIA. 2"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT (GAL/FT)
2" (0.1667)	0.1632
4" (0.3333)	0.6528
6" (0.5000)	1.4688
8" (0.6667)	2.6110

CALCULATIONS

VOL. OF H<sub>2</sub>O IN CASING = DEPTH OF WATER COLUMN  
X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 0.81 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)

ACTUAL VOLUME PURGED [GAL]: 0.5 gal

PURGE METHOD: New 1.0' Poly Bailer PURGE START: 10:55 END: 10:59

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
Riz-7	10:33	New 1.0' poly disposable bailer	8260 (w/ tank list) & TPH	Cloudy

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.43	NC	NC	NC	>200	Cloudy	25.7/20.0

NC = not collected

SM272

SM272



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

MW-1

**SECTION 1**

**SITE LOCATION:** 200 East Avenue, Roch. NY **JOB #:** 0577S-95  
**PROJECT NAME:** Phase II Study **DATE :** 7/28/95  
**SAMPLE COLLECTOR(S):** S. Mullin  
**WEATHER CONDITIONS:** Sunny, Humid 85°F

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 14.90 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 7.98 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 6.92 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 1.13  
**CALCULATIONS:**  

<u>CASING DIA. (FT)</u>	<u>WELL CONSTANT (GAL/FT)</u>	<u>CALCULATIONS</u>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
4" (0.3333)	0.6528	<u>X WELL CONSTANT</u>
6" (0.5000)	1.4688	

**CALCULATED PURGE VOLUME [GAL]:** 3.4 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
**ACTUAL VOLUME PURGED [GAL]:** 3.5  
**PURGE METHOD:** Dedicated 3.0' Polyethylene Bailer **PURGE START:** 11:38 **END:** 11:50

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-1	13:35 am	New disposable 1.0' poly bailer	TPH, 8260 TCL (w/"STARS" List)	Clear

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.95	20.5	6.15	NC	>200 (5th bailer)*	Clear to Cloudy septic, musty odor	7.4 ppm**

NC - not collected

\*Initial bailer appeared very clear (est. at <50 NTU)

\*\*Well headspace reading

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

**MW-2**

**SECTION 1**

**SITE LOCATION:** 200 East Avenue, Roch. NY **JOB #:** 0577S-95  
**PROJECT NAME:** Phase II Study **DATE :** 7/28/95  
**SAMPLE COLLECTOR(S):** S. Mullin  
**WEATHER CONDITIONS:** Sunny, Humid / 85°F

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 14.45 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 9.12 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 5.33 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.87 gal.

**CALCULATIONS:**  

<u>CASING DIA. (FT)</u>	<u>WELL CONSTANT (GAL/FT)</u>	<u>CALCULATIONS</u>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
4" (0.3333)	0.6528	<u>X WELL CONSTANT</u>
6" (0.5000)	1.4688	

**CALCULATED PURGE VOLUME [GAL]:** 2.6 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
**ACTUAL VOLUME PURGED [GAL]:** 3.0 (greenish tint)  
**PURGE METHOD:** Dedicated 3.0' polyethylene purger **PURGE START:** 10:35 **END:** 10:47  
bailer

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-2	12:05 pm	New disposable 1.0' poly bailer	TPH, 8260 TCL (w/"STARS" List)	Greenish Tint

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID READING
9.02	20.2	6.27	NC	>200 (5th bailer)*	Greenish tint, septic, pet. odor	6.8 ppm**

NC - not collected

\*1<sup>st</sup> bailer very clear (est. at <50 NTU)

\*\*Well headspace reading

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

**MW-3**

**SECTION 1**

**SITE LOCATION:** 200 East Avenue, Roch. NY **JOB #:** 0577S-95  
**PROJECT NAME:** Phase II Study **DATE :** 7/24/95  
**SAMPLE COLLECTOR(S):** S. Mullin / J. Biondolillo  
**WEATHER CONDITIONS:** Overcast / Mid to Upper 70°F

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 14.0 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 7.93 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 6.07 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.99

**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 X WELL CONSTANT
4" (0.3333)	0.6528	
6" (0.5000)	1.4688	

**CALCULATED PURGE VOLUME [GAL]:** 3.0 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
**ACTUAL VOLUME PURGED [GAL]:** 3.1  
**PURGE METHOD:** Dedicated 36" Polyethylene bailer **PURGE START:** 10:57 **END:** 11:03

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-3	12:00 pm	New disposable 12" poly bailer	8260 (w/tank list) TPH NYSDOH 310.13	Clear

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID READING
7.93	17.9	6.85	1699 µs/cm	>200 (5th bailer)*	Clear	**

\*Initial bailer appeared very clear (est. <50 NTU)

\*\*Initial well headspace reading = 3.6 ppm

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

MW-2

SECTION 1

SITE LOCATION: 200 East Avenue, Roch. NY JOB #: 0577S-95  
PROJECT NAME: Phase II Study DATE: 7/24/95  
SAMPLE COLLECTOR(S): S. Mullin / J. Biondolillo  
WEATHER CONDITIONS: Overcast & humid / 75°F (am)

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 14.45 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 9.04 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 5.41 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.883 gal.  
  
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  
4" (0.3333) 0.6528 X WELL CONSTANT  
6" (0.5000) 1.4688  
  
CALCULATED PURGE VOLUME [GAL]: 2.7 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
ACTUAL VOLUME PURGED [GAL]: 3.0 (Note, greenish color to H<sub>2</sub>O)  
PURGE METHOD: Dedicated 36" polyethylene bailer PURGE START: 9:55 END: 10:01

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-2	11:35 am	New disposable 12" poly bailer	8260 (w/tank list) TPH NYSDOH 310.13	Greenish Tint

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING
8.98	19.4	6.59	1536 $\mu$ s/cm	133.8 (5th bailer)*	Greenish Tint	**

\*Initial bailer appeared very clear (est. at <50 NTU)

\*\*Initial well headspace PID reading = 4.4 ppm

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

**MW-4**

**SECTION 1**

**SITE LOCATION:** 200 East Avenue, Roch. NY **JOB #:** 0577S-95  
**PROJECT NAME:** Phase II Study **DATE :** 7/24/95  
**SAMPLE COLLECTOR(S):** S. Mullin / J. Biondolillo  
**WEATHER CONDITIONS:** Overcast & Humid / 75°F

**SECTION 2 - PURGE INFORMATION**

**DEPTH OF WELL [FT]:** 13.54 (MEASURED FROM TOP OF CASING - T.O.C.)  
**STATIC WATER LEVEL (SWL) [FT]:** 7.92 (MEASURED FROM T.O.C.)  
**DEPTH OF WATER COLUMN [FT]:** 5.62 (DEPTH OF WELL - SWL)  
**CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]:** 0.92

**CALCULATIONS:**  

<u>CASING DIA. (FT)</u>	<u>WELL CONSTANT (GAL/FT)</u>	<u>CALCULATIONS</u>
2" (0.1667)	0.1632	VOL. OF H <sub>2</sub> O IN CASING = DEPTH OF WATER COLUMN
4" (0.3333)	0.6528	X WELL CONSTANT
6" (0.5000)	1.4688	

**CALCULATED PURGE VOLUME [GAL]:** 2.75 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
**ACTUAL VOLUME PURGED [GAL]:** 3.0  
**PURGE METHOD:** Dedicated 36" Polyethylene **PURGE START:** 10:13 **END:** 10:18  
bailer

**SECTION 3 - SAMPLE IDENTIFICATION**

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-4	12:20 pm	New disposable 12" poly bailer	8260 (w/tank list), TPH NYSDOH 310.13	Clear, Slight Gas Odor

**SECTION 4 - SAMPLE DATA**

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID READING
7.93	20	6.63	1979 µs/cm	>200 (5th bailer)*	Clear	**

\*Initial bailer very clear (est. <50 NTU)

\*\*Initial PID well headspace reading = 14.6 ppm

DAY ENVIRONMENTAL, INC.  
MONITORING WELL SAMPLING LOG

MW-4

SECTION 1

SITE LOCATION: 200 East Avenue, Roch. NY JOB #: 0577S-95  
PROJECT NAME: Phase II Study DATE: 7/28/95  
SAMPLE COLLECTOR(S): S. Mullin  
WEATHER CONDITIONS: Sunny, Humid / 85°F

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 13.54 (MEASURED FROM TOP OF CASING - T.O.C.)  
STATIC WATER LEVEL (SWL) [FT]: 7.93 (MEASURED FROM T.O.C.)  
DEPTH OF WATER COLUMN [FT]: 5.61 (DEPTH OF WELL - SWL)  
CALCULATED VOL. OF H<sub>2</sub>O PER WELL CASING [GAL]: 0.92  
  
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
4" (0.3333)	0.6528	<u>X WELL CONSTANT</u>
6" (0.5000)	1.4688	

  
CALCULATED PURGE VOLUME [GAL]: 2.75 (3) (3 - 5 TIMES CASING VOLUME - SPECIFY)  
ACTUAL VOLUME PURGED [GAL]: 3.0  
PURGE METHOD: Dedicated 3.0' Polyethylene bailer PURGE START: 11:05 END: 11:10

SECTION 3 - SAMPLE IDENTIFICATION

SAMPLE ID #	TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)	SAMPLE APPEARANCE
MW-4	12:30 pm	New disposable 1.0' poly bailer	TPH, 8260 TCL (w/"STARS" List)	Clear, slight septic/oil odor

SECTION 4 - SAMPLE DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY (uMHOS/CM)	TURBIDITY (NTU)	VISUAL	PID/FID READING
7.92	21.4	6.34	NC	>200 (5th bailer) *	Clear, slight septic/pet. odor	8.9 ppm**

NC - not collected

\*Initial bailer very clear (est. <50 NTU)

\*\*Well headspace reading (Note: Initial headspace reading at 11:00 was 22.8 ppm)

## **APPENDIX D**

## GROUNDWATER ELEVATIONS

DATE OF MEASUREMENT: 7/20/95

200 EAST AVENUE  
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	520.44	519.99	8.25	511.74
MW-2	522.15	521.77	8.71	513.06
MW-3	520.85	520.48	7.89	512.59
MW-4	522.99	522.59	7.86	514.73
Riz-1	522.60	522.55	8.35*	514.20
Riz-2	522.61	522.33	8.73	513.60
Riz-7	522.72	522.52	7.92	514.60

Note: SWL measurements were collected from north side of PVC well casing.

\*A thin layer of oil was encountered on the groundwater and may have skewed the SWL measurement.

## GROUNDWATER ELEVATIONS

DATE OF MEASUREMENT: 7/24/95

200 EAST AVENUE  
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	520.44	519.99	8.21	511.78
MW-2	522.15	521.77	9.04	512.73
MW-3	520.85	520.48	7.93	512.55
MW-4	522.99	522.59	7.92	514.67
Riz-1	522.60	522.55	8.20	514.35
Riz-2	522.61	522.33	8.74	513.59
Riz-7	522.72	522.52	7.80	514.72

Note: SWL measurements were collected from north side of PVC well casing



## **APPENDIX E**

**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 Lab Project No: GE2834  
Lab Sample No: 8752A  
Client Job Site: Hallman  
200 East Ave., Rochester New Yro Sample Type: Soil  
Client Job No: 0577S-95  
Date Sampled: 6/13/95  
Field Location: TB-01 Date Received: 06/13/95  
Field ID No: Hall-01 Date Analyzed: 06/15/95

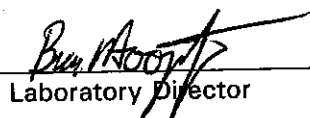
VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND < 274	Benzene	ND < 274
Bromomethane	ND < 274	Chlorobenzene	ND < 274
Bromoform	ND < 274	Ethylbenzene	ND < 274
Carbon tetrachloride	ND < 274	Toluene	ND < 274
Chloroethane	ND < 274	m,p - Xylene	464
Chloromethane	ND < 274	o - Xylene	260 J
2-Chloroethyl vinyl ether	ND < 274	Styrene	ND < 274
Chloroform	ND < 274	1,3-Dichlorobenzene	ND < 274
Dibromochloromethane	ND < 274	1,4-Dichlorobenzene	ND < 274
1,1-Dichloroethane	ND < 274	1,2-Dichlorobenzene	ND < 274
1,2-Dichloroethane	ND < 274		
1,1-Dichloroethene	ND < 274		
trans-1,2-Dichloroethene	ND < 274	<u>Ketones &amp; Misc.</u>	
1,2-Dichloropropane	ND < 274	Acetone	ND < 547
cis-1,3-Dichloropropene	ND < 274	Vinyl acetate	ND < 547
trans-1,3-Dichloropropene	ND < 274	2-Butanone	ND < 547
Methylene chloride	ND < 274	4-Methyl-2-pentanone	ND < 547
1,1,2,2-Tetrachloroethane	ND < 274	2-Hexanone	ND < 547
Tetrachloroethene	ND < 274	Carbon disulfide	ND < 547
1,1,1-Trichloroethane	ND < 274		
1,1,2-Trichloroethane	ND < 274		
Trichloroethene	ND < 274		
Vinyl Chloride	ND < 274		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration

Approved By

  
Laboratory Director

**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**

**Client:** Day Environmental **Lab Project No.:** GE2834  
**Lab Sample No.:** 8752A  
**Client Job Site:** Hallman  
200 East Ave., Rochester, New York **Sample Type:** Soil  
**Client Job No.:** 0577S-95  
**Date Sampled:** 06/13/95  
**Field Location:** TB-01 **Date Received:** 06/13/95  
**Field ID No:** Hall-01 **Date Analyzed:** 06/14/95

Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
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

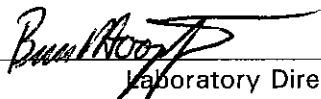
Analytical Method: EPA 8080

ELAP ID No.: 10958

**Comments:**

ND denotes Not Detected.

**Approved By:**

  
Laboratory Director

# PARADIGM

**ENVIRONMENTAL  
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

**Lab Project No.:** GE2834

**Client Job Site:** Hallman  
200 East Ave., Rochester New York

**Lab Sample No.:** 8752A

**Client Job No.:** 0577S-95

**Sample Type:** Soil

**Field Location:** TB-01

**Date Sampled:** 06/13/95

**Field ID No.:** Hall-01

**Date Received:** 06/13/95


**Date Analyzed:** 06/15/95

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND < 391
Acenaphthene	ND < 391
Fluorene	ND < 391
Fluoranthene	ND < 391
Anthracene	ND < 391
Phenanthrene	ND < 391
Benzo (a) anthracene	ND < 391
Chrysene	ND < 391
Pyrene	ND < 391
Benzo (b) fluoranthene	ND < 391
Benzo (k) fluoranthene	ND < 391
Benzo (g,h,i) perylene	ND < 391
Benzo (a) pyrene	ND < 391
Dibenz (a,h) anthracene	ND < 391
Indeno (1,2,3-cd) pyrene	ND < 391

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

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

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834
		<b>Lab Sample No.:</b>	8752A
<b>Client Job Site:</b>	Hallman	<b>Sample Type:</b>	Soil
	200 East Ave., Rochester New York		
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	6/13/95
		<b>Date Received:</b>	6/13/95
<b>Field Location:</b>	TB-01	<b>Date Analyzed:</b>	6/19/95
<b>Field ID No:</b>	Hall-01		

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Heavy Weight PHC as Lube Oil	7,071,307	976,944

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

Client: Day Environmental

Lab Project No.: GE2834

Lab Sample No.: 8752B

Client Job Site: Hallman  
200 East Avenue, Rochester, New York

Sample Type: TCLP Extract

Client Job No.: 0577S-95

Date Sampled: 6/13/95

Field Location: TB-01

Date Received: 6/13/95

Field ID No.: Hall-01

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Cadmium	6/21/95	EPA 6010	<0.01	1.0
Chromium	6/21/95	EPA 6010	<0.05	5.0
Lead	6/21/95	EPA 6010	<0.5	5.0

ELAP ID No.: 10709

Comments:

Approved By: 

Laboratory Director

**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**

<b>Client:</b>	<b>Day Environmental</b>	<b>Lab Project No:</b>	GE2834
		<b>Lab Sample No:</b>	8753A/B
<b>Client Job Site:</b>	Hallman 200 East Ave., Rochester	<b>Sample Type:</b>	Soil
<b>Client Job No:</b>	0577S-95	<b>Date Sampled:</b>	6/13/95
<b>Field Location:</b>	TB-05 (4-6', 8-9'10")	<b>Date Received:</b>	06/13/95
<b>Field ID No:</b>	Hall-02	<b>Date Analyzed:</b>	06/15/95

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND < 268	Benzene	ND < 268
Bromomethane	ND < 268	Chlorobenzene	ND < 268
Bromoform	ND < 268	Ethylbenzene	ND < 268
Carbon tetrachloride	ND < 268	Toluene	ND < 268
Chloroethane	ND < 268	m,p - Xylene	371
Chloromethane	ND < 268	o - Xylene	235 J
2-Chloroethyl vinyl ether	ND < 268	Styrene	ND < 268
Chloroform	ND < 268	1,3-Dichlorobenzene	222 J
Dibromochloromethane	ND < 268	1,4-Dichlorobenzene	379
1,1-Dichloroethane	ND < 268	1,2-Dichlorobenzene	894
1,2-Dichloroethane	ND < 268		
1,1-Dichloroethene	ND < 268		
trans-1,2-Dichloroethene	ND < 268	<u>Ketones &amp; Misc.</u>	
1,2-Dichloropropane	ND < 268	Acetone	ND < 535
cis-1,3-Dichloropropene	ND < 268	Vinyl acetate	ND < 535
trans-1,3-Dichloropropene	ND < 268	2-Butanone	ND < 535
Methylene chloride	ND < 268	4-Methyl-2-pentanone	ND < 535
1,1,2,2-Tetrachloroethane	ND < 268	2-Hexanone	ND < 535
Tetrachloroethene	ND < 268	Carbon disulfide	ND < 535
1,1,1-Trichloroethane	ND < 268		
1,1,2-Trichloroethane	ND < 268		
Trichloroethene	ND < 268		
Vinyl Chloride	ND < 268		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration

Approved By   
Laboratory Director

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


Client: Day Environmental Lab Project No.: GE2834  
Lab Sample No.: 8753A/B  
Client Job Site: Hallman  
200 East Ave., Rochester New York Sample Type: Soil  
Client Job No.: 0577S-95 Date Sampled: 06/13/95  
Field Location: TB-05 (4-6', 8-9'10") Date Received: 06/13/95  
Field ID No.: Hall-02 Date Analyzed: 06/15/95

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 268
Isopropylbenzene	ND < 268
n-Propylbenzene	342
1,3,5-Trimethylbenzene	1733
tert-Butylbenzene	ND < 268
1,2,4-Trimethylbenzene	6095
sec-Butylbenzene	466
p-Isopropyltoluene	ND < 268
n-Butylbenzene	1535
Naphthalene	ND < 268

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

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

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834
		<b>Lab Sample No.:</b>	8753A/B
<b>Client Job Site:</b>	Hallman	<b>Sample Type:</b>	Composite Soil
	200 East Ave., Rochester, New York		
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	06/13/95
		<b>Date Received:</b>	06/13/95
<b>Field Location:</b>	TB-05 (4'-6' & 8'-9'10")	<b>Date Analyzed:</b>	06/14/95
<b>Field ID No:</b>	Hall-02		

Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
PCB 1016	ND	0.56
PCB 1221	ND	0.56
PCB 1232	ND	0.56
PCB 1242	ND	0.56
PCB 1248	ND	0.56
PCB 1254	ND	0.56
PCB 1260	ND	0.56

Analytical Method: EPA 8080

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**

Lab Project No.: GE2834

Lab Sample No.: 8753C

Client Job Site: Hallman  
200 East Ave., Rochester New York

Sample Type: Soil

Client Job No.: 0577S-95

Date Sampled: 06/13/95

Field Location: TB-05 (6'-8')

Date Received: 06/13/95

Field ID No.: Hall-02

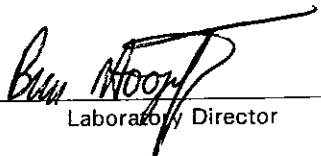
Date Analyzed: 06/15/95

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND < 391
Acenaphthene	ND < 391
Fluorene	ND < 391
Fluoranthene	ND < 391
Anthracene	ND < 391
Phenanthrene	ND < 391
Benzo (a) anthracene	ND < 391
Chrysene	ND < 391
Pyrene	ND < 391
Benzo (b) fluoranthene	ND < 391
Benzo (k) fluoranthene	ND < 391
Benzo (g,h,i) perylene	ND < 391
Benzo (a) pyrene	ND < 391
Dibenz (a,h) anthracene	ND < 391
Indeno (1,2,3-cd) pyrene	ND < 391

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

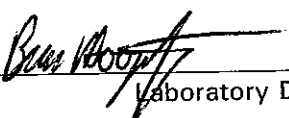
**Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix**

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834
		<b>Lab Sample No.:</b>	8753A/B
<b>Client Job Site:</b>	Hallman	<b>Sample Type:</b>	Soil
	200 East Ave., Rochester New York		
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	6/13/95
		<b>Date Received:</b>	6/13/95
<b>Field Location:</b>	TB-05 (4-6",8-9'10")	<b>Date Analyzed:</b>	6/19/95
<b>Field ID No:</b>	Hall-02		

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Heavy Weight PHC as Lube Oil	2,620,327	279,893

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

Client: Day Environmental

Lab Project No.: GE2834

Lab Sample No.: 8753D

Client Job Site: Hallman  
200 East Avenue, Rochester, New York

Sample Type: TCLP Extract

Client Job No.: 0577S-95

Date Sampled: 6/13/95

Field Location: TB-05

Date Received: 6/13/95

Field ID No.: Hall-2

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Cadmium	6/21/95	EPA 6010	<0.01	1.0
Chromium	6/21/95	EPA 6010	<0.05	5.0
Lead	6/21/95	EPA 6010	<0.5	5.0

ELAP ID No.: 10709

Comments:

Approved By: 

Laboratory Director

## Chain-of Custody

Client: DAY ENVIRONMENTAL  
Address: 244 BRIGHTON HENRIETTA TOWNLINE ROAD  
ROCHESTER, NEW YORK 14623  
Phone No: (716) 292-1090  
FAX No: (716) 292-0425

Lab Project No:  
Client Job No:  
Client Job Site:  
Sampled By:


662834  
05775-95  
Hallman  
200 East Avenue, Rochester, NY  
Joseph. Brondillo

Lab Sample Number	Field ID Number	Field Location	Date Sampled	Time Sampled	Sample Type	Preservation	Analyses Requested
8752	HALL-01	TB-01 (2 jars)	6-13-95	10:50am	Grab	ice	VOC's 8260, B/N (STARS) 8260,
8753	* HALL-02	TB-05 (4 jars)	6-13-95	3:30pm	Grab	ice	TPH 310.13, PCB's 8080, TUP Pb, Cd
							(marked)
							* There are 2 VOC jars from TB-05 from different depths. Lab to composite (X).
							these two jars prior to analyzing sample for VOCs, TPH and PCB's.

Relinquished By: Joseph Dore

Relinquished By: \_\_\_\_\_

Received By:  
Received By:  
Date/Time:

  
 Mark H. Williams  
 March 13, 1995 5:10 pm

6E 2834

Chain-of Custody

Client: DAI Environmental

Address: \_\_\_\_\_

Lab Project No: \_\_\_\_\_

Client Job No: \_\_\_\_\_

Client Job Site: \_\_\_\_\_

Phone No: \_\_\_\_\_

FAX No: \_\_\_\_\_

Sampled By: \_\_\_\_\_

Lab Sample Number	Field ID Number	Field Location	Date Sampled	Time Sampled	Sample Type	Preservation	Analyses Requested
8752A	HALL-01	TB-01	6/13/95	10:50 AM	SOIL	NO	EPA 8260, TPH 310.13, T-PCBS, EPA 8270, B/N-STRS
8752B	HALL-01	<del>TB-01</del> TB-01 (10'8")	↓	11:15 AM	↓	↓	TCLP Pb, Cr, Cd
8753A	HALL-02	TB-05 (4'-6')	6/13/95	2:50 PM	SOIL	NO	EPA 8260, TPH 310.13, T-PCBS
8753B	↓	↓ (8'-9'10")	↓	3:30 PM	↓	↓	↓ Composite 2-TDI
8753C	HALL-02	TB-05 (6'-8')	6/13/95	3:15 PM	SOIL	NO	EPA 8270 (B/N-STRS)
8753D	↓	↓	↓	↓	↓	↓	TCLP Pb, Cr, Cd

Relinquished By: \_\_\_\_\_

Relinquished By: \_\_\_\_\_

Received By: \_\_\_\_\_

Received By: \_\_\_\_\_

Date/Time: \_\_\_\_\_



**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: GE2834E

Lab Sample No: 9036

Client Job Site: Hallman's Chevrolet

Sample Type: Soil

Client Job No: 0577S-95

Date Sampled: 6/24/95

Field Location: STA 2 + 15 @4.2'

Date Received: 6/28/95

Field ID No: TP-01

Date Analyzed: 6/30/95

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND < 8.5	Benzene	ND < 8.5
Bromomethane	ND < 8.5	Chlorobenzene	ND < 8.5
Bromoform	ND < 8.5	Ethylbenzene	ND < 8.5
Carbon tetrachloride	ND < 8.5	Toluene	ND < 8.5
Chloroethane	ND < 8.5	m,p - Xylene	ND < 8.5
Chloromethane	ND < 8.5	o - Xylene	ND < 8.5
2-Chloroethyl vinyl ether	ND < 8.5	Styrene	ND < 8.5
Chloroform	ND < 8.5	1,3-Dichlorobenzene	ND < 8.5
Dibromochloromethane	ND < 8.5	1,4-Dichlorobenzene	ND < 8.5
1,1-Dichloroethane	ND < 8.5	1,2-Dichlorobenzene	ND < 8.5
1,2-Dichloroethane	ND < 8.5		
1,1-Dichloroethene	ND < 8.5		
trans-1,2-Dichloroethene	ND < 8.5	<u>Ketones &amp; Misc.</u>	
1,2-Dichloropropane	ND < 8.5	Acetone	ND < 21.3
cis-1,3-Dichloropropene	ND < 8.5	Vinyl acetate	ND < 21.3
trans-1,3-Dichloropropene	ND < 8.5	2-Butanone	ND < 21.3
Methylene chloride	ND < 8.5	4-Methyl-2-pentanone	ND < 21.3
1,1,2,2-Tetrachloroethane	ND < 8.5	2-Hexanone	ND < 21.3
Tetrachloroethene	ND < 8.5	Carbon disulfide	ND < 21.3
1,1,1-Trichloroethane	ND < 8.5		
1,1,2-Trichloroethane	ND < 8.5		
Trichloroethene	ND < 8.5		
Vinyl Chloride	ND < 8.5		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comment 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.: GE2834E  
Lab Sample No.: 9036  
Client Job Site: Hallman's Chevrolet  
Sample Type: Soil  
Client Job No.: 0577S-95  
Date Sampled: 06/24/95  
Field Location: STA 2 + 15 @ 4.2' Date Received: 06/28/95  
Field ID No.: TP-01 Date Analyzed: 06/30/95

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 8.5
Isopropylbenzene	250.7
n-Propylbenzene	401.4
1,3,5-Trimethylbenzene	14.4
tert-Butylbenzene	90.5
1,2,4-Trimethylbenzene	16.0
sec-Butylbenzene	347.0
p-Isopropyltoluene	ND < 8.5
n-Butylbenzene	304.8
Naphthalene	77.8

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: *Paula Acet*  
Laboratory Director

# PARADIGM

ENVIRONMENTAL  
SERVICES, INC.

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

## SEMI-VOLATILES LABORATORY REPORT FOR BASE/NEUTRAL FRACTION IN SOIL

Client: Day Environmental, Inc.

Lab Project No.: GE2834E

Client Job Site: Hallman's Chevrolet

Lab Sample No.: 9036

Client Job No.: 0577S-95

Sample Type: Soil

Field Location: STA 2+15 @ 4.2'

Sample Date: 6/24/95

Field ID No.: TP-01

Date Received: 6/28/95

Date Analyzed: 6/28/95

COMPOUND	RESULT (ug/Kg)	COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	ND < 1012	Fluorene	1714
Bis (2-chloroethyl) ether	ND < 405	Hexachlorocyclopentadiene	ND < 405
Bis (2-chloroisopropyl) ether	ND < 405	2-Nitroaniline	ND < 1012
1,3-Dichlorobenzene	ND < 405	3-Nitroaniline	ND < 1012
1,4-Dichlorobenzene	ND < 405	4-Nitroaniline	ND < 1012
1,2-Dichlorobenzene	ND < 405	4-Bromophenyl phenyl ether	ND < 405
Hexachloroethane	ND < 405	Di-n-butyl phthalate	ND < 405
N-Nitrosodimethylamine	ND < 405	Fluoranthene	ND < 405
N-Nitroso-di-n-propylamine	ND < 405	Hexachlorobenzene	ND < 405
Bis (2-chloroethoxy) methane	ND < 405	N-Nitrosodiphenylamine	ND < 405
4-Chloroaniline	ND < 405	Anthracene	4925
Hexachlorobutadiene	ND < 405	Phenanthrene	ND < 405
Isophorone	ND < 405	Benzidine	ND < 1012
2-Methylnaphthalene	6942	Benzo (a) anthracene	ND < 405
Naphthalene	ND < 405	Bis (2-ethylhexyl) phthalate	ND < 405
Nitrobenzene	ND < 405	Butylbenzylphthalate	ND < 405
1,2,4-Trichlorobenzene	ND < 405	Chrysene	ND < 405
2-Chloronaphthalene	ND < 405	3,3'-Dichlorobenzidine	ND < 405
Acenaphthene	850	Pyrene	ND < 405
Acenaphthylene	430	Benzo (b) fluoranthene	ND < 405
4-Chlorophenyl phenyl ether	ND < 405	Benzo (k) fluoranthene	ND < 405
Dibenzofuran	824	Benzo (g,h,i) perylene	ND < 405
Diethyl phthalate	ND < 405	Benzo (a) pyrene	ND < 405
Dimethyl phthalate	ND < 1012	Dibenz (a,h) anthracene	ND < 405
2,4-Dinitrotoluene	ND < 405	Di-n-octylphthalate	ND < 405
2,6-Dinitrotoluene	ND < 405	Indeno (1,2,3-cd) pyrene	ND < 405

ELAP ID No: 10958

Analytical Method: EPA 8270

Comments: ND denotes Not Detected

Approved By: [Signature]

Laboratory Director

**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**

Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2834E
Client Job Site:	Hallman's Chevrolet	Lab Sample No.:	9036
Client Job No.:	0577S-95	Sample Type:	Soil
Field Location:	STA 2 + 15 @4.2'	Date Sampled:	06/24/95
Field ID No:	TP-01	Date Received:	06/28/95
		Date Analyzed:	06/29/95

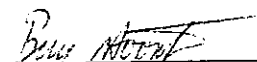
Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
PCB 1016	ND	0.63
PCB 1221	ND	0.63
PCB 1232	ND	0.63
PCB 1242	ND	0.63
PCB 1248	ND	0.63
PCB 1254	ND	0.63
PCB 1260	ND	0.63

Analytical Method: EPA 8080

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

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

Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2834E
Client Job Site:	Hallman's Chevrolet	Lab Sample No.:	9036
Client Job No.:	0577S-95	Sample Type:	Soil
Field Location:	STA 2 + 15 @4.2'	Date Sampled:	6/24/95
Field ID No:	TP-01	Date Received:	6/28/95
		Date Analyzed:	7/3/95

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Diesel Fuel	1,487,425	50,615

N.Y.D.O.H. Analytical Method: 310.13 modified 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 Organic Compound Laboratory Analysis Report For Soil/Sludge**

Client: Day Environmental, Inc.

Lab Project No: GE2834E

Lab Sample No: 9037

Client Job Site: Hallman's Chevrolet

Sample Type: Soil

Client Job No: 0577S-95

Date Sampled: 6/25/95

Field Location: STA 5 + 47

Date Received: 6/28/95

Field ID No: TP-03

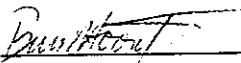
Date Analyzed: 6/30/95

VOLATILE HALOCARBONS		RESULTS (ug/Kg)		VOLATILE AROMATICS		RESULTS (ug/Kg)	
Bromodichloromethane		ND <	8.1	Benzene		ND <	8.1
Bromomethane		ND <	8.1	Chlorobenzene		ND <	8.1
Bromoform		ND <	8.1	Ethylbenzene		ND <	8.1
Carbon tetrachloride		ND <	8.1	Toluene		ND <	8.1
Chloroethane		ND <	8.1	m,p - Xylene		ND <	8.1
Chloromethane		ND <	8.1	o - Xylene		ND <	8.1
2-Chloroethyl vinyl ether		ND <	8.1	Styrene		ND <	8.1
Chloroform		ND <	8.1	1,3-Dichlorobenzene		ND <	8.1
Dibromochloromethane		ND <	8.1	1,4-Dichlorobenzene		ND <	8.1
1,1-Dichloroethane		ND <	8.1	1,2-Dichlorobenzene		ND <	8.1
1,2-Dichloroethane		ND <	8.1				
1,1-Dichloroethene		ND <	8.1				
trans-1,2-Dichloroethene		ND <	8.1	<u>Ketones &amp; Misc.</u>			
1,2-Dichloropropane		ND <	8.1	Acetone		ND <	20.3
cis-1,3-Dichloropropene		ND <	8.1	Vinyl acetate		ND <	20.3
trans-1,3-Dichloropropene		ND <	8.1	2-Butanone		ND <	20.3
Methylene chloride		ND <	8.1	4-Methyl-2-pentanone		ND <	20.3
1,1,2,2-Tetrachloroethane		ND <	8.1	2-Hexanone		ND <	20.3
Tetrachloroethene		ND <	8.1	Carbon disulfide		ND <	20.3
1,1,1-Trichloroethane		ND <	8.1				
1,1,2-Trichloroethane		ND <	8.1				
Trichloroethene		ND <	8.1				
Vinyl Chloride		ND <	8.1				

Analytical Method: EPA 8260

ELAP ID No: 10958

Comment 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.:	GE2834E
		Lab Sample No.:	9037
Client Job Site:	Hallman's Chevrolet	Sample Type:	Soil
Client Job No.:	0577S-95	Date Sampled:	06/25/95
Field Location:	STA 5 + 47	Date Received:	06/28/95
Field ID No.:	TP-03	Date Analyzed:	06/30/95

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 8.1
Isopropylbenzene	ND < 8.1
n-Propylbenzene	ND < 8.1
1,3,5-Trimethylbenzene	ND < 8.1
tert-Butylbenzene	ND < 8.1
1,2,4-Trimethylbenzene	ND < 8.1
sec-Butylbenzene	51.7
p-Isopropyltoluene	19.5
n-Butylbenzene	39.1
Naphthalene	42.7

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

Client: Day Environmental, Inc.

Lab Project Number: GE2834E

Client Job Site: Hallman's Chevrolet

Type Of Sample: Soil

Date Sampled: 6/24/95-6/25/95

Client Job No.: 0577S-95

Date Received: 6/28/95

Sampled By: R.Kampff/J.Biondolillo

Laboratory Sample No.: 9038

Field Location: TP-02 Sta. 3 + 47, TP-04 Sta. 5 + 74, TP-05 Sta. 6 + 28

Field ID No.: TP-02, TP-04, TP-05


Parameter	Method	Date Analyzed	Result
pH	SW846 9045	7/5/95	7.59

Parameter	Method	Date Analyzed	Result (mg/kg)
Lead	SW846 7420	7/5/95	2490
Cadmium	SW846 7130	6/30/95	1.49
Chromium	SW846 7190	6/29/95	20.9
Barium	SW846 7380	6/29/95	174
Silver	SW846 7520	6/30/95	< 1.45
Selenium	SW846 7740	6/30/95	1.24
Arsenic	SW846 7060	7/5/95	16.5
Mercury	SW846 7471	7/6/95	0.684

ELAP ID No.: 10958

Digestion Method: SW846 3050

Comments:

Laboratory Results Approved By: 

# PARADIGM

ENVIRONMENTAL  
SERVICES, INC.

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

## SEMI-VOLATILES LABORATORY REPORT FOR BASE/NEUTRAL FRACTION IN SOIL

Client: Day Environmental, Inc.

Lab Project No.: GE2834E

Client Job Site: Hallman's Chevrolet

Lab Sample No.: 9038

Client Job No.: 0577S-95

Sample Type: Composite Soil

Field Location: TP-02 Sta. 3 + 47, TP-04 Sta. 5 + 74  
TP-05 Sta. 6 + 28

Sample Date: 6/24/95 - 6/25/95

Date Received: 6/28/95

Date Analyzed: 6/28/95

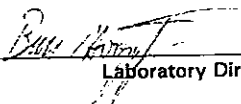
Field ID No.: TP-02, TP-04, TP-05

COMPOUND	RESULT (ug/Kg)	COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	ND < 1196	Fluorene	ND < 478
Bis (2-chloroethyl) ether	ND < 478	Hexachlorocyclopentadiene	ND < 478
Bis (2-chloroisopropyl) ether	ND < 478	2-Nitroaniline	ND < 1196
1,3-Dichlorobenzene	ND < 478	3-Nitroaniline	ND < 1196
1,4-Dichlorobenzene	ND < 478	4-Nitroaniline	ND < 1196
1,2-Dichlorobenzene	ND < 478	4-Bromophenyl phenyl ether	ND < 478
Hexachloroethane	ND < 478	Di-n-butyl phthalate	ND < 478
N-Nitrosodimethylamine	ND < 478	Fluoranthene	513
N-Nitroso-di-n-propylamine	ND < 478	Hexachlorobenzene	ND < 478
Bis (2-chloroethoxy) methane	ND < 478	N-Nitrosodiphenylamine	ND < 478
4-Chloroaniline	ND < 478	Anthracene	ND < 478
Hexachlorobutadiene	ND < 478	Phenanthrene	ND < 478
Isophorone	ND < 478	Benzidine	ND < 1196
2-Methylnaphthalene	ND < 478	Benzo (a) anthracene	ND < 478
Naphthalene	ND < 478	Bis (2-ethylhexyl) phthalate	ND < 478
Nitrobenzene	ND < 478	Butylbenzylphthalate	ND < 478
1,2,4-Trichlorobenzene	ND < 478	Chrysene	460 J
2-Chloronaphthalene	ND < 478	3,3'-Dichlorobenzidine	ND < 478
Acenaphthene	ND < 478	Pyrene	442 J
Acenaphthylene	ND < 478	Benzo (b) fluoranthene	193 J
4-Chlorophenyl phenyl ether	ND < 478	Benzo (k) fluoranthene	216 J
Dibenzofuran	ND < 478	Benzo (g,h,i) perylene	266 J
Diethyl phthalate	ND < 478	Benzo (a) pyrene	291 J
Dimethyl phthalate	ND < 1196	Dibenz (a,h) anthracene	ND < 478
2,4-Dinitrotoluene	ND < 478	Di-n-octylphthalate	ND < 478
2,6-Dinitrotoluene	ND < 478	Indeno (1,2,3-cd) pyrene	250 J

ELAP ID No: 10958

Analytical Method: EPA 8270

Comments: ND denotes Not Detected  
J denotes an estimated concentration

Approved By:   
Laboratory Director



# PARADIGM ENVIRONMENTAL SERVICES, INC.

## Chain-of Custody

Client: Day Environmental, Inc. Lab Project No.: GE 2834E  
 Address: 2144 Brighton Henriette T.L. Rd. Client Job No.: 05775-95  
Rochester, New York Client Job Site: Hallman's Chem.  
 Phone No.: 292-1090 Sampled By: R. Kampff / J. Biondoli 110  
 FAX No.: 292-0425

Lab Sample Number	Field ID Number	Field Location	Date Sampled	Time Sampled	Sample Type	Preservation	Analyses Requested
TP-01	9036	STA 2+15 @ 4.2'	6/24/95	1100	50:1	ICE	UOCs 8260 + Tank List
							5-UOCs 8270 (base/neutral)
							PCBS 8080, TPH 310.13
TP-03	9037	STA 5+47	6/25/95	900	50:1	ICE	UOCs 8260 + Tank List
Composite TP-02	9038	TP-02 STA 3+47 TP-04 STA 5+74 TP-05 STA 6+28	6/24/95		50:1	ICE	PH, 5-UOCs 8270 (Base/Neutrals), Total RCRA metals -
							Note: Make one composite sample from TP-02 (1 jar), TP-04 (2 jars) & TP-05 (2 jars)

Relinquished By: Joseph D. [Signature]  
 Relinquished By: \_\_\_\_\_

Received By: [Signature]  
 Received By: \_\_\_\_\_  
 Date/Time: June 28, 1995 9:26



**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**

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834B
		<b>Lab Sample No.:</b>	8766
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Sediment
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	06/14/95
<b>Field Location:</b>	Lifts 4,9,15	<b>Date Received:</b>	06/14/95
<b>Field ID No:</b>	LIFT-01	<b>Date Analyzed:</b>	06/19/95

Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
PCB 1016	ND	0.67
PCB 1221	ND	0.67
PCB 1232	ND	0.67
PCB 1242	ND	0.67
PCB 1248	ND	0.67
PCB 1254	ND	0.67
PCB 1260	ND	0.67

Analytical Method: EPA 8080

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

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

<b>Client:</b>	<b>Day Environmental</b>	<b>Lab Project No.:</b>	GE2834B
		<b>Lab Sample No.:</b>	8767
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Sediment
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	06/14/95
		<b>Date Received:</b>	06/14/95
<b>Field Location:</b>	Southeast Sump	<b>Date Analyzed:</b>	06/19/95
<b>Field ID No:</b>	SUMP-01		

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

Analytical Method: EPA 8080

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

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

<b>Client:</b>	<b>Day Environmental</b>	<b>Lab Project No.:</b>	GE2834B
		<b>Lab Sample No.:</b>	8768
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Sediment
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	06/14/95
		<b>Date Received:</b>	06/14/95
<b>Field Location:</b>	Trench Drains	<b>Date Analyzed:</b>	06/19/95
<b>Field ID No:</b>	TRENCH-01		

Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
PCB 1016	ND	0.49
PCB 1221	ND	0.49
PCB 1232	ND	0.49
PCB 1242	ND	0.49
PCB 1248	ND	0.49
PCB 1254	ND	0.49
PCB 1260	ND	0.49

Analytical Method: EPA 8080

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

**Client:** Day Environmental

**Lab Project No.:** GE2834B

**Lab Sample No.:** 8766

**Client Job Site:** Hallman  
200 East Avenue, Rochester, New York

**Sample Type:** TCLP Extract

**Client Job No.:** 0577S-95

**Date Sampled:** 6/14/95

**Field Location:** Lifts 4,9,15

**Date Received:** 6/14/95

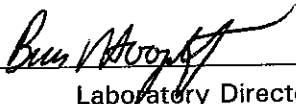
**Field ID No.:** Lift-01

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Cadmium	6/21/95	EPA 6010	<0.01	1.0
Chromium	6/21/95	EPA 6010	<0.05	5.0
Lead	6/21/95	EPA 6010	<0.5	5.0

ELAP ID No.: 10709

Comments:

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

  
Laboratory Director

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

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

**Client:** Day Environmental **Lab Project No.:** GE2834B  
**Lab Sample No.:** 8767  
**Client Job Site:** Hallman  
200 East Avenue, Rochester, New York **Sample Type:** TCLP Extract  
**Client Job No.:** 0577S-95 **Date Sampled:** 6/14/95  
**Field Location:** Southeast Sump **Date Received:** 6/14/95  
**Field ID No.:** Sump-01

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Cadmium	6/21/95	EPA 6010	<0.01	1.0
Chromium	6/21/95	EPA 6010	<0.05	5.0
Lead	6/21/95	EPA 6010	<0.5	5.0

ELAP ID No.: 10709

Comments:

Approved By: 

Laboratory Director

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

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

**Client:** Day Environmental **Lab Project No.:** GE2834B  
**Lab Sample No.:** 8768  
**Client Job Site:** Hallman  
200 East Avenue, Rochester, New York **Sample Type:** TCLP Extract  
**Client Job No.:** 0577S-95 **Date Sampled:** 6/14/95  
**Field Location:** Trench Drains **Date Received:** 6/14/95  
**Field ID No.:** Trench-01

Parameter	Date Analyzed	Analytical Method	Result (mg/L)	Regulatory Limit (mg/L)
TCLP Metal Series				
Cadmium	6/21/95	EPA 6010	<0.01	1.0
Chromium	6/21/95	EPA 6010	<0.05	5.0
Lead	6/21/95	EPA 6010	<0.5	5.0

ELAP ID No.: 10709

Comments:

Approved By: Bruce Hoag  
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**

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	<b>GE2834B</b>
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Lab Sample No.:</b>	<b>8766</b>
<b>Client Job No.:</b>	0577S-95	<b>Sample Type:</b>	<b>Sediment</b>
<b>Field Location:</b>	Lifts 4,9,15	<b>Date Sampled:</b>	<b>6/14/95</b>
<b>Field ID No:</b>	LIFT-01	<b>Date Received:</b>	<b>6/14/95</b>
		<b>Date Analyzed:</b>	<b>6/19/95</b>

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Heavy Weight PHC as Lube Oil	65,844,286	3,676,471

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

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

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834B
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Lab Sample No.:</b>	8767
<b>Client Job No.:</b>	0577S-95	<b>Sample Type:</b>	Sediment
<b>Field Location:</b>	Southeast Sump	<b>Date Sampled:</b>	6/14/95
<b>Field ID No:</b>	SUMP-01	<b>Date Received:</b>	6/14/95
		<b>Date Analyzed:</b>	6/19/95

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Heavy Weight PHC as Lube Oil	31,935,969	771,605
Light Weight PHC as gasoline	9,412,574	771,605

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

Comments: ND denotes Not Detected.

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

Laboratory Director

File ID: G2834BP5.XLS

**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**

<b>Client:</b>	<b><u>Day Environmental</u></b>	<b>Lab Project No.:</b>	GE2834B
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Lab Sample No.:</b>	8768
<b>Client Job No.:</b>	0577S-95	<b>Sample Type:</b>	Sediment
<b>Field Location:</b>	Trench Drains	<b>Date Sampled:</b>	6/14/95
<b>Field ID No:</b>	TRENCH-01	<b>Date Received:</b>	6/14/95
		<b>Date Analyzed:</b>	6/19/95

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Heavy Weight PHC as Lube Oil	4,030,549	248,756

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

**Comments:** ND denotes Not Detected.

**Approved By:**

  
Laboratory Director

# PARADIGM ENVIRONMENTAL SERVICES, INC.

## Chain-of Custody

Client: DAY ENVIRONMENTAL  
 Address: 2444 BRIGHTON HENRIETTA TOWNLINE ROAD  
ROCHESTER, NEW YORK 14623  
 Phone No: (716) 292-1090  
 FAX No: (716) 292-0425

Lab Project No: 62 2834B  
 Client Job No: 0577S-95  
 Client Job Site: 200 EAST AVE  
ROCHESTER, N.Y.  
 Sampled By: S. MULLIN/J. DORETY

Lab Sample Number	Field ID Number	Field Location	Date Sampled	Time Sampled	Sample Type	Preservation	Analyses Requested
8768	TRENCH-01	TRENCH DRAINS	6/14/95	15:33	SEDIMENT	ICE	8260, 8080 PCBs, TPH 310.13 TCLP Cd, Cr, Pb (2 JARS)
8767	SUMP-01	SOUTHEAST SUMP		15:47			8260, 8080 PCBs, TPH 310.13 TCLP Cd, Cr, Pb (2 JARS)
8766	LIFT-01	LIFTS 4, 9, 15		16:17			8260, 8080 PCBs, TPH 310.13 TCLP Cd, Cr, Pb (2 JARS)

Relinquished By:  
 Relinquished By:

Received By:  
 Received By:  
 Date/Time:

[Signature]  
[Signature]  
June 14, 1995 1705



**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**  
Client Job Site: 200 East Ave.  
Rochester, New York  
Client Job No: 0577S-95  
Field Location: Lifts 4,9,15  
Field ID No: Lift-01

Lab Project No: GE2834B  
Lab Sample No: 8766  
Sample Type: Sediments  
Date Sampled: 6/14/95  
Date Received: 06/14/95  
Date Analyzed: 06/16/95

VOLATILE HALOCARBONS		RESULTS (ug/Kg)		VOLATILE AROMATICS		RESULTS (ug/Kg)	
Bromodichloromethane	ND < 500	Benzene	ND < 500				
Bromomethane	ND < 500	Chlorobenzene	ND < 500				
Bromoform	ND < 500	Ethylbenzene	450 J				
Carbon tetrachloride	ND < 500	Toluene	369 J				
Chloroethane	ND < 500	m,p - Xylene	1662				
Chloromethane	ND < 500	o - Xylene	801				
2-Chloroethyl vinyl ether	ND < 500	Styrene	ND < 500				
Chloroform	ND < 500	1,3-Dichlorobenzene	ND < 500				
Dibromochloromethane	ND < 500	1,4-Dichlorobenzene	ND < 500				
1,1-Dichloroethane	ND < 500	1,2-Dichlorobenzene	ND < 500				
1,2-Dichloroethane	ND < 500						
1,1-Dichloroethene	ND < 500						
trans-1,2-Dichloroethene	ND < 500						
1,2-Dichloropropane	ND < 500						
cis-1,3-Dichloropropene	ND < 500						
trans-1,3-Dichloropropene	ND < 500						
Methylene chloride	ND < 500						
1,1,2,2-Tetrachloroethane	ND < 500						
Tetrachloroethene	ND < 500						
1,1,1-Trichloroethane	ND < 500						
1,1,2-Trichloroethane	ND < 500						
Trichloroethene	ND < 500						
Vinyl Chloride	ND < 500						

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration

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 Lab Project No.: GE2834B  
Lab Sample No.: 8766  
Client Job Site: 200 East Ave.  
Rochester, New York Sample Type: Sediments  
Client Job No.: 0577S-95  
Date Sampled: 06/14/95  
Field Location: Lifts 4,9,15 Date Received: 06/14/95  
Field ID No.: LIFT-01 Date Analyzed: 06/16/95

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 500
Isopropylbenzene	ND < 500
n-Propylbenzene	316 J
1,3,5-Trimethylbenzene	1055
tert-Butylbenzene	ND < 500
1,2,4-Trimethylbenzene	3421
sec-Butylbenzene	ND < 500
p-Isopropyltoluene	ND < 500
n-Butylbenzene	527
Naphthalene	965

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration

Approved By: 

Laboratory Director

**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  
Client Job Site: 200 East Ave.  
Rochester, New York  
Client Job No: 0577S-95  
Field Location: Southeast Sump  
Field ID No: SUMP-01

Lab Project No: GE2834B  
Lab Sample No: 8767  
Sample Type: Sediments  
Date Sampled: 6/14/95  
Date Received: 06/14/95  
Date Analyzed: 06/15/95

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND < 2273	Benzene	ND < 2273
Bromomethane	ND < 2273	Chlorobenzene	ND < 2273
Bromoform	ND < 2273	Ethylbenzene	55789
Carbon tetrachloride	ND < 2273	Toluene	30660
Chloroethane	ND < 2273	m,p - Xylene	214701
Chloromethane	ND < 2273	o - Xylene	73587
2-Chloroethyl vinyl ether	ND < 2273	Styrene	ND < 2273
Chloroform	ND < 2273	1,3-Dichlorobenzene	1539 J
Dibromochloromethane	ND < 2273	1,4-Dichlorobenzene	5048
1,1-Dichloroethane	6751	1,2-Dichlorobenzene	10983
1,2-Dichloroethane	ND < 2273		
1,1-Dichloroethene	ND < 2273		
trans-1,2-Dichloroethene	ND < 2273	<u>Ketones &amp; Misc.</u>	
1,2-Dichloropropane	ND < 2273	Acetone	ND < 4545
cis-1,3-Dichloropropene	ND < 2273	Vinyl acetate	ND < 4545
trans-1,3-Dichloropropene	ND < 2273	2-Butanone	ND < 4545
Methylene chloride	ND < 2273	4-Methyl-2-pentanone	ND < 4545
1,1,2,2-Tetrachloroethane	ND < 2273	2-Hexanone	ND < 4545
Tetrachloroethene	48242	Carbon disulfide	ND < 4545
1,1,1-Trichloroethane	16260		
1,1,2-Trichloroethane	ND < 2273		
Trichloroethene	ND < 2273		
Vinyl Chloride	ND < 2273		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration.

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:	<u>Day Environmental</u>	Lab Project No.:	GE2834B
		Lab Sample No.:	8767
Client Job Site:	200 East Ave. Rochester, New York	Sample Type:	Sediment
Client Job No.:	0577S-95	Date Sampled:	06/14/95
Field Location:	Southeast Sump	Date Received:	06/14/95
Field ID No.:	SUMP-01	Date Analyzed:	06/15/95

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 2273
Isopropylbenzene	5949
n-Propylbenzene	24745
1,3,5-Trimethylbenzene	77157
tert-Butylbenzene	ND < 2273
1,2,4-Trimethylbenzene	202436
sec-Butylbenzene	5062
p-Isopropyltoluene	ND < 2273
n-Butylbenzene	27079
Naphthalene	33817

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 Organic Compound Laboratory Analysis Report For Soil/Sludge**

**Client:** Day Environmental  
**Client Job Site:** 200 East Ave.  
 Rochester, New York  
**Client Job No:** 0577S-95  
**Field Location:** Trench Drains  
**Field ID No:** TRENCH -01

**Lab Project No:** GE2834B  
**Lab Sample No:** 8768  
**Sample Type:** Sediments  
**Date Sampled:** 6/14/95  
**Date Received:** 06/14/95  
**Date Analyzed:** 06/15/95

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/Kg)		RESULTS (ug/Kg)
Bromodichloromethane	ND < 230	Benzene	ND < 230
Bromomethane	ND < 230	Chlorobenzene	ND < 230
Bromoform	ND < 230	Ethylbenzene	451
Carbon tetrachloride	ND < 230	Toluene	286
Chloroethane	ND < 230	m,p - Xylene	1707
Chloromethane	ND < 230	o - Xylene	627
2-Chloroethyl vinyl ether	ND < 230	Styrene	ND < 230
Chloroform	ND < 230	1,3-Dichlorobenzene	ND < 230
Dibromochloromethane	ND < 230	1,4-Dichlorobenzene	ND < 230
1,1-Dichloroethane	ND < 230	1,2-Dichlorobenzene	ND < 230
1,2-Dichloroethane	ND < 230		
1,1-Dichloroethene	ND < 230		
trans-1,2-Dichloroethene	ND < 230	<u>Ketones &amp; Misc.</u>	
1,2-Dichloropropane	ND < 230	Acetone	ND < 460
cis-1,3-Dichloropropene	ND < 230	Vinyl acetate	ND < 460
trans-1,3-Dichloropropene	ND < 230	2-Butanone	ND < 460
Methylene chloride	ND < 230	4-Methyl-2-pentanone	ND < 460
1,1,2,2-Tetrachloroethane	ND < 230	2-Hexanone	ND < 460
Tetrachloroethene	ND < 230	Carbon disulfide	ND < 460
1,1,1-Trichloroethane	ND < 230		
1,1,2-Trichloroethane	ND < 230		
Trichloroethene	ND < 230		
Vinyl Chloride	ND < 230		

Analytical Method: EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By Bruce McQuinn  
 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:	<u>Day Environmental</u>	Lab Project No.:	GE2834B
		Lab Sample No.:	8768
Client Job Site:	200 East Ave.	Sample Type:	Sediment
	Rochester, New York		
Client Job No.:	0577S-95	Date Sampled:	06/14/95
		Date Received:	06/14/95
Field Location:	Trench Drains	Date Analyzed:	06/15/95
Field ID No.:	TRENCH-01		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND < 230
Isopropylbenzene	ND < 230
n-Propylbenzene	ND < 230
1,3,5-Trimethylbenzene	480
tert-Butylbenzene	ND < 230
1,2,4-Trimethylbenzene	1442
sec-Butylbenzene	ND < 230
p-Isopropyltoluene	ND < 230
n-Butylbenzene	ND < 230
Naphthalene	312

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

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

<b>Client:</b>	<b>Day Environmental</b>	<b>Lab Project No.:</b>	GE2834C
<b>Client Job Site:</b>	200 East Ave. Rochester, New York	<b>Lab Sample No.:</b>	8826
<b>Client Job No.:</b>	0577S-95	<b>Sample Type:</b>	2:1 Soil Composite
<b>Field Location:</b>	Compressor Room	<b>Date Sampled:</b>	06/19/95
<b>Field ID No:</b>	CR-01	<b>Date Received:</b>	06/20/95
		<b>Date Analyzed:</b>	06/23/95

Polychlorinated Biphenyl	Result (ug/g)	Reporting Limit (ug/g)
PCB 1016	ND	0.71
PCB 1221	ND	0.71
PCB 1232	ND	0.71
PCB 1242	ND	0.71
PCB 1248	ND	0.71
PCB 1254	ND	0.71
PCB 1260	ND	0.71

Analytical Method: EPA 8080

ELAP ID No.: 10958

**Comments:**

ND denotes Not Detected.

Approved By: 

Laboratory Director

## Chain-of Custody

Lab Project No: 652834C  
Client Job No: 0575-95  
Client Job Site: 200 EAST AVE  
ROCH, NY  
Sampled By: Steve Moll, D

Phone No: (716) 292-1090  
FAX No: (716) 292-0423

[illegible]

Relinquished By:

Received By: \_\_\_\_\_  
Received By: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

*[Signature]*  
6/20/93 4:37 PM



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

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

**Laboratory Analysis For Petroleum Hydrocarbons in Water**

<b>Client:</b>	<b><u>Day Environmental, Inc.</u></b>	<b>Lab Project No.:</b>	GE2947
		<b>Lab Sample No.:</b>	9238
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	7/24/95
<b>Field Location:</b>	MW-1	<b>Date Received:</b>	7/24/95
<b>Field ID No:</b>	MW-1	<b>Date Analyzed:</b>	7/24/95

Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Petroleum Hydrocarbons	ND	250

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

ELAP ID No.: 10958

**Comments:** ND denotes Not Detected.

**Approved By:**   
Laboratory Director



**SERVICES, INC.**

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

## Volatile Laboratory Analysis Report For Non-Potable Water

Client: Day Environmental  
 Client Job Site: 200 East Avenue  
 Rochester, New York  
 Client Job No.: 0577S-95

**Lab Project No.:** GE2947  
**Lab Sample No.:** 9238

**Sample Type:** Water

**Field Location:** MW-1

**Date Sampled:** 07/24/95

Date Received: 07/24/95

Field ID No.: MW-1

**Date Analyzed:** 07/24/95

VOLATILE HALOCARBONS		VOLATILE AROMATICS	
	RESULTS (ug/L)		RESULTS (ug/L)
Bromodichloromethane	ND < 2.0	Benzene	ND < 2.0
Bromomethane	ND < 2.0	Chlorobenzene	ND < 2.0
Bromoform	ND < 2.0	Ethylbenzene	ND < 2.0
Carbon tetrachloride	ND < 2.0	Toluene	ND < 2.0
Chloroethane	ND < 2.0	m,p - Xylene	ND < 2.0
Chloromethane	ND < 2.0	o - Xylene	ND < 2.0
2-Chloroethyl vinyl ether	ND < 2.0	Styrene	ND < 2.0
Chloroform	ND < 2.0		
Dibromochloromethane	ND < 2.0		
1,1-Dichloroethane	ND < 2.0	Carbon disulfide	ND < 2.0
1,2-Dichloroethane	ND < 2.0		
1,1-Dichloroethene	ND < 2.0		
trans-1,2-Dichloroethene	ND < 2.0		
1,2-Dichloropropane	ND < 2.0		
cis-1,3-Dichloropropene	ND < 2.0	<u>Ketones</u>	
trans-1,3-Dichloropropene	ND < 2.0	Acetone	ND < 5.0
1,2-Dichloropropane	ND < 2.0	Vinyl acetate	ND < 5.0
Methylene chloride	ND < 2.0	2-Butanone	ND < 5.0
1,1,2,2-Tetrachloroethane	ND < 2.0	4-Methyl-2-pentanone	ND < 5.0
Tetrachloroethene	ND < 2.0	2-Hexanone	ND < 5.0
1,1,1-Trichloroethane	ND < 2.0		
1,1,2-Trichloroethane	ND < 2.0		
Trichloroethene	ND < 2.0		
Vinyl Chloride	ND < 2.0		

Analytical Method: EPA 8260

ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By Brian M. [Signature]  
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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

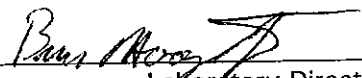
<b>Client:</b>	<b><u>Day Environmental, Inc.</u></b>	<b>Lab Project No.:</b>	<b>GE2947</b>
		<b>Lab Sample No.:</b>	<b>9238</b>
<b>Client Job Site:</b>	200 East Ave. Rochester, New York	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	07/24/95
<b>Field Location:</b>	MW-1	<b>Date Received:</b>	07/24/95
<b>Field ID No.:</b>	MW-1	<b>Date Analyzed:</b>	07/24/95

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	ND < 2.0
Naphthalene	ND < 2.0

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

**Laboratory Analysis For Petroleum Hydrocarbons in Water**

Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2947
Client Job Site:	200 East Ave. Rochester, NY	Lab Sample No.:	9239
Client Job No.:	0577S-95	Sample Type:	Water
Field Location:	MW-2	Date Sampled:	7/24/95
Field ID No:	MW-2	Date Received:	7/24/95
		Date Analyzed:	7/24/95

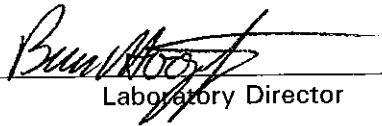
Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Heavy Weight PHC as Lube Oil	283	250

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

ELAP ID No.: 10958

Comments: ND denotes Not Detected.

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

  
Laboratory Director

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

## Volatile Laboratory Analysis Report For Non-Potable Water

Client: Day Environmental  
 Client Job Site: 200 East Avenue  
 Rochester, New York  
 Client Job No.: 0577S-95

Lab Project No.: GE2947  
Lab Sample No.: 9239

**Sample Type:** Water

**Field Location:** MW-2

**Date Sampled:** 07/24/95

**Date Received:** 07/24/95

**Date Analyzed:** 07/25/95

Field ID No.: MW-2

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND < 2.0	Benzene	ND < 2.0
Bromomethane	ND < 2.0	Chlorobenzene	ND < 2.0
Bromoform	ND < 2.0	Ethylbenzene	ND < 2.0
Carbon tetrachloride	ND < 2.0	Toluene	ND < 2.0
Chloroethane	ND < 2.0	m,p - Xylene	ND < 2.0
Chloromethane	ND < 2.0	o - Xylene	ND < 2.0
2-Chloroethyl vinyl ether	ND < 2.0	Styrene	ND < 2.0
Chloroform	ND < 2.0		
Dibromochloromethane	ND < 2.0		
1,1-Dichloroethane	5.0		
1,2-Dichloroethane	ND < 2.0	Carbon disulfide	ND < 2.0
1,1-Dichloroethene	ND < 2.0		
trans-1,2-Dichloroethene	ND < 2.0		
1,2-Dichloropropane	ND < 2.0		
cis-1,3-Dichloropropene	ND < 2.0	<u>Ketones</u>	
trans-1,3-Dichloropropene	ND < 2.0	Acetone	ND < 5.0
1,2-Dichloropropane	ND < 2.0	Vinyl acetate	ND < 5.0
Methylene chloride	ND < 2.0	2-Butanone	ND < 5.0
1,1,2,2-Tetrachloroethane	ND < 2.0	4-Methyl-2-pentanone	ND < 5.0
Tetrachloroethene	ND < 2.0	2-Hexanone	ND < 5.0
1,1,1-Trichloroethane	ND < 2.0		
1,1,2-Trichloroethane	ND < 2.0		
Trichloroethene	ND < 2.0		
Vinyl Chloride	ND < 2.0		

Analytical Method: EPA 8260

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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

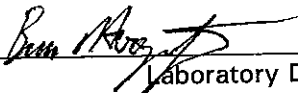
Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2947
		Lab Sample No.:	9239
Client Job Site:	200 East Ave.	Sample Type:	Water
	Rochester, New York		
Client Job No.:	0577S-95	Date Sampled:	07/24/95
		Date Received:	07/24/95
Field Location:	MW-2	Date Analyzed:	07/25/95
Field ID No.:	MW-2		

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	ND < 2.0
Naphthalene	ND < 2.0

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

**Client:** **Day Environmental, Inc.**

**Lab Project No.:** GE2947

**Lab Sample No.:** 9239

**Client Job Site:** 200 East Avenue  
Rochester, New York

**Sample Type:** Water

**Client Job No.:** 0577S-95

**Date Sampled:** 7/24/95

**Field Location:** MW-2

**Date Received:** 7/24/95

**Field ID No.:** MW-2

Parameter	Date Analyzed	Analytical Method	Result
Ethylene Glycol	8/1/95	NYS APC-44	<0.5 mg/L

ELAP ID No.:10709

**Comments:**

**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 Water**

<b>Client:</b>	<b><u>Day Environmental, Inc.</u></b>	<b>Lab Project No.:</b>	<b>GE2947</b>
		<b>Lab Sample No.:</b>	<b>9240</b>
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	7/24/95
<b>Field Location:</b>	MW-3	<b>Date Received:</b>	7/24/95
<b>Field ID No:</b>	MW-3	<b>Date Analyzed:</b>	7/24/95

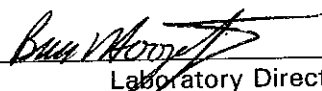
Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Petroleum Hydrocarbons	ND	250

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

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 Laboratory Analysis Report For Non-Potable Water

**Client:** Day Environmental  
**Client Job Site:** 200 East Avenue  
 Rochester, New York  
**Client Job No.:** 0577S-95

Lab Project No.: GE2947  
Lab Sample No.: 9240

**Sample Type:** Water

**Field Location:** MW-3

**Date Sampled:** 07/24/95

**Date Received:** 07/24/95

**Date Analyzed:** 07/25/95

Field ID No.: MW-3

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND < 2.0	Benzene	1.1 J
Bromomethane	ND < 2.0	Chlorobenzene	ND < 2.0
Bromoform	ND < 2.0	Ethylbenzene	1.1 J
Carbon tetrachloride	ND < 2.0	Toluene	ND < 2.0
Chloroethane	ND < 2.0	m,p - Xylene	2.0
Chloromethane	ND < 2.0	o - Xylene	ND < 2.0
2-Chloroethyl vinyl ether	ND < 2.0	Styrene	ND < 2.0
Chloroform	ND < 2.0		
Dibromochloromethane	ND < 2.0		
1,1-Dichloroethane	2.1		
1,2-Dichloroethane	ND < 2.0	Carbon disulfide	ND < 2.0
1,1-Dichloroethene	ND < 2.0		
trans-1,2-Dichloroethene	ND < 2.0		
1,2-Dichloropropane	ND < 2.0		
cis-1,3-Dichloropropene	ND < 2.0	<u>Ketones</u>	
trans-1,3-Dichloropropene	ND < 2.0	Acetone	ND < 5.0
1,2-Dichloropropane	ND < 2.0	Vinyl acetate	ND < 5.0
Methylene chloride	ND < 2.0	2-Butanone	ND < 5.0
1,1,2,2-Tetrachloroethane	ND < 2.0	4-Methyl-2-pentanone	ND < 5.0
Tetrachloroethene	ND < 2.0	2-Hexanone	ND < 5.0
1,1,1-Trichloroethane	ND < 2.0		
1,1,2-Trichloroethane	ND < 2.0		
Trichloroethene	ND < 2.0		
Vinyl Chloride	ND < 2.0		

Analytical Method: EPA 8260

ELAP ID No.: 10958

Comments: ND denotes Not Detected  
J denotes an estimated concentration

Approved By Tom Brog  
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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

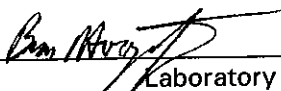
Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2947
Client Job Site:	200 East Ave.	Lab Sample No.:	9240
Client Job No.:	Rochester, New York	Sample Type:	Water
Field Location:	0577S-95	Date Sampled:	07/24/95
Field ID No.:	MW-3	Date Received:	07/24/95
	MW-3	Date Analyzed:	07/25/95

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	2.4
n-Propylbenzene	4.3
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	1.3 J
Naphthalene	ND < 2.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected  
J denotes an estimated concentration

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 Water**

<b>Client:</b>	<b><u>Day Environmental, Inc.</u></b>	<b>Lab Project No.:</b>	<b>GE2947</b>
		<b>Lab Sample No.:</b>	<b>9241</b>
<b>Client Job Site:</b>	200 East Ave. Rochester, NY	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	7/24/95
<b>Field Location:</b>	MW-4	<b>Date Received:</b>	7/24/95
<b>Field ID No:</b>	MW-4	<b>Date Analyzed:</b>	7/24/95

Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Petroleum Hydrocarbons	ND	250

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

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 Laboratory Analysis Report For Non-Potable Water

**Client:** Day Environmental  
**Client Job Site:** 200 East Avenue  
 Rochester, New York  
**Client Job No.:** 0577S-95

Lab Project No.: GE2947

**Lab Sample No.:** 9241

**Sample Type:** Water

**Field Location:** MW-4

**Date Sampled:** 07/24/95

**Date Received:** 07/24/95

**Date Analyzed:** 07/25/95

Field ID No.: MW-4

VOLATILE HALOCARBONS	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND < 2.0	Benzene	ND < 2.0
Bromomethane	ND < 2.0	Chlorobenzene	ND < 2.0
Bromoform	ND < 2.0	Ethylbenzene	ND < 2.0
Carbon tetrachloride	ND < 2.0	Toluene	ND < 2.0
Chloroethane	ND < 2.0	m,p - Xylene	ND < 2.0
Chloromethane	ND < 2.0	o - Xylene	ND < 2.0
2-Chloroethyl vinyl ether	ND < 2.0	Styrene	ND < 2.0
Chloroform	ND < 2.0		
Dibromochloromethane	ND < 2.0		
1,1-Dichloroethane	ND < 2.0		
1,2-Dichloroethane	ND < 2.0	Carbon disulfide	ND < 2.0
1,1-Dichloroethene	ND < 2.0		
trans-1,2-Dichloroethene	ND < 2.0		
1,2-Dichloropropane	ND < 2.0		
cis-1,3-Dichloropropene	ND < 2.0	<u>Ketones</u>	
trans-1,3-Dichloropropene	ND < 2.0	Acetone	ND < 5.0
1,2-Dichloropropane	ND < 2.0	Vinyl acetate	ND < 5.0
Methylene chloride	ND < 2.0	2-Butanone	ND < 5.0
1,1,2,2-Tetrachloroethane	ND < 2.0	4-Methyl-2-pentanone	ND < 5.0
Tetrachloroethene	ND < 2.0	2-Hexanone	ND < 5.0
1,1,1-Trichloroethane	ND < 2.0		
1,1,2-Trichloroethane	ND < 2.0		
Trichloroethene	ND < 2.0		
Vinyl Chloride	ND < 2.0		

Analytical Method: EPA 8260

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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

**Client:** Day Environmental, Inc.

**Lab Project No.:** GE2947

**Lab Sample No.:** 9241

**Client Job Site:** 200 East Ave.  
Rochester, New York

**Sample Type:** Water

**Client Job No.:** 0577S-95

**Date Sampled:** 07/24/95

**Date Received:** 07/24/95

**Field Location:** MW-4

**Date Analyzed:** 07/25/95

**Field ID No.:** MW-4

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	ND < 2.0
Naphthalene	ND < 2.0

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By:   
Laboratory Director

## Chain-of Custody

Lab Project No:  
Client Job No:  
Client Job Site:  
Sampled By:

632947

05775-95

THIRTY EIGHT

ROCHESTER, NY

STEVE MILLIN

**Sampled By:**

7/24/95 1:20 p.m.

Received By:

Received By:

Date/Time:

Relinquished By:

Relinquished By:

**PARADIGM  
ENVIRONMENTAL  
SERVICES, INC.**

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

## Volatile Laboratory Analysis Report For Non-Potable Water

Client: Day Environmental, Inc.  
Client Job Site: 200 East Ave.  
Rochester, New York  
Client Job No.: 0577S-95

Lab Project No.: GE2834D

**Lab Sample No.:** 8838

**Sample Type:** Water

**Field Location:** MW-RIZ-1

**Date Sampled:** 06/21/95

**Date Received:** 06/21/95

**Date Analyzed:** 06/26/95

Field ID No.: RIZ-01

VOLATILE HALOCARBONS		RESULTS (ug/L)	VOLATILE AROMATICS		RESULTS (ug/L)
Bromodichloromethane	ND < 2.0		Benzene	ND < 2.0	
Bromomethane	ND < 2.0		Chlorobenzene	ND < 2.0	
Bromoform	ND < 2.0		Ethylbenzene	ND < 2.0	
Carbon tetrachloride	ND < 2.0		Toluene	ND < 2.0	
Chloroethane	ND < 2.0		m,p - Xylene	ND < 2.0	
Chloromethane	ND < 2.0		o - Xylene	ND < 2.0	
2-Chloroethyl vinyl ether	ND < 2.0		Styrene	ND < 2.0	
Chloroform	ND < 2.0				
Dibromochloromethane	ND < 2.0				
1,1-Dichloroethane	ND < 2.0		Carbon disulfide	ND < 2.0	
1,2-Dichloroethane	ND < 2.0				
1,1-Dichloroethene	ND < 2.0				
trans-1,2-Dichloroethene	ND < 2.0				
1,2-Dichloropropane	ND < 2.0				
cis-1,3-Dichloropropene	ND < 2.0		<u>Ketones</u>		
trans-1,3-Dichloropropene	ND < 2.0		Acetone	ND < 5.0	
1,2-Dichloropropane	ND < 2.0		Vinyl acetate	ND < 5.0	
Methylene chloride	ND < 2.0		2-Butanone	ND < 5.0	
1,1,2,2-Tetrachloroethane	ND < 2.0		4-Methyl-2-pentanone	ND < 5.0	
Tetrachloroethene	ND < 2.0		2-Hexanone	ND < 5.0	
1,1,1-Trichloroethane	ND < 2.0				
1,1,2-Trichloroethane	ND < 2.0				
Trichloroethene	ND < 2.0				
Vinyl Chloride	ND < 2.0				

Analytical Method: EPA 8260

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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

<b>Client:</b>	<b>Day Environmental, Inc.</b>	<b>Lab Project No.:</b>	GE2834D
		<b>Lab Sample No.:</b>	8838
<b>Client Job Site:</b>	200 East Ave. Rochester, New York	<b>Sample Type:</b>	Water
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	06/21/95
		<b>Date Received:</b>	06/21/95
<b>Field Location:</b>	MW-RIZ-1	<b>Date Analyzed:</b>	06/26/95
<b>Field ID No.:</b>	RIZ-01		

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 2.0
Isopropylbenzene	ND < 2.0
n-Propylbenzene	ND < 2.0
1,3,5-Trimethylbenzene	ND < 2.0
tert-Butylbenzene	ND < 2.0
1,2,4-Trimethylbenzene	ND < 2.0
sec-Butylbenzene	ND < 2.0
p-Isopropyltoluene	ND < 2.0
n-Butylbenzene	ND < 2.0
Naphthalene	ND < 2.0

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 Laboratory Analysis Report For Non-Potable Water**

Client: **Day Environmental, Inc.**  
Client Job Site: 200 East Ave.  
Rochester, New York  
Client Job No.: 0577S-95

Lab Project No.: GE2834D  
Lab Sample No.: 8839

Sample Type: Water

Field Location: MW-RIZ-7

Date Sampled: 06/21/95

Date Received: 06/21/95

Field ID No.: RIZ-02

Date Analyzed: 06/26/95

VOLATILE HALOCARBONS		RESULTS (ug/L)	VOLATILE AROMATICS		RESULTS (ug/L)
Bromodichloromethane	ND <	20.0	Benzene		119.5
Bromomethane	ND <	20.0	Chlorobenzene		ND < 20.0
Bromoform	ND <	20.0	Ethylbenzene		310.0
Carbon tetrachloride	ND <	20.0	Toluene		200.4
Chloroethane	ND <	20.0	m,p - Xylene		2056.4
Chloromethane	ND <	20.0	o - Xylene		291.1
2-Chloroethyl vinyl ether	ND <	20.0	Styrene		ND < 20.0
Chloroform	ND <	20.0			
Dibromochloromethane	ND <	20.0			
1,1-Dichloroethane	ND <	20.0	Carbon disulfide		ND < 20.0
1,2-Dichloroethane	ND <	20.0			
1,1-Dichloroethene	ND <	20.0			
trans-1,2-Dichloroethene	ND <	20.0			
1,2-Dichloropropane	ND <	20.0			
cis-1,3-Dichloropropene	ND <	20.0			
trans-1,3-Dichloropropene	ND <	20.0			
1,2-Dichloropropane	ND <	20.0			
Methylene chloride	ND <	20.0			
1,1,2,2-Tetrachloroethane	ND <	20.0			
Tetrachloroethene	ND <	20.0			
1,1,1-Trichloroethane	ND <	20.0			
1,1,2-Trichloroethane	ND <	20.0			
Trichloroethene	ND <	20.0			
Vinyl Chloride	ND <	20.0			

Analytical Method: EPA 8260

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 Non-Potable Water (STARS List)**  
**(Additional EPA 8260 Compounds)**

Client:	<u>Day Environmental, Inc.</u>	Lab Project No.:	GE2834D
Client Job Site:	200 East Ave.	Lab Sample No.:	8839
Client Job No.:	Rochester, New York	Sample Type:	Water
Field Location:	0577S-95	Date Sampled:	06/21/95
Field ID No.:	MW-RIZ-7	Date Received:	06/21/95
	RIZ-02	Date Analyzed:	06/26/95

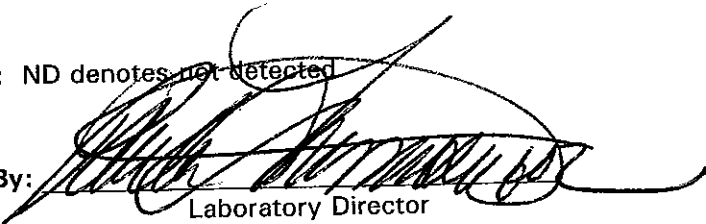
VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND < 20.0
Isopropylbenzene	ND < 20.0
n-Propylbenzene	ND < 20.0
1,3,5-Trimethylbenzene	428
tert-Butylbenzene	213
1,2,4-Trimethylbenzene	1878
sec-Butylbenzene	ND < 20.0
p-Isopropyltoluene	ND < 20.0
n-Butylbenzene	26.8
Naphthalene	390

Analytical Method: EPA 8260

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By:

  
Laboratory Director

Phone No: 292-1090  
FAX No: 292-0425

Relinquished By: Sam Miller

Relinquished By: \_\_\_\_\_

Received By:  
Received By:  
Date/Time:

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

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

**Laboratory Analysis For Petroleum Hydrocarbons in Water**

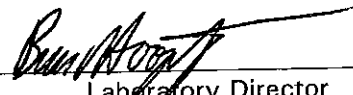
<b>Client:</b>	<b>Day Environmental, Inc.</b>	<b>Lab Project No.:</b>	GE2869
		<b>Lab Sample No.:</b>	8924
<b>Client Job Site:</b>	200 East Ave. Rochester, New York	<b>Sample Type:</b>	Water (3:1 Composite)
<b>Client Job No.:</b>	0577S-95	<b>Date Sampled:</b>	6/21-23/95
<b>Field Location:</b>	R12-1	<b>Date Received:</b>	6/23/95
<b>Field ID No:</b>	MW-R12-1	<b>Date Analyzed:</b>	6/26/95

Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Heavy Weight PHC as Lube Oil	68,253	3,333

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

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

**Laboratory Analysis For Petroleum Hydrocarbons in Water**

<b>Client:</b>	<b><u>Day Environmental, Inc.</u></b>	<b>Lab Project No.:</b>	GE2869
<b>Client Job Site:</b>	200 East Ave. Rochester, New York	<b>Lab Sample No.:</b>	8925
<b>Client Job No.:</b>	0577S-95	<b>Sample Type:</b>	Water (3:1 Composite)
<b>Field Location:</b>	R12-7	<b>Date Sampled:</b>	6/21-23/95
<b>Field ID No:</b>	MW-R12-7	<b>Date Received:</b>	6/23/95
		<b>Date Analyzed:</b>	6/26/95

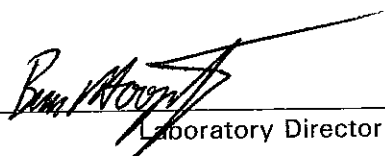
Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Gasoline	6,352	385

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

ELAP ID No.: 10958

**Comments:** ND denotes Not Detected.

**Approved By:**

  
Laboratory Director



# General Testing Corporation



A FULL SERVICE ENVIRONMENTAL LABORATORY

August 9, 1995

Mr. Joe Biondolillo  
Day Environmental  
2144 Brighton Henrietta Tl Rd  
Rochester, NY 14623

RE: 200 EAST AVE.  
Submission #:9508000001

AUG 14 1995

Dear Mr. Biondolillo:

Enclosed are the analytical results of the analyses requested. The analytical data was provided to you on 08/04/95 per a Facsimile transmittal. All data has been reviewed prior to report submission.

Should you have any questions please contact me at 454-3760.

Thank you for letting us provide this service.

Sincerely,

GENERAL TESTING CORPORATION

Janice Jaeger  
Client Service Representative

Enc.

This package has been reviewed by General Testing Corporation's QA Department/Laboratory Director prior to report submittal. *MVP 8/10/95*

710 Exchange Street • Rochester, NY 14608 • Tele:(716)454-3760 • Fax:(716)454-1245  
85 Trinity Place • Hackensack, NJ 07601 • Tele:(201)488-5242 • Fax:(201)488-6386  
435 Lawrence Bell Drive • Amherst, NY 14421 • Tele:(716)634-0454 • Fax:(716)634-9019



A Full Service Environmental Laboratory

Effective 05/09/95

**GTC LIST OF QUALIFIERS**

(The basis of this proposal are the EPA-CLP Qualifiers)

- U - Indicates compound was analyzed for but was not detected. The sample quantitation limit must be corrected for dilution and for percent moisture.
- J - Indicates an estimated value. For further explanation see case narrative / cover letter.
- B - This flag is used when the analyte is found in the associated blank as well as in the sample.
- E - This flag identifies compounds whose concentrations exceed the calibration range.
- A - This flag indicates that a TIC is a suspected aldol-condensation product.
- N - Spiked sample recovery not within control limits.  
(Flag the entire batch - Inorganic analysis only)
- \* - Duplicate analysis not within control limits.  
(Flag the entire batch - Inorganic analysis only)
- Also used to qualify Organics QC data outside limits.
- D - Spike diluted out.
- S - Reported value determined by Method of Standard Additions. (MSA)
- X - As specified in the case narrative.

**GTC Lab ID # for State Certifications**

NY ID # in Rochester: 10145  
NY ID # in Hackensack: 10801  
NY ID # in Massachusetts: M-NY032

NJ ID # in Rochester: 73331  
NJ ID # in Hackensack: 02317



## **CASE NARRATIVE**

COMPANY: Day Environmental  
Project No: 0577S-95  
200 East Ave.

SUBMISSION #: 9508000001

Day water samples were collected on 7/28/95 and 7/31/95 and received at GTC on the same day as collection in good condition.

### **VOLATILE ORGANICS**

Two water samples were analyzed for the Target Compound List (TCL) of Volatiles plus the Petroleum-Contaminated Soil Guidance List (Tank List) by method 8260 from SW-846.

All Tuning criteria for BFB were within limits.

The initial calibration and continuing calibration check (CCC) criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within acceptance limits on all samples.

The Blank Spike recoveries and the Matrix Spike/Matrix Spike Duplicate recoveries associated with this analysis were all within QC limits.

All Laboratory Blanks were free of contamination.

The required holding time of 14 days was met for all samples.

No analytical or QC problems were encountered with these analyses.

### **TOTAL PETROLEUM HYDROCARBONS**

Two water samples was analyzed for Petroleum Hydrocarbons using NYSDOH GC fingerprint method 310-13. This method analyzes for Petroleum Hydrocarbons following a solvent extraction and analysis by GC/FID.

All initial and continuing calibration criteria were met.

Sample MW-4 was quantitated as Gasoline since the peak pattern detected matched that of a standard.

No analytical or QC problems were encountered with this analysis.





### **SEMIVOLATILE ORGANICS**

One water sample was analyzed for the Target Compound List (TCL) of Semivolatiles plus a Library Search using SW-846 method 8270.

All Tuning criteria for DFTPP were within limits.

The initial calibration and continuing calibration check (CCC) criteria were met for all analytes.

All internal standard areas were within QC limits.

All surrogate standard recoveries were within acceptance limits for all samples.

The Matrix Spike/Matrix Spike Duplicate and the reference check recoveries and the % RPD from the MS/MSD associated with these samples were all within QC limits.

No analytical or QC problems were encountered.

### **ETHYLENE GLYCOL ANALYSIS**

One water sample were analyzed for Ethylene Glycol using NYSDEC method 89-9. Ethylene Glycol is converted to Formaldehyde, which in the presence of the reagents used, forms Diacetyldihydrolutidine(DDL) and develops a yellow color to be read at 412 nm.

All initial and continuing calibration criteria were met.

No analytical or QC problems were encountered.



VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

Date Sampled : 07/28/95 GTC Order # : 31384 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	6.3	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L



VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

Date Sampled : 07/28/95 GTC Order # : 31384 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
O-XYLENE	5.0	5.0 U	UG/L
M+P-XYLENE	5.0	5.0 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	98	%
TOLUENE-D8	(88 - 110)	99	%
DIBROMOFLUOROMETHANE	(86 - 118)	100	%



EXTRACTABLE ORGANICS  
METHOD NYSDEC ASP 89-9  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

Date Sampled : 07/28/95 GTC Order # : 31384 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2438

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
ETHYLENE GLYCOL	1000	1000 U	UG/L



EXTRACTABLE ORGANICS  
METHOD 310.13 TPH  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

Date Sampled : 07/28/95 GTC Order # : 31384 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2444

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
AS N-DODECANE	20	20 U	UG/L
FUEL OIL #2/DIESEL FUEL	20	20 U	UG/L
GASOLINE	20	20 U	UG/L
KEROSENE	20	20 U	UG/L



Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

EXTRACTABLE ORGANICS  
METHOD 8270 SEMIVOLATILES  
Reported: 08/09/95

Date Sampled : 07/31/95 GTC Order # : 31386 Sample Matrix: WATER  
Date Received: 07/31/95 Submission #: 9508000001 Analytical Run: 2430

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	5.0	5.0 U	UG/L
ACENAPHTHYLENE	5.0	5.0 U	UG/L
ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) PYRENE	5.0	5.0 U	UG/L
BENZO (B) FLUORANTHENE	5.0	5.0 U	UG/L
BENZO (G, H, I) PERYLENE	5.0	5.0 U	UG/L
BENZO (K) FLUORANTHENE	5.0	5.0 U	UG/L
BENZYL ALCOHOL	5.0	5.0 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	5.0 U	UG/L
DI-N-BUTYL PHTHALATE	5.0	5.0 U	UG/L
CARBAZOLE	5.0	5.0 U	UG/L
INDENO (1, 2, 3-CD) PYRENE	5.0	5.0 U	UG/L
4-CHLOROANILINE	5.0	5.0 U	UG/L
BIS (-2-CHLOROETHOXY) METHANE	5.0	5.0 U	UG/L
BIS (2-CHLOROETHYL) ETHER	5.0	5.0 U	UG/L
2-CHLORONAPHTHALENE	5.0	5.0 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2, 2'-OXYBIS (1-CHLOROPROPANE)	5.0	5.0 U	UG/L
CHRYSENE	5.0	5.0 U	UG/L
DIBENZO (A, H) ANTHRACENE	5.0	5.0 U	UG/L
DIBENZOFURAN	5.0	5.0 U	UG/L
1, 3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 4-DICHLOROBENZENE	5.0	5.0 U	UG/L
3, 3'-DICHLOROBENZIDINE	5.0	5.0 U	UG/L
2, 4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYL PHTHALATE	5.0	5.0 U	UG/L
DIMETHYL PHTHALATE	5.0	5.0 U	UG/L
2, 4-DIMETHYLPHENOL	10	10 U	UG/L
2, 4-DINITROPHENOL	20	20 U	UG/L
2, 4-DINITROTOLUENE	5.0	5.0 U	UG/L
2, 6-DINITROTOLUENE	5.0	5.0 U	UG/L
BIS (2-ETHYLHEXYL) PHTHALATE	5.0	5.0 U	UG/L
FLUORANTHENE	5.0	5.0 U	UG/L
FLUORENE	5.0	5.0 U	UG/L
HEXACHLOROBENZENE	5.0	5.0 U	UG/L
HEXACHLOROBUTADIENE	5.0	5.0 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	5.0 U	UG/L
HEXACHLOROETHANE	5.0	5.0 U	UG/L
ISOPHORONE	5.0	5.0 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L



EXTRACTABLE ORGANICS  
METHOD 8270 SEMIVOLATILES  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-2

Date Sampled : 07/31/95 GTC Order # : 31386 Sample Matrix: WATER  
Date Received: 07/31/95 Submission #: 9508000001 Analytical Run: 2430

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
4,6-DINITRO-2-METHYLPHENOL	20	20 U	UG/L
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
2-METHYLPHENOL	10	10 U	UG/L
4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
2-NITROANILINE	5.0	5.0 U	UG/L
3-NITROANILINE	5.0	5.0 U	UG/L
4-NITROANILINE	5.0	5.0 U	UG/L
NITROBENZENE	5.0	5.0 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	20	20 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	5.0 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	5.0 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	5.0 U	UG/L
PENTACHLOROPHENOL	20	20 U	UG/L
PHENANTHRENE	5.0	5.0 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
4-CHLOROPHENYL-PHENYLEETHER	5.0	5.0 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	5.0 U	UG/L
PYRENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES

QC LIMITS

TERPHENYL-d14	(33 - 141)	53	%
NITROBENZENE-d5	(35 - 114)	61	%
PHENOL-d6	(10 - 94)	26	%
2-FLUOROBIPHENYL	(43 - 116)	64	%
2-FLUOROPHENOL	(21 - 110)	34	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	88	%

NYSDEC Sample No: MW-2

1F - SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL TESTING CORP.  
Lab Code: 10145 Case No.: --  
Matrix: (soil/water) WATER  
Sample wt/vol: 1000 (g/mL) ML  
Level (low/med): LOW  
% Moisture: not dec. dec. 1000  
Extraction: (SepF/Cont/Sonc)SONC  
GPC Cleanup (Y/N) N pH

Contract: DAY  
SAS No.: -- SDG No.:  
Lab Sample ID:9508-001  
Lab File ID: DH079  
Date Received:07/28/95  
Date Extracted: 08/01/95  
Date Analyzed: 08/02/95  
Dilution Factor: 1.0

Number TIC's found: 12

Concentration Units: UG/L  
(ug/L or ug/Kg)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	Unknown	4.66	4.0	J
2.	Unknown	5.17	12	J
3.	Unknown	10.47	13	J
4.	Unknown	13.11	8.0	J
5.	Unknown	13.77	6.0	J
6.	Unknown	14.00	13	J
7.	Unknown	14.92	13	J
8.	Unknown	15.31	28	J
9.	Unknown	16.49	4.0	J
10.	Unknown	16.74	7.0	J
11.	Unknown	17.12	13	J
12.	Unknown	18.58	37	J
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

FORM I SV-TIC  
NYSDEC B-78





VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-4

Date Sampled : 07/28/95 GTC Order # : 31385 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	6.2	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.5	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	20	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	58	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L



VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-4

Date Sampled : 07/28/95 GTC Order # : 31385 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
O-XYLENE	5.0	13	UG/L
M+P-XYLENE	5.0	42	UG/L

SURROGATE RECOVERIES	QC LIMITS		
4-BROMOFLUOROBENZENE	(86 - 115)	100	%
TOLUENE-D8	(88 - 110)	99	%
DIBROMOFLUOROMETHANE	(86 - 118)	100	%



EXTRACTABLE ORGANICS  
METHOD 310.13 TPH  
Reported: 08/09/95

Day Environmental  
Project Reference: 200 EAST AVE.  
Client Sample ID : MW-4

Date Sampled : 07/28/95 GTC Order # : 31385 Sample Matrix: WATER  
Date Received: 07/28/95 Submission #: 9508000001 Analytical Run: 2444

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
AS N-DODECANE	20	20 U	UG/L
FUEL OIL #2/DIESEL FUEL	20	20 U	UG/L
GASOLINE	20	2570	UG/L
KEROSENE	20	20 U	UG/L



VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 32353 Sample Matrix: WATER  
Date Received: Submission #: Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
ACETONE	10	10 U	UG/L
BENZENE	5.0	5.0 U	UG/L
BROMODICHLOROMETHANE	5.0	5.0 U	UG/L
BROMOFORM	5.0	5.0 U	UG/L
BROMOMETHANE	5.0	5.0 U	UG/L
2-BUTANONE (MEK)	10	10 U	UG/L
SEC-BUTYLBENZENE	5.0	5.0 U	UG/L
N-BUTYLBENZENE	5.0	5.0 U	UG/L
TERT-BUTYLBENZENE	5.0	5.0 U	UG/L
CARBON DISULFIDE	10	10 U	UG/L
CARBON TETRACHLORIDE	5.0	5.0 U	UG/L
CHLOROBENZENE	5.0	5.0 U	UG/L
CHLOROETHANE	5.0	5.0 U	UG/L
CHLOROFORM	5.0	5.0 U	UG/L
CHLOROMETHANE	5.0	5.0 U	UG/L
DIBROMOCHLOROMETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHANE	5.0	5.0 U	UG/L
1,2-DICHLOROETHANE	5.0	5.0 U	UG/L
1,1-DICHLOROETHENE	5.0	5.0 U	UG/L
CIS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
TRANS-1,2-DICHLOROETHENE	5.0	5.0 U	UG/L
1,2-DICHLOROPROPANE	5.0	5.0 U	UG/L
CIS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
TRANS-1,3-DICHLOROPROPENE	5.0	5.0 U	UG/L
METHYL-TERT-BUTYL-ETHER	5.0	5.0 U	UG/L
ETHYLBENZENE	5.0	5.0 U	UG/L
2-HEXANONE	10	10 U	UG/L
ISOPROPYL BENZENE	5.0	5.0 U	UG/L
P-ISOPROPYLTOLUENE	5.0	5.0 U	UG/L
METHYLENE CHLORIDE	5.0	5.0 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
4-METHYL-2-PENTANONE (MIBK)	10	10 U	UG/L
N-PROPYLBENZENE	5.0	5.0 U	UG/L
STYRENE	5.0	5.0 U	UG/L
1,1,2,2-TETRACHLOROETHANE	5.0	5.0 U	UG/L
TETRACHLOROETHENE	5.0	5.0 U	UG/L
TOLUENE	5.0	5.0 U	UG/L
1,1,1-TRICHLOROETHANE	5.0	5.0 U	UG/L
1,1,2-TRICHLOROETHANE	5.0	5.0 U	UG/L
TRICHLOROETHENE	5.0	5.0 U	UG/L
1,3,5-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
1,2,4-TRIMETHYLBENZENE	5.0	5.0 U	UG/L
VINYL CHLORIDE	5.0	5.0 U	UG/L
O-XYLENE	5.0	5.0 U	UG/L



VOLATILE ORGANICS  
METHOD 8260 TCL/TANK  
Reported: 08/09/95

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 32353 Sample Matrix: WATER  
Date Received: Submission #: Analytical Run: 2553

ANALYTE	PQL	RESULT	UNITS
---------	-----	--------	-------

DATE ANALYZED : 08/01/95

ANALYTICAL DILUTION: 1.0

M+P-XYLENE	5.0	5.0 U	UG/L
------------	-----	-------	------

SURROGATE RECOVERIES

QC LIMITS

4-BROMOFLUOROBENZENE	(86 - 115)	96	%
TOLUENE-D8	(88 - 110)	100	%
DIBROMOFLUOROMETHANE	(86 - 118)	97	%



EXTRACTABLE ORGANICS  
METHOD 8270 SEMIVOLATILES  
Reported: 08/09/95

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled : GTC Order # : 31479 Sample Matrix: WATER  
Date Received: Submission #: Analytical Run: 2430

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
ACENAPHTHENE	5.0	5.0 U	UG/L
ACENAPHTHYLENE	5.0	5.0 U	UG/L
ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) ANTHRACENE	5.0	5.0 U	UG/L
BENZO (A) PYRENE	5.0	5.0 U	UG/L
BENZO (B) FLUORANTHENE	5.0	5.0 U	UG/L
BENZO (G, H, I) PERYLENE	5.0	5.0 U	UG/L
BENZO (K) FLUORANTHENE	5.0	5.0 U	UG/L
BENZYL ALCOHOL	5.0	5.0 U	UG/L
BUTYL BENZYL PHTHALATE	5.0	5.0 U	UG/L
DI-N-BUTYL PHTHALATE	5.0	5.0 U	UG/L
CARBAZOLE	5.0	5.0 U	UG/L
INDENO (1, 2, 3-CD) PYRENE	5.0	5.0 U	UG/L
4-CHLOROANILINE	5.0	5.0 U	UG/L
BIS (-2-CHLOROETHOXY) METHANE	5.0	5.0 U	UG/L
BIS (2-CHLOROETHYL) ETHER	5.0	5.0 U	UG/L
2-CHLORONAPHTHALENE	5.0	5.0 U	UG/L
2-CHLOROPHENOL	10	10 U	UG/L
2, 2'-OXYBIS (1-CHLOROPROPANE)	5.0	5.0 U	UG/L
CHRYSENE	5.0	5.0 U	UG/L
DIBENZO (A, H) ANTHRACENE	5.0	5.0 U	UG/L
DIBENZOFURAN	5.0	5.0 U	UG/L
1, 3-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 2-DICHLOROBENZENE	5.0	5.0 U	UG/L
1, 4-DICHLOROBENZENE	5.0	5.0 U	UG/L
3, 3'-DICHLOROBENZIDINE	5.0	5.0 U	UG/L
2, 4-DICHLOROPHENOL	10	10 U	UG/L
DIETHYL PHTHALATE	5.0	5.0 U	UG/L
DIMETHYL PHTHALATE	5.0	5.0 U	UG/L
2, 4-DIMETHYLPHENOL	10	10 U	UG/L
2, 4-DINITROPHENOL	20	20 U	UG/L
2, 4-DINITROTOLUENE	5.0	5.0 U	UG/L
2, 6-DINITROTOLUENE	5.0	5.0 U	UG/L
BIS (2-ETHYLHEXYL) PHTHALATE	5.0	5.0 U	UG/L
FLUORANTHENE	5.0	5.0 U	UG/L
FLUORENE	5.0	5.0 U	UG/L
HEXACHLOROBENZENE	5.0	5.0 U	UG/L
HEXACHLOROBUTADIENE	5.0	5.0 U	UG/L
HEXACHLOROCYCLOPENTADIENE	5.0	5.0 U	UG/L
HEXACHLOROETHANE	5.0	5.0 U	UG/L
ISOPHORONE	5.0	5.0 U	UG/L
2-METHYLNAPHTHALENE	10	10 U	UG/L
4, 6-DINITRO-2-METHYLPHENOL	20	20 U	UG/L

**Project Reference:**  
**Client Sample ID : METHOD BLANK**

**Date Sampled :** GTC Order # : 31479 **Sample Matrix: WATER**  
**Date Received:** Submission #: **Analytical Run: 2430**

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/02/95			
ANALYTICAL DILUTION: 1.0			
4-CHLORO-3-METHYLPHENOL	10	10 U	UG/L
2-METHYLPHENOL	10	10 U	UG/L
4-METHYLPHENOL	10	10 U	UG/L
NAPHTHALENE	5.0	5.0 U	UG/L
2-NITROANILINE	5.0	5.0 U	UG/L
3-NITROANILINE	5.0	5.0 U	UG/L
4-NITROANILINE	5.0	5.0 U	UG/L
NITROBENZENE	5.0	5.0 U	UG/L
2-NITROPHENOL	10	10 U	UG/L
4-NITROPHENOL	20	20 U	UG/L
N-NITROSODIMETHYLAMINE	5.0	5.0 U	UG/L
N-NITROSODIPHENYLAMINE	5.0	5.0 U	UG/L
DI-N-OCTYL PHTHALATE	5.0	5.0 U	UG/L
PENTACHLOROPHENOL	20	20 U	UG/L
PHENANTHRENE	5.0	5.0 U	UG/L
PHENOL	10	10 U	UG/L
4-BROMOPHENYL-PHENYLETHER	5.0	5.0 U	UG/L
4-CHLOROPHENYL-PHENYLETHER	5.0	5.0 U	UG/L
N-NITROSO-DI-N-PROPYLAMINE	5.0	5.0 U	UG/L
PYRENE	5.0	5.0 U	UG/L
1,2,4-TRICHLOROBENZENE	5.0	5.0 U	UG/L
2,4,6-TRICHLOROPHENOL	10	10 U	UG/L
2,4,5-TRICHLOROPHENOL	10	10 U	UG/L

SURROGATE RECOVERIES	QC LIMITS		
TERPHENYL-d14	(33 - 141)	60	%
NITROBENZENE-d5	(35 - 114)	58	%
PHENOL-d6	(10 - 94)	25	%
2-FLUOROBIPHENYL	(43 - 116)	60	%
2-FLUOROPHENOL	(21 - 110)	36	%
2,4,6-TRIBROMOPHENOL	(10 - 123)	46	%

NYSDEC Sample No: METHOD BLANK

1F - SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GENERAL TESTING CORP.  
Lab Code: 10145 Case No.: --  
Matrix: (soil/water) WATER  
Sample wt/vol: 1000 (g/mL) ML  
Level (low/med): LOW  
% Moisture: not dec. dec.  
Extraction: (SepF/Cont/Sonc) SEPF  
GPC Cleanup (Y/N) pH

Contract: DAY  
SAS No.: -- SDG No.:  
Lab Sample ID: 31479  
Lab File ID: DH078  
Date Received: --  
Date Extracted: 08/01/95  
Date Analyzed: 08/02/95  
Dilution Factor: 1.0

Number TIC's found: 0

Concentration Units: UG/L  
(ug/L or ug/Kg)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				





EXTRACTABLE ORGANICS  
METHOD NYSDEC ASP 89-9  
Reported: 08/09/95

Project Reference:  
Client Sample ID : METHOD BLANK

Date Sampled :	GTC Order # : 31525	Sample Matrix: WATER
Date Received:	Submission #:	Analytical Run: 2438

ANALYTE	PQL	RESULT	UNITS
DATE EXTRACTED : 08/01/95			
DATE ANALYZED : 08/01/95			
ANALYTICAL DILUTION: 1.0			
ETHYLENE GLYCOL	1000	1000 U	UG/L

# GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

change Street 85 Trinity Place 435 Lawrence Bell Drive GTC Job. No. **9508-001**  
 aster, NY 14608 Hackensack, NJ 07601 Amherst, NY 14221-7077 Client Project No. \_\_\_\_\_  
 le Origination & Shipping Information  
 Collection Site 200 EAST AVE  
 Address 200 EAST AVE ROCK NY  
 Collector STEVE MULLIN City State Zip  
 Print Signature

Bottles Prepared by GTC Rec'd by \_\_\_\_\_  
 Bottles Shipped to Client via \_\_\_\_\_ Seal/Shipping # \_\_\_\_\_  
 Samples Shipped via \_\_\_\_\_ Seal/Shipping # \_\_\_\_\_

Sample(s) Relinquished by: Steve Mullin Received by: \_\_\_\_\_ Date//Time \_\_\_\_\_  
 1. Sign Steve Mullin 1. Sign General Testing Corp 7/28/95  
 for DAY ENVIRONMENTAL, INC. for \_\_\_\_\_ 14:45  
 2. Sign \_\_\_\_\_ 2. Sign \_\_\_\_\_ :  
 for \_\_\_\_\_ for \_\_\_\_\_ :  
 3. Sign \_\_\_\_\_ 3. Sign \_\_\_\_\_ :  
 for \_\_\_\_\_ for \_\_\_\_\_ :

Sample(s) Received in Laboratory by Ds/garh 7/28/95 @ 14:45

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Preserved Y N	Prep Filtered Y N	Bottle Set(s) (see below)
Lab #	Date/Time					
1 MW-1	MW-1	W	8260 TCL (w/ NYSDEC "STARS" LIST), TPH (NYSDEC 310.13)	ICE & HCL		* 1,1,1,1,4 cancelled
2 MW-2	MW-2	W	8260-TCL+stars TPH-GL, 8260-TS 89-9 ethylene glycol	ICE & HCL		1,1,1,1,4 Analysis added as per J. Biondolillo 7/31
3 MW-3	MW-3	W	cancelled	ICE & HCL		1,1,1,1,4
4 MW-4	MW-4	W	8260-TCL+stars TPH-GL	ICE & HCL		1,1,1,1,4
5	/ / :					

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.	1L AMBER GLASS	
# of each	10									4	

ditional Analytes 1 week TAT as per Day 7/28/95 16:55  
Analysis cancelled by Joe Biondolillo for MW1, MW3

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page. 7/31 JMS 7/31  
 Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H),  
 River or Stream (R), Pond (P), Industrial Discharge (I)

# GENERAL TESTING CORPORATION / CHAIN-OF-CUSTODY RECORD

710 Exchange Street 85 Trinity Place  
Rochester, NY 14608 Hackensack, NJ 07601

435 Lawrence Bell Drive  
Amherst, NY 14221-7077

GTC Job. No. 9508-1  
Client Project No. 05773-95

## Sample Origination & Shipping Information

Collection Site

Address 200 EAST AVE ROCH NY State State Mullin Zip

Collector STEVE MULLIN Print Steve Mullin Signature

Bottles Prepared by GTC Rec'd by

Bottles Shipped to Client via Seal/Shipping #

Samples Shipped via Seal/Shipping #

Sample(s) Relinquished by:

Received by:

Date/Time

1. Sign <u>Steve Mullin</u>	1. Sign <u>Tor Hastings</u>	7/31/95
for <u>DAY ENVIRONMENTAL, INC.</u>	for <u>GTC</u>	15:00
2. Sign	2. Sign	/ /
for	for	:
3. Sign	3. Sign	/ /
for	for	:

Sample(s) Received in Laboratory by

BB/garden 7/31/95 @ 15:00

Client I.D. #	Sample Location	*	Analyte or Analyte Group(s) Required (see below for additional)	Sample Prep Preserved Filtered Y N Y N	Bottle Set(s) (see below)
Lab #	Date/Time				
<u>MW-2</u>	<u>MW-2</u>	<u>W</u>	<u>8270 FULL SCAN</u>		<u>10</u>
<u>31386</u>	<u>07/31/95 14:15</u>		<u>8270 + LS</u>		
	/ / :				
	/ / :				
	/ / :				
	/ / :				
	/ / :				

Use Bottle No. for indicating type bottles used in each bottle set and fill in box with # of bottles used for each type.

Bottle No.	1	2	3	4	5	6	7	8	9	10	11
Bottle Type	40 ml Vial	Pint Glass	Qt. Glass	4 oz. Plastic	8 oz. Plastic	16 oz. Plastic	Qt. Pl.	Gal. Pl.	Steril. Pl.	1 L AMBER	
# of each										1	

Additional Analytes

Shaded area for Lab use only; bottom copy for client; maximum of 5 samples per page.

Source Codes: Monitoring Well (W), Soil (S), Treatment Plant (T), Drinking Water (D), Leachate (L), Hazardous Waste (H), River or Stream (R), Pond (P), Industrial Discharge (I). (X) (Y)