

DEG Copy

PHASE II ENVIRONMENTAL STUDY

**370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK**

Prepared for: The City of Rochester
30 Church Street
Rochester, New York 14614

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

Project No.: 2508S-00

Date: March 2001



TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	Background	1
1.2	Objectives	1
2.0	FIELDWORK AND ANALYTICAL LABORATORY TESTING	2
2.1	Test Boring Evaluation	2
2.2	Groundwater Evaluation	3
2.3	Field Observations	4
2.4	Analytical Laboratory Testing	5
2.5	Decontamination Procedures and Study-Derived Wastes	8
3.0	CONCLUSIONS AND RECOMMENDATIONS	10
4.0	ABBREVIATIONS	13

APPENDICES

Appendix A: Figures

Figure 1 - Project Locus Map

Figure 2 - Site Plan with Test Boring and Well Locations

Appendix B: Tables

Table 1 - Groundwater Elevation Data for 12/28/00

Table 2 - Soil Analytical Laboratory Testing Program

Table 3 - Total Petroleum Hydrocarbons - Soil Samples

Table 4 - Volatile Organic Compounds - Soil Samples

Table 5 - Semi-Volatile Organic Compounds - Soil Samples

Table 6 - Total RCRA Metals - Soil Samples

Table 7 - Groundwater Analytical Laboratory Testing Program

Table 8 - Total Petroleum Hydrocarbons - 12/28/00 Groundwater Sample

Table 9 - Volatile Organic Compounds - 12/28/00 Groundwater Samples

Table 10 - Total RCRA Metals - 12/28/00 Groundwater Sample

Appendix C: Test Boring Logs and Monitoring Well Logs

Appendix D: Well Development Logs and Well Sampling Logs

Appendix E: Analytical Laboratory Data

1.0 INTRODUCTION

This report prepared by Day Environmental, Inc. (DAY) summarizes the findings of a Phase II Environmental Study conducted at 370 & 406 Orchard Street, City of Rochester, County of Monroe, New York (Site). The general location of the Site is shown on Figure 1 (Project Locus Map) included in Appendix A. As shown on Figure 2 (Site Plan) included in Appendix A, the Site consists of two parcels that are not contiguous.

1.1 Background

DAY completed a Phase I Environmental Site Assessment (Phase I ESA) report (DAY file #1745E-98) dated December 20, 2000 for five parcels, including the two parcels that comprise the Site. The Phase I ESA report identified the following environmental concerns for the 370 Orchard Street and 406 Orchard Street parcels:

370 Orchard Street

1. Historical uses of adjoining properties (e.g., a gasoline station and/or automobile repair shop, a coal sales and storage facility, a lithographing operation, a box manufacturing operation, etc.).
2. Abandoned dry cleaning machine and water heater

406 Orchard Street

1. Former underground storage tank
2. Suspect and confirmed asbestos-containing material
3. Historical uses of the property and adjoining properties (a cabinet company, a chromium plating operation, a basket company, an automobile rust control company, a welding company, an automobile repair shop, a coal sales and storage facility, an electric company, and appliance manufacturing facility, etc.)
4. Floor drains and trench drains

The City of Rochester did not identify the evaluation of Concern #2 (suspect and confirmed asbestos-containing material) for the 406 Orchard Street parcel as a requirement of this Phase II Environmental Study. Therefore, evaluation of the suspect and confirmed asbestos-containing material concern is not included as part of this Phase II Environmental Study.

1.2 Objectives

The objective of this Phase II Environmental Study was to evaluate subsurface conditions, including soil, fill and groundwater, for the presence of contamination in relation to the potential environmental concerns identified in the Phase I ESA report for these two parcels that comprise the Site.

2.0 FIELDWORK AND ANALYTICAL LABORATORY TESTING

As part of this Phase II Environmental Study, various tasks were performed on the Site including: a test boring evaluation, a groundwater evaluation, and analytical laboratory testing. These tasks and the associated findings are discussed below.

2.1 Test Boring Evaluation

On December 13 and December 14, 2000, thirty (30) test borings (i.e., TB-1 through TB-30) were advanced on the Site using vehicle-mounted Geoprobe System soil sampling equipment. DAY retained MARCOR Remediation, Inc. to advance these test borings. The test borings were sampled continuously and advanced through the overburden to depths ranging between approximately 4.5 feet (TB-24) and 23.0 feet (TB-22) below the ground surface. With the exception of test boring TB-22, equipment refusal (i.e., inferred top of bedrock) was encountered in the test borings at depths ranging between 4.5 feet (TB-24) and 11.0 feet (TB-21). The average depth to equipment refusal encountered at the 29 test boring location was 6.6 feet.

Figure 2 (Appendix A) illustrates the locations of these test borings and their locations are further described below:

- Test Borings TB-1 through TB-14: 370 Orchard Street parcel.
 - Test borings TB-1 through TB-4 were advanced along the eastern property line shared with an adjoining property formerly used as an automobile service and gasoline station (i.e., addressed as 935 West Broad Street).
 - Test Boring TB-5 was advanced in proximity to the abandoned dry cleaning machine.
 - The remaining test borings were advanced over the balance of the Site.
- Test borings TB-15 through TB-30: 406 Orchard Street parcel.
 - Four of these test borings (TB-27, TB-28, TB-29 and TB-30) were advanced inside the existing building on the 406 Orchard Street parcel at, or in proximity to, existing or former (i.e., filled in) trench drains and floor drains.
 - Five of the test borings (TB-15, TB-16, TB-17, TB-25 and TB-26) were advanced west of the building on this parcel in an area suspected to be the location of a former underground storage tank and associated fuel dispensing unit.
 - The remaining test borings were advanced over the balance of the Site, including the location of a former shed that was located immediately east of the existing building.

A DAY representative observed the recovered soil samples in order to develop a stratigraphic description of the subsurface conditions encountered and to evaluate the recovered soil samples for evidence of suspect contamination (e.g., staining, unusual odors, presence of petroleum or chemical product, etc.). Portions of the recovered soil samples were also screened with a

Photovac 2020IS photoionization detector (PID) equipped with a 10.6 eV lamp. The DAY representative recorded pertinent information for each test boring and subsequently prepared test boring logs (included in Appendix C).

Selected samples of fill or soil collected from the test borings were evaluated in the field for evidence of contamination (i.e., staining, odors, type of fill material, elevated PID readings, etc.). Other portions of the samples were retained for possible testing at Paradigm Environmental Services, Inc. (Paradigm), which is a New York State Department of Health (NYSDOH) ELAP-certified analytical laboratory.

2.2 Groundwater Evaluation

As part of the studies conducted, the test borings TB-1, TB-14 and TB-21 were converted into 1.25-inch diameter overburden groundwater monitoring wells that are designated as MW-1, MW-2, and MW-3 (refer to Figure 2 included in Appendix A). Well MW-1 is located on the eastern portion of the 370 Orchard Street parcel at a test boring location where field evidence of petroleum-type contamination was encountered in the saturated zone. Well MW-1 is in proximity to former aboveground storage tanks and a building (identified in the Phase I ESA report as being used for "oiling and greasing") that were present on the adjoining property to the east. Well MW-2 is located on the western portion of the 370 Orchard Street parcel. This well location is in proximity to the adjoining properties to the west that had historical uses that were identified as potential environmental concerns in the Phase I ESA report. Well MW-3 is located on the northwest portion of the 406 Orchard Street parcel. This location was selected due to its proximity in relation to adjoining properties to the north and west that had historical uses that were identified as potential environmental concerns in the Phase I ESA report. Two of these wells (MW-1 and MW-3) were later developed, and groundwater samples were collected for analytical laboratory testing. Well MW-2 was dry (i.e., no measurable groundwater) and could not be sampled as part of this study.

Each well consists of a pre-cleaned approximate four-foot to five-foot long, 1.25-inch inner-diameter (ID), threaded, flush-jointed, No. 10 slot, Schedule 40 polyvinyl chloride (PVC) screen attached to flush-coupled riser casing of the same material. The well screens were installed to intercept the top of the water table observed in the overburden during advancement of the associated test borings. The well installations included a washed and graded sand pack surrounding the screen and about 1 to 5.5 feet of sand above the top of the screen. A bentonite seal was placed above the sand pack and the remaining annulus was filled with cement/bentonite grout. A steel protective curb box with locking cap was placed over the wells and cemented in place. Well details are included on the corresponding logs in Appendix C.

Monitoring Well Development

Monitoring wells MW-1 and MW-3 were developed by DAY on December 22, 2000. These wells were developed to restore natural hydraulic properties at the well locations to the extent possible. Well development was performed utilizing disposable bailers with dedicated cord. No fluids were added to the wells during development, and well development equipment was decontaminated prior to development of the well. Water quality readings (i.e., pH, conductance, and temperature) were collected before, during and after development. Copies of well development logs for these wells are included in Appendix D.

Monitoring Well Sampling

On December 28, 2000, wells MW-1 and MW-3 were purged by removing more than three well casing volumes of groundwater, and a groundwater sample was collected from each well (designated as samples 2508S-MW01 and 2508S-MW02) for subsequent laboratory analysis. Copies of well sampling logs are included in Appendix D.

The location of the three wells (MW-1 through MW-3) on the Site were tape-measured in relation to existing site structures or to site boundaries, and a licensed land surveyor surveyed their elevations. On December 28, 2000, DAY measured static water levels in the three wells using a Heron Model HO1L oil/water interface probe. Well MW-2 was dry (i.e., containing no measurable groundwater) at the time of the December 28, 2000 sampling event. The well elevations, static water levels and calculated groundwater elevations are presented on Table 1 in Appendix B. Evidence of light non-aqueous phase liquid (LNAPL) was not detected in the wells using the Heron oil/water interface probe during this monitoring event. Since groundwater elevation data was not available for well MW-2, a groundwater potentiometric map could not be developed for December 28, 2000. However, the data does show that on December 28, 2000, the groundwater elevation at well MW-1 (90.78') is 1.56' higher than at well MW-3 (89.22'), which suggests that groundwater at the Site may generally flow towards the north. The former Erie Canal located along the eastern side of West Broad Street was filled in and may also be influencing groundwater flow toward the north/northwest in proximity to the Site.

2.3 Field Observations

Field observations and findings based upon the work completed during this Phase II Environmental Study are summarized below, and generally apply to both parcels that comprise the Site:

- Most test borings were advanced through asphalt pavement or concrete. Fill material generally consisting of mixtures of silt, sand and gravel with lesser amounts of clay, coal, ash, organics, brick, and slag was encountered beginning at the ground surface in each of the test borings. The fill material in the test borings excavated during this study extended from the ground surface to depths ranging between approximately 1.5 feet (TB-5, TB-6) and 8.0 feet (TB-22). Based on the observation of soil samples from the 30 test borings, the average thickness of the fill material on the Site is approximately 3.4 feet. A specific fill pattern was not identified.
- Soils beneath the fill material generally consisted of silt and/or sand with lesser amounts of gravel and clay. At many of the test borings, rock fragments (i.e., fractured Lockport Dolomite) were observed in samples collected near the bottom of the test borings. The thickness of the indigenous soil observed ranged between approximately 0.0 feet (TB-13 and TB-23) and 15.0 feet (TB-22) with an average thickness of 3.7 feet.
- The apparent groundwater table was encountered (i.e., as evidenced by wet soil samples and/or standing water in the test boring) in 15 of the 30 test borings advanced during this study. On December 28, 2000, groundwater was measured in wells MW-1 (TB-1) and MW-3 (TB-21) at depths of 8.32 feet and 10.34 feet below the ground surface, respectively. On December 28, 2000, there was no measurable groundwater in well MW-2 (TB-14).

- Field evidence of suspect petroleum or chemical contaminated soil (i.e., based upon PID readings greater than 5.0 ppm and observations including odors, staining, etc.) was detected on soil samples from 2 of the 30 test borings (i.e., TB-1 and TB-29). The contamination at these two locations was noted on wet soil samples near the bottom of these test borings (i.e., immediately above equipment refusal that inferred the top of bedrock). The peak PID readings measured at TB-1 and TB-29 were 430 ppm and 6.2 ppm, respectively. Petroleum-type odors were noted on the soil at these two locations.
- Peak PID readings measured at the other 28 test borings (i.e., TB-2 through TB-28 and TB-30) were less than 1.0 ppm, and evidence of staining was not observed. However, ash material was observed in the fill material at many of these locations. In addition, a 0.1' thick layer of soft white unknown material (possibly ash) was observed at a depth of approximately 2.8 feet at test boring TB-19.
- Fill material was encountered in test boring TB-22 from the ground surface to a depth of 8 feet, and between 5.0 feet to 8.0 feet this fill consisted of ash with some coal. This test boring as advanced to a depth of 23 feet below the ground surface without encountering equipment refusal, whereas equipment refusal (suggesting the inferred top of bedrock) was encountered at depths ranging between 4.5 feet (TB-24) and 11.0 feet (TB-21) at the other 29 test boring locations. The soils encountered beneath the fill material in this test boring appeared lacustrine in nature and a piece of wood was observed in the soil sample at a depth of 23 feet below the ground surface. As such, it is possible that the soil identified as indigenous beneath the fill was actually fill material (e.g., reworked indigenous soil). A review of Sanborn map and Plat Book information included in the Phase I ESA report indicated that the Erie Canal was located along the east side of Broad Street (i.e., east of TB-22) between the years of at least 1875 and 1918. It is possible that this test boring may have intercepted a structure, etc. that was once associated with the Erie Canal.
- The test boring logs included in Appendix D provide additional information regarding subsurface conditions, PID measurements, etc. encountered in each test boring.
- Evidence of contamination associated with floor drains and trench drains and the former underground storage tank at the 406 Orchard Street parcel was not encountered. Evidence of contamination associated with the abandoned dry cleaning machine at the 370 Orchard Street parcel was not encountered.

2.4 Analytical Laboratory Testing

Analytical laboratory testing for this project was completed by Paradigm. The following laboratory program was implemented on samples that were collected from test borings and monitoring wells:

Soil Samples

Six (6) soil samples were submitted for analytical laboratory testing. The specific locations, depth intervals, and test parameters for these soil samples are illustrated on Table 2 included in Appendix B, and summarized as follows:

- Sample 2508-01 from test boring TB-1 (8-10') was analyzed for United States Environmental Protection Agency (USEPA) target compound list (TCL) and New York

State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series (STARS)-list volatile organic compounds (VOCs) using USEPA Method 8260; NYSDEC STARS-list base/neutral semi-volatile organic compounds (SVOCs) using USEPA Method 8270; and total petroleum hydrocarbons (TPH) using NYSDOH Method 310.13.

- Sample 2508-02 from test boring TB-29 (6-6.5') was analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260; NYSDEC STARS-list base/neutral SVOCs using USEPA Method 8270; TPH using NYSDOH Method 310.13; and polychlorinated biphenyls (PCBs) using USEPA Method 8082.
- Sample 2508-03 from test boring TB-19 (0-4') was analyzed for pH; total RCRA metals; and TCL base/neutral/acid SVOCs using USEPA Method 8270.
- Sample 2508-04 from test boring TB-22 (5-8') was analyzed for pH and total RCRA metals.
- Sample 2508-05 from test boring TB-6 (0-4') was analyzed for total RCRA metals.
- Sample 2508-06 from test boring TB-3 (0-4') was analyzed for total RCRA metals.

Groundwater Samples

Two groundwater samples were collected on December 28, 2000 from wells MW-1 and MW-3 (designated as 2508S-MW01 and 2508S-MW02, respectively). The groundwater analytical laboratory testing program is presented on Table 7 included in Appendix B.

- Sample 2508S-MW01 from well MW-1 was analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260; TPH using NYSDOH Method 310.13; and total RCRA metals.
- Due to groundwater volume limitations caused by slow recharge at well MW-3, Sample 2508S-MW02 was only analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260.

Analytical Laboratory Test Results

Copies of analytical laboratory test results for the soil and groundwater samples are included in Appendix E. Tables summarizing the analytical laboratory data and providing a comparison to NYSDEC criteria are included in Appendix B. The test results for the samples are further discussed as follows:

Soil Samples

- As shown on Table 3 included in Appendix B, 33 mg/kg (ppm) of light-weight TPH designated as mineral spirits was detected in Sample 2508-01 from TB-1 (8-10'), which was advanced on the 370 Orchard Street parcel in proximity to a former gasoline service station on the adjoining property east of the Site. 3,520 mg/kg or ppm of medium-weight TPH

designated as diesel fuel was detected in Sample 2508-02 from TB-29 (6-6.5'), which was advanced inside the building on the 406 Orchard Street parcel through a former trench drain that had been filled in. The NYSDEC's Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046) dated January 24, 1994 indicates that the soil cleanup objective for total VOCs is 10 ppm and for total SVOCs is 500 ppm. Light-weight TPH (e.g., mineral spirits) is comprised primarily of VOCs. Medium-weight TPH (e.g., diesel fuel) and heavy-weight TPH are comprised primarily of SVOCs. Based on these considerations, the TPH test results for the soil samples from TB-1 and TB-29 indicate that regulatory agencies could require that the two types of TPH detected at the Site be addressed in some manner (i.e., remediated, control exposure to contamination, etc.).

- As shown on Table 4 included in Appendix B, VOCs were detected in Sample 2508-01 from TB-1 (8-10'), but were not detected above reported analytical laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5'). Four of the VOCs detected in Sample 2508-01 (i.e., 1,2,4-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene and naphthalene) are typically associated with petroleum products (e.g., fuels, solvents, lubricants). In addition, acetone was also detected in this sample. As shown on Table 4, the concentration of naphthalene detected in Sample 2508-01 (i.e., 251 ug/kg or ppb) exceeded its toxicity characteristic leaching procedure (TCLP) alternative soil guidance value as referenced in the August 1992 NYSDEC Spill Technology and Remediation Series, STARS Memo #1, Petroleum-Contaminated Soil Guidance Policy (STARS Memo #1), but did not exceed its recommended soil cleanup objective as referenced in the January 24, 1994 NYSDEC TAGM 4046, as amended by the NYSDEC's supplemental Table 1 dated 1998. The concentrations of 1,2,4-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene and acetone detected in Sample 2508-01 did not exceed their STARS TCLP alternative soil guidance values, or TAGM 4046 recommended soil cleanup objectives.
- As shown on Table 5 included in Appendix B, SVOCs were detected above reported laboratory detection limits in Samples 2508-01 and 2508-03. SVOCs were not detected above reported laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5'). The SVOCs naphthalene and phenanthrene were detected in Sample 2508-01 from TB-01 (8-10') at concentrations of 23,400 ug/kg (ppb) and 29,700 ug/kg (ppb), respectively. The SVOC pyrene was detected in Sample 2508-03 from TB-19 (0-4') at a concentration of 991 ug/kg (ppb). These SVOCs are typically associated with petroleum products, or due to the incomplete combustion of organic matter (ash). The concentrations of SVOCs detected in Sample 2508-01 exceed STARS TCLP alternative soil guidance values and/or TAGM 4046 recommended soil cleanup objectives. The concentration of the SVOC pyrene detected in Sample 2508-03 did not exceed its STARS TCLP alternative soil guidance value and/or TAGM 4046 recommended soil cleanup objective.
- PCBs were not detected above analytical laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5').
- As shown on Table 6 included in Appendix B, the RCRA metals arsenic, barium, cadmium, chromium, lead, mercury and selenium were detected in one or more of the four soil samples that were tested.

- The concentrations of arsenic, barium, chromium, lead, and selenium were within their typical background ranges as referenced in NYSDEC TAGM 4046.
- The concentrations of mercury in three of the samples, and cadmium in one sample, were above their typical background ranges as referenced in the January 24, 1994 NYSDEC TAGM 4046.
- The concentrations of arsenic and mercury in Samples 2508-04, 2508-05 and 2508-06 exceed their January 24, 1994 NYSDEC TAGM 4046 recommended soil cleanup objectives.
- The concentrations of the metals barium, cadmium, chromium, lead, and selenium detected in the four samples were below their respective NYSDEC TAGM 4046 recommended soil cleanup objectives. [Note, as allowed by the NYSDEC on other projects, the NYSDEC's 1995 proposed recommended soil cleanup objectives for cadmium and chromium were used for comparison to the test results].
- The pH test results for Sample 2508-03 from TB-19 (0-4') and Sample 2508-04 from TB-22 (5-8') were 7.49 and 8.24 standard units, respectively.

Groundwater Samples

- As shown on Table 8, light-weight TPH identified as gasoline was detected in Sample 2508S-MW01 at a concentration of 7,080 ug/l (ppb). There are no NYSDEC cleanup criteria for TPH in groundwater.
- As shown on Table 9, only the VOC benzene was detected in Sample 2508S-MW01 at a concentration of 33.7 ug/l (ppb). The concentration of benzene detected in Sample 2508S-MW01 exceeded its respective groundwater standard of 1.0 ug/l (ppb) as referenced in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1) dated June 1998. VOCs were not detected above reported analytical laboratory detection limits in Sample 2508S-MW02.
- As shown in Table 10, the metals arsenic, barium, chromium, lead, mercury, selenium and silver were detected at concentrations above reported analytical laboratory detection limits in Sample 2508S-MW01. The concentrations of arsenic, chromium, lead, and selenium exceed their respective groundwater standards and/or guidance values as referenced in the NYSDEC TOGS 1.1.1 dated June 1998. The presence of the metals in the groundwater may be attributable to leaching from the fill material, naturally occurring metals, an area-wide or localized source or a combination of these factors. [Note: Groundwater is not used as a potable water supply at the Site. As such, the above standards may not be applicable.]

2.5 Decontamination Procedures and Study-Derived Wastes

Drilling and sampling equipment used during the test boring evaluation and groundwater evaluation were decontaminated prior to being used at each location by implementing the following

procedures: 1) rough wash in tap water; 2) wash in mixture of tap water andalconox soap; 3) double rinse with distilled or deionized water; and 4) air dry and/or dry with clean paper towel. Decontamination was conducted as a quality control measure to avoid cross-contamination between sample intervals at and between test locations.

Drill cuttings that were generated during this study were placed on the ground surface or used as backfill at their specific locations. Due to evidence of contamination, well development and purge waters from well MW-1 were placed in a New York State Department of Transportation (NYSDOT)-approved 30-gallon drum that was labeled and staged on-site. Well development and purge waters from well MW-3, and decontamination waters, were discharged to the ground surface at the Site.

3.0 CONCLUSIONS AND RECOMMENDATIONS

A previous Phase I ESA report identified environmental concerns for the 370 Orchard Street and 406 Orchard Street parcels. Intrusive work was performed as part of this Phase II Environmental Study in an effort to evaluate environmental conditions at the Site. The environmental concerns identified in the Phase I ESA report for the 370 Orchard Street parcel that were further evaluated as part of this study included: historical uses of adjoining properties; and abandoned dry cleaning machine and water heater. The environmental concerns identified in the Phase I ESA report for the 406 Orchard Street parcel that were further evaluated as part of this study included: a former underground storage tank; historical uses of the property and adjoining properties; and floor drains and trench drains.

This Phase II Environmental Study included: advancement of 30 test borings; installation of three groundwater monitoring wells; field observations and PID screening on soil and groundwater samples; analytical laboratory testing of six soil and two groundwater samples; and evaluation of the data collected. The conclusions and recommendations developed by DAY based upon the work completed to date are summarized below.

Evidence of petroleum contamination was detected in soil and groundwater at only two of the 30 test locations at the Site (i.e., TB-1/MW-1 and TB-29). Some of the petroleum constituents detected at these two locations exceeded NYSDEC clean-up criteria. The contamination at these two locations was encountered in saturated soils immediately above the inferred top of bedrock. As such, it is likely that the contamination may also be present in the bedrock at these locations; however, the scope-of-work for this Phase II Environmental Study was generally limited to an assessment of overburden conditions. VOC or petroleum contamination was generally not observed in unsaturated soil samples collected from test boring locations at the Site. Groundwater samples collected from a groundwater monitoring well on each parcel generally contained little or no VOCs. A moderate concentration of light-weight TPH was detected in a groundwater sample from well MW-1 located on the 370 Orchard Street parcel in proximity to an apparent off-site source to the east.

The extent of petroleum contamination in the overburden soils on the 370 Orchard Street parcel appears limited to the area in proximity to TB-1. Analytical laboratory testing at TB-1/MW-1 indicates that light-weight TPH designated as mineral spirits/gasoline is present at this location. Evidence of this type of contamination was not detected at other nearby test locations (i.e., TB-2 and TB-12). Since petroleum contamination was not encountered in unsaturated soils above the water table at this parcel, the contamination encountered at TB-1 likely migrated on-site in groundwater from the adjoining off-site property (addressed as 935 West Broad Street) located east of the 370 Orchard Street parcel. This adjoining property was formerly used as a gasoline and service station. A review of historic Sanborn maps shows the off-site building closest to test boring TB-1 was labeled as "oiling and greasing" and that three approximately 30-foot long aboveground storage tanks were also located nearby on this adjoining property (refer to Figure 2 included in Appendix A).

The extent of petroleum contamination in the overburden soils on the 406 Orchard Street parcel appears limited to the area in proximity to TB-29, which was advanced inside the existing building. Analytical laboratory testing at TB-29 indicates that medium-weight TPH designated as diesel fuel is present at this location. Evidence of this type of contamination was not detected at other nearby

test locations (i.e., TB-18, TB-19, TB-27 and TB-28). An on-site source of the petroleum contamination encountered at TB-29 was not identified. It is possible that this contamination has migrated on-site in groundwater from an on-site or off-site source, since the contamination was only encountered in the saturated soils at the bottom of the test boring. An auto repair facility (addressed as 392 Orchard Street) is located on an adjoining property south of the 406 Orchard Street parcel (refer to Figure 2 included in Appendix A).

Fill material generally consisting of mixtures of silt, sand and gravel with lesser amounts of clay, coal, ash, organics, brick, and slag was encountered beginning at the ground surface in each of the test borings to depths up to 8.0 feet. Also, a pocket of ash with some coal was noted from 5.0 feet to 8.0 feet at test boring TB-22 on the 406 Orchard Street parcel. One sample of fill material from test boring TB-19 contained the SVOC pyrene, but at a concentration below NYSDEC recommended cleanup criteria. Total RCRA metals such as arsenic, cadmium and mercury were detected in one or more samples of fill material at concentrations exceeding typical background ranges and/or above recommended soil cleanup objectives as referenced in the NYSDEC's TAGM 4046. The elevated concentrations of detected metals appear attributable to the fill material. Currently, this fill material is generally covered with paved surfaces or the existing building on the 406 Orchard Street parcel. This type of fill material containing elevated concentrations of metals and SVOCs is typical for older industrial and commercial sites in the City of Rochester, New York area.

Although the petroleum contamination encountered at test borings TB-1 and TB-29 appear limited in extent and possibly attributable to off-site sources, remediation, activity use or redevelopment restrictions, or implementation of environmental engineering controls may be warranted if redevelopment is proposed for these areas of the Site.

Based on the work conducted as part of this Phase II Environmental Study, the following items presented in the Phase I ESA report do not appear to have resulted in environmental impacts to the Site and are no longer considered to represent an environmental concern at this time:

- Abandoned dry cleaning machine or water heater on the 370 Orchard Street parcel. One test boring was advanced in this area, and evidence of VOC contamination was not encountered.
- Former underground storage tank; and floor drains and trench drains on the 370 Orchard Street parcel. The suspected location of the former UST system was west of the building on this parcel. Five test borings were advanced in this area, and evidence of petroleum contamination was not encountered. Four test borings were advanced inside the building on this parcel. Two of the borings were advanced inside or next to floor drains or trench drains. Evidence of contamination was observed only in one test boring (TB-29) advanced inside a filled trench drain, but the contamination was encountered starting at an approximate depth of 6.0 feet near the inferred top of bedrock (i.e., the contamination was not observed in proximity to the near surface trench drain structure).

Recommendations

Based on the current use and improvement of the Site and the fact that on-site sources for the petroleum contamination were not identified during this study, further evaluation or remediation of subsurface environmental conditions are not recommended at this time. The findings of this study could be presented to the NYSDEC so that the NYSDEC can pursue evaluating the potential off-site sources of petroleum contamination that have been identified as part of this study.

If the Site is to be redeveloped, or if subsurface media are to be disturbed, it is recommended that an environmental management plan (EMP) be developed and implemented. The EMP should include a site-specific health and safety plan (HASP). The EMP and HASP would be used to assist in the proper handling, disposal or re-use of contaminated media, assist in protecting construction workers and nearby residents/occupants of adjoining properties against exposures to site contaminants, and specify environmental engineering controls (e.g., vapor barriers, passive vent systems, etc.) for planned structures, etc. if the Site is to be redeveloped. Appropriate regulatory agencies (e.g., Monroe County Department of Health, etc.) should be offered the opportunity to review and comment on the EMP and HASP and to evaluate whether remediation activities would be required.

Also, further subsurface studies may be warranted in the future depending upon redevelopment plans. For example, an evaluation of environmental conditions in bedrock may be warranted if construction of basements, sub-grade parking garages, etc. is planned that would require disturbance of the bedrock. In addition, given the former or current industrial and commercial uses of adjoining properties, future owners, developers, lending institutions, etc. may require evaluation of environmental conditions at the Site to further assess the potential risks (monetary, exposure, etc.) that could arise if contamination in the bedrock and underlying groundwater is significant.

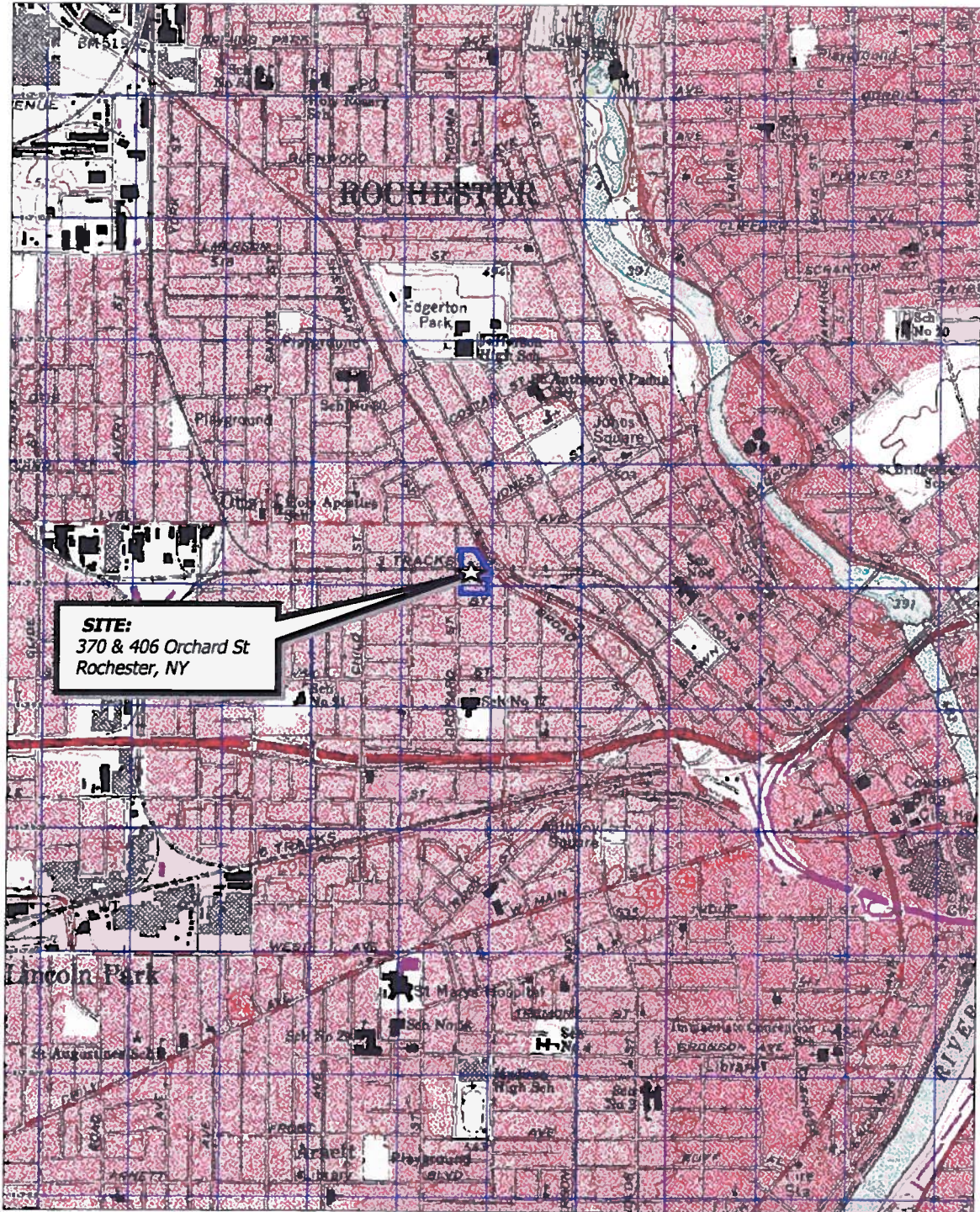
As a precaution to reduce the potential for future environmental impact, it is recommended that the abandoned dry cleaning machine and apparent water heater on the 370 Orchard Street parcel be properly removed and disposed of off-site.

4.0 ABBREVIATIONS

DAY	Day Environmental, Inc.
EMP	Environmental Management Plan
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
ID	Inner Diameter
LNAPL	Light Non-Aqueous Phase Liquid
MCDOH	Monroe County Department of Health
mg/kg	Milligram Per Kilogram
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
ppb	Parts Per Billion
ppm	Parts Per Million
PVC	Polyvinyl Chloride
STARS	Spill Technology and Remediation Series
SVOC	Semi-Volatile Organic Compound
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
ug/kg	Microgram Per Kilogram
ug/l	Microgram Per Liter
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

APPENDIX A


Figures



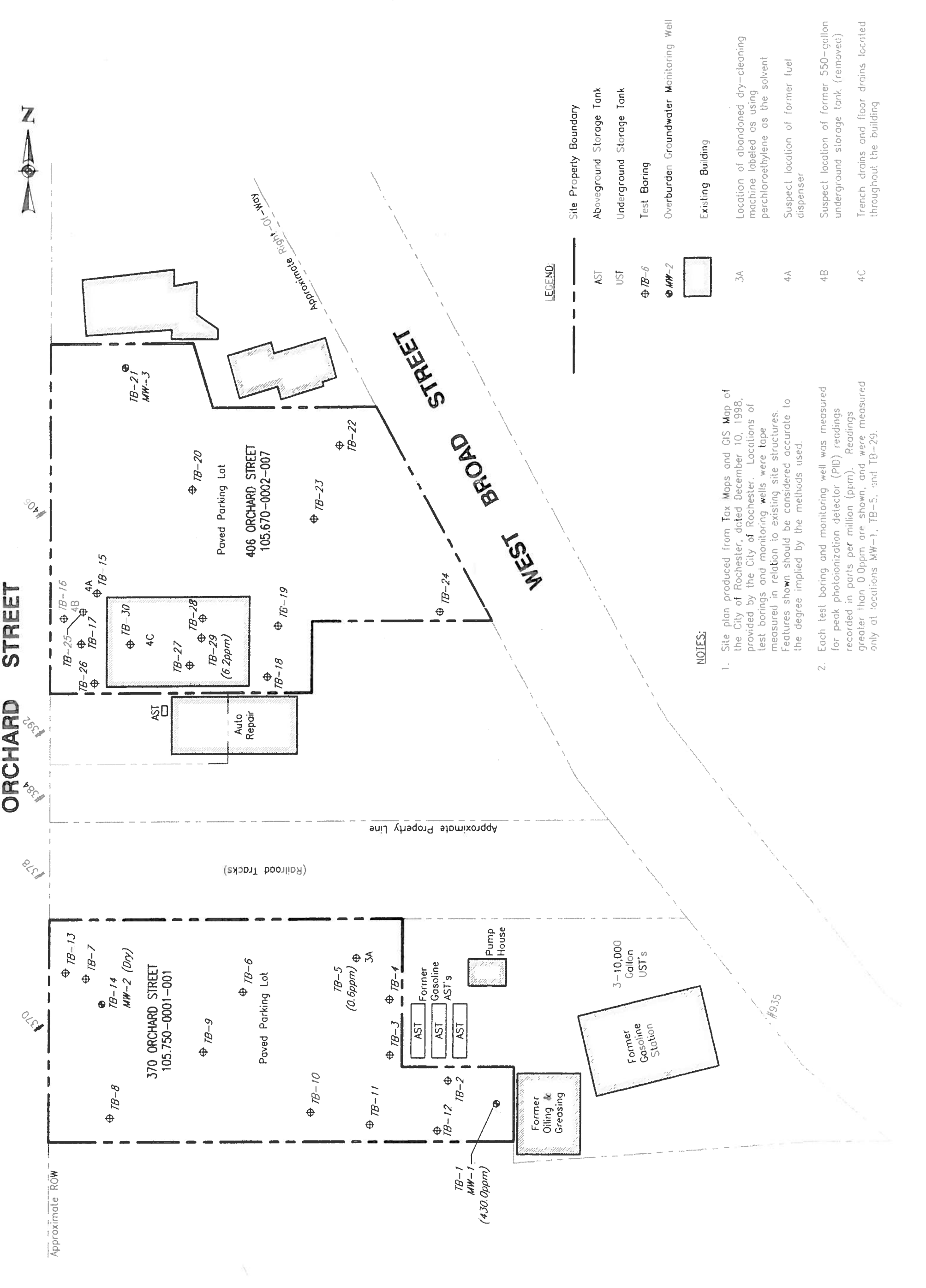
SITE:
370 & 406 Orchard St
Rochester, NY

3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS 544 ft Scale: 1:19,200 Detail: 14-0 Datum: NAD27

Drawing Produced From: 3-D TopoQuads, DeLorme Map Co., referencing USGS quad maps Rochester West (NY) 1995 and Rochester East (NY) 1995. Site Lat/Long: N43d-09.78' - W77d-38.05'

<p>DATE 01/31/2001</p> <p>DRAWN BY Tww</p> <p>SCALE 1" = 2000'</p>	 <p>DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700</p>	<p>PROJECT TITLE 370 & 406 ORCHARD STREET ROCHESTER, NEW YORK</p> <p>PHASE II ENVIRONMENTAL STUDY</p> <p>DRAWING TITLE PROJECT LOCUS MAP</p>	<p>PROJECT NO. 2508S-00</p> <p>FIGURE 1</p> <p>SHEET 1 OF 1</p>
---	--	---	---

DATE 01/03/2001 DESIGNED BY JAD DATE DRAWN 01/05/2001 DRAWN BY TW SCALE 1" = 50' DATE ISSUED 01/09/2001	day ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14623-2700	PROJECT TITLE 370 & 406 ORCHARD STREET ROCHESTER, NEW YORK DRAWING TITLE LIMITED PHASE II ENVIRONMENTAL STUDY Site Plan With Test Boring And Monitoring Well Locations
PROJECT NO. 2508S-00		FIGURE 2 SHEET 1 OF 1



APPENDIX B

Tables

TABLE 1

GROUNDWATER ELEVATION DATA FOR DECEMBER 28, 2000

370 & 406 Orchard Street
Rochester, New York

WELL ID	CURB BOX ELEVATION (FT)	ELEVATION OF PVC WELL CASING (FT)	STATIC WATER LEVEL (SWL) MEASUREMENT (FT)	GROUNDWATER ELEVATION (FT)	DEPTH TO TOP OF FREE PRODUCT (FT)	FREE PRODUCT ELEVATION (FT)	FREE PRODUCT THICKNESS (FT)	(1)ADJUSTED GROUNDWATER ELEVATION (FT)
MW-1	99.53	99.10	8.32	90.78	---	---	---	---
MW-2	98.74	98.45	DRY	---	---	---	---	---
MW-3	99.96	99.56	10.34	89.22	---	---	---	---

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

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

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

--- = Free product not encountered.

TABLE 2

**370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK**

SOIL ANALYTICAL LABORATORY TESTING PROGRAM

Sample Designation/Location	Location	Analysis
2508-01 / TB-1 (8-10')	#370 Orchard St	8260 / 8270 / 310.13
2508-02 / TB-29 (6-6.5')	#406 Orchard St	8260 / 8270 / 310.13 / 8082
2508-03 / TB-19 (0-4')	#406 Orchard St	pH / RCRA Metals / BNA 8270
2508-04 / TB-22 (5-8')	#406 Orchard St	pH / RCRA Metals
2508-05 / TB-6 (0-4')	#370 Orchard St	RCRA Metals
2508-06 / TB-3 (0-4')	#370 Orchard St	RCRA Metals

- 8260 = USEPA Method 8260 TCL and STARS-list volatile organic compounds
- 8270 = USEPA Method 8270 BN STARS-list semi-volatile organic compounds
- BNA 8270 = USEPA Method 8270 BNA TCL semi-volatile organic compounds
- 310.13 = NYSDOH Method 310.13 total petroleum hydrocarbons
- 8082 = USEPA Method 8082 polychlorinated biphenyls
- pH = USEPA Method 9040 pH
- RCRA Metals = USEPA Methods 6010 and 7471 total RCRA metals

TABLE 3

**370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK**

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

SOIL SAMPLES

SAMPLE DESIGNATION AND LOCATION	TPH TEST RESULTS (MG/KG or PPM)	TAGM 4046 Recommended Soil Cleanup Objectives (1)
2508-01 / TB-1 (8-10')	33 LW (Mineral Spirits)	10 (total VOCs)
2508-02 / TB-29 (6-6.5')	3,520 MW (Diesel Fuel)	500 (total SVOCs)

LW = Light Weight

MW = Medium Weight

(1) = Recommended Soil Cleanup Objective as referenced in the January 24, 1994 NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046).

TABLE 4

**370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK**

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

SOIL SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION		NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB) (1)	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB) (2)
	2508-01 TB-1 (8-10')	2508-02 TB-29 (6-6.5')		
Acetone	127	--	NA	200
1,2,4-Trimethylbenzene	20.4	--	100	13,000
sec-Butylbenzene	18.0	--	100	25,000
p-Isopropyltoluene	52.0	--	100	11,000
Naphthalene	251	--	200	13,000
Total VOCs	468.4	0	NA	10,000

- = Not detected above reported laboratory detection limit value.
- NA = Not available.
- (1) = TCLP Alternative Guidance Value as referenced in the August 1992 NYSDEC STARS Memo #1 "Petroleum-Contaminated Soil Guidance Policy".
- (2) = Recommended Soil Cleanup Objective as referenced in the January 24, 1994 NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046), and a supplemental Table 1 dated 1998.

TABLE 5

370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK

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

DETECTED SVOCs	SAMPLE AND LOCATION			NYSDEC STARS MEMO #1 TCLP ALTERNATIVE GUIDANCE VALUES (PPB) (1)	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPB) (2)
	2508-01 TB-1 (8-10.5')	2508-02 TB-29 (6-6.5')	2508-03 TB-19 (0-4')		
Naphthalene	23,400	--	--	200	13,000
Phenanthrene	29,700	--	--	1000	50,000
Pyrene	--	--	991	1000	50,000
TOTAL SVOCs	53,100	0	991	NA	500,000

- = Not detected above reported laboratory detection limit value.
- NA = Not available.
- (1) = TCLP Alternative Guidance Value as referenced in the August 1992 NYSDEC STARS Memo #1 "Petroleum-Contaminated Soil Guidance Policy".
- (2) = Recommended Soil Cleanup Objective as referenced in the January 24, 1994 NYSDEC Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046).

TABLE 6
370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK
TOTAL RCRA METALS TEST RESULTS
IN MG/KG OR PARTS PER MILLION (PPM)
SOIL SAMPLES

DETECTED ANALYTES	SAMPLE AND LOCATION				NYSDEC TAGM 4046 TYPICAL BACKGROUND RANGES (PPM)	NYSDEC TAGM 4046 RECOMMENDED SOIL CLEANUP OBJECTIVE (PPM)
	2508-03 TB-19 (0-4')	2508-04 TB-22 (5-8')	2508-05 TB-6 (0-4')	2508-06 TB-3 (0-4')		
Arsenic	6.50	10.4	8.89	9.72	3-12	7.5 or SB
Barium	34.9	94.1	110	85.7	15-600	300 or SB
Cadmium	1.55	--	0.861	0.963	0.1-1	1 or SB (10) ¹
Chromium	26.9	11.7	13.0	14.1	1.5-40	10 or SB (50) ²
Lead	35.5	231	114	217	200-500	SB
Mercury	0.071	0.843	0.370	0.510	0.001-0.2	0.1
Selenium	2.58	1.22	2.20	--	0.1-3.9	2 or SB
Silver	--	--	--	--	NA	SB

-- = Not detected above reported laboratory detection limit value.
NA = Not available.
SB = Site background.
1 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for cadmium of 10 ppm
2 = 1995 TAGM 4046 "proposed" recommended soil cleanup objective for chromium of 50 ppm.

TABLE 7

**370 & 406 ORCHARD ST.
ROCHESTER, NEW YORK**

GROUNDWATER ANALYTICAL LABORATORY TESTING PROGRAM

Well Location	Sample Date	Sample Designation	Analysis
MW-1	12/28/00	2508S-MW01	8260 / 310.13 / RCRA Metals
MW-3	12/28/00	2508S-MW02	8260

8260 = USEPA Method 8260 TCL and STARS-list volatile organic compounds
310.13 = NYSDOH Method 310.13 total petroleum hydrocarbons
RCRA Metals = USEPA Methods 6010 and 7470 total RCRA metals

TABLE 8

**370 & 406 ORCHARD ST.
ROCHESTER, NEW YORK**

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

DECEMBER 28, 2000 GROUNDWATER SAMPLE

SAMPLE LOCATION	SAMPLE DESIGNATION	TPH TEST RESULTS (PPB)
MW-1	2508S-MW01	7,080 LW (gasoline)

-- = Not detected above reported laboratory detection limit values.
LW = Light Weight

TABLE 9

**370 & 406 ORCHARD ST.
ROCHESTER, NEW YORK**

**SUMMARY OF DETECTED
VOLATILE ORGANIC COMPOUNDS (VOCs)
IN UG/L OR PARTS PER BILLION (PPB)**

DECEMBER 28, 2000 GROUNDWATER SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION		NYSDEC TOGS 1.1.1 GROUNDWATER STANDARDS AND GUIDANCE VALUES (PPB) ⁽¹⁾
	2508S-MW01 from MW-1	2508S-MW02 from MW-3	
Benzene	33.7	--	1.0

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

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

TABLE 10

**370 & 406 ORCHARD ST.
ROCHESTER, NEW YORK**

**TOTAL RCRA METALS TEST RESULTS
IN UG/L OR PARTS PER BILLION (PPB)**

DECEMBER 28, 2000 GROUNDWATER SAMPLE FROM MW-1

DETECTED ANALYTES	Sample 2508S-MW01	NYSDEC TOGS 1.1.1 GROUNDWATER STANDARDS / GUIDANCE VALUES (PPB) (1)
Arsenic	185	25
Barium	865	1,000
Cadmium	--	5
Chromium	202	50
Lead	326	25
Mercury	0.5	0.7
Selenium	73	10
Silver	23	50

-- = Not detected above reported laboratory detection limit value.
NA = Not available.
(1) = Groundwater standard of as referenced in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1) dated June 1998

APPENDIX C

Test Boring Logs and Monitoring Well Logs

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-1 (MW-1)

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: 1.25" PVC well

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: 99.53' **Datum:** 100.00'
Start Date: 12/13/00 **Completion Date:** 12/13/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 10.5 feet
Water Level: 7.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Red brown reworked Silt, some Coal and Ash (FILL) Damp.
2	NA	S-1	0-4	70	NA	0.0		
3						0.0		
4						0.0		
5						0.0		... Moist. Little Gravel.
6	NA	S-2	4-8	80	NA	0.0		Red brown Fine Sandy SILT, trace Clay nodules. Moist.
7						0.0		... Wet at 7.0'.
8						0.6		
9	NA	S-3	8-10.5	50	NA	35.0		
10						430.0		Black SAND and fractured DOLOMITE, some Silt. Wet. Strong petroleum type odors.
11							Refusal at 10.5'	
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-2

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/13/00

Borehole Diameter: 2.25 inches

Water Level: 6.5 feet

Datum: NA

Completion Date: 12/13/00

Borehole Depth: 8.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	75	NA	0.0		Brown reworked Silt, some Sand, trace Ash and Organics (FILL).
3						0.0		
4						0.0		Red brown Sandy SILT, some Gravel.
5						0.0		
6	NA	S-2	4-8	80	NA	0.0		... Trace Gravel. Moist.
7						0.0		... Wet at 6.5'.
8	NA	S-3	8-8.5	100	NA	0.0		... Wet, light brown, some fractured Dolomite.
9								Refusal at 8.5'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-3

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/13/00 **Completion Date:** 12/13/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 7.5 feet
Water Level: 6.5 feet

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	40	NA	0.0		Black brown reworked Silt, some Sand, little Gravel and white/yellow Ash (FILL). Moist.
3						0.0		
4						0.0		... Moist.
5						0.0		Red brown fine SAND and SILT, trace Gravel and Clay nodules. Moist.
6	NA	S-2	4-7.5	85	NA	0.0		
7						0.0		... Wet at 6.5'.
8								Refusal at 7.5'
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-4

Project: 370& 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/13/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/13/00
Borehole Depth: 6.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	100	NA	0.0		Black brown reworked Silt, little Sand and Gravel, trace Clay, Ash and Organics (FILL). Damp.
3						0.0		Light brown SILT, some fine Sand, little Gravel. Damp.
4						0.0		
5	NA	S-2	4-6.5	100	NA	0.0		Brown fine SAND, little Gravel and Silt. Moist to very moist.
6						0.0		
7								Refusal at 6.5'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-5

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/13/00

Borehole Diameter: 2.25 inches

Water Level: 6.0 feet

Datum: NA

Completion Date: 12/13/00

Borehole Depth: 7.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Black brown reworked Silt, little Sand and Gravel, trace Clay, Ash and Brick (FILL). Damp.
2	NA	S-1	0-4	80	NA	0.0		Red brown SILT, little Clay and fine Sand, trace Gravel. Moist.
3						0.0		
4						0.0		
5	NA	S-2	4-7	80	NA	0.0		... Moist.
6						0.0		... Wet at 6.0'.
7						0.6		... Some fractured Dolomite.
8								Refusal at 7.0'
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-6

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/13/00

Borehole Diameter: 2.25 inches

Water Level: Not encountered

Datum: NA

Completion Date: 12/13/00

Borehole Depth: 6.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Black brown reworked Silt, some Sand and Gravel, little gray Ash, (FILL). Moist.
2	NA	S-1	0-4	70	NA	0.0		Red brown SILT, little fine Sand and Gravel, trace Clay. Very moist.
3						0.0		
4						0.0		... Fine Sandy SILT, trace Gravel and Clay. Very moist.
5	NA	S-2	4-6	95	NA	0.0		
6						0.0		Refusal at 6.0'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090



BORING NUMBER: TB-7

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/13/00 **Completion Date:** 12/13/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 6.0 feet
Water Level: 5.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Gray black reworked Sand and Gravel, trace Clay and Silt (FILL). Damp.
2	NA	S-1	0-4	50	NA	0.0		Brown SILT, some Clay and fine Sand, trace Gravel. Moist.
3						0.0		
4						0.0		Brown Silty fine SAND, trace Clay. Moist.
5	NA	S-2	4-6	55	NA	0.0		... Wet at 5.5'
6						0.0		Refusal at 6.0'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090



BORING NUMBER: TB-8

Project: 370 & 406 Orchard Street, Rochester, NY

Project No: 2508S-00

DAY Representative: Jeff Danzinger

Boring Location: See Site Plan

Drilling Contractor: Marcor Remediation, Inc.

Ground Surface Elevation: NA

Datum: NA

Drilling Rig: Geoprobe

Start Date: 12/13/00

Completion Date: 12/13/00

Sampling Method: Macrocore Direct Push

Borehole Diameter: 2.25 inches

Borehole Depth: 7.0 feet

Completion Method: Backfilled with cuttings

Water Level: 6.8 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt
2	NA	S-1	0-4	80	NA	0.0		Gray black reworked Sand, Gravel and Silt (FILL). Moist.
3						0.0		... Brown. Moist.
4						0.0		Brown SILT, little fine Sand, trace Clay and Gravel.
5						0.0		
6	NA	S-2	4-7	30	NA	0.0		
7						0.0		... Wet at 6.8'.
8								Refusal at 7.0'
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-9

Project: 370 & 406 Orchard Street, Rochester, NY

Project No: 2508S-00

DAY Representative: Jeff Danzinger

Boring Location: See Site Plan

Drilling Contractor: Marcor Remediation, Inc.

Ground Surface Elevation: NA

Datum: NA

Drilling Rig: Geoprobe

Start Date: 12/13/00

Completion Date: 12/13/00

Sampling Method: Macrocore Direct Push

Borehole Diameter: 2.25 inches

Borehole Depth: 5.5 feet

Completion Method: Backfilled with cuttings

Water Level: 5.2 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	95	NA	0.0		Gray, black, brown reworked Silt, Sand and Gravel, trace Organics (FILL). Damp.
3						0.0		Red brown SILT, little to some fine Sand. Damp.
4						0.0		
5	NA	S-2	4-5.5	90	NA	0.0		... Wet at 5.2'. Some fractured Dolomite.
6						0.0		Refusal at 5.5'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-10

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/13/00
Borehole Diameter: 2.25 inches
Water Level: 7.0 feet
Datum: NA
Completion Date: 12/13/00
Borehole Depth: 8.4 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	80	NA	0.0		Gray, black, brown reworked Sand, Silt and Gravel, little Clay, trace yellow Ash (FILL). Damp to moist.
3						0.0		... Red brown.
4						0.0		Brown fine SAND, little Silt. Moist.
5						0.0		
6	NA	S-2	4-8	85	NA	0.0		... Wet at 7.0', some fractured Dolomite.
7						0.0		
8	NA	S-3	8-8.4	100	NA	0.0		... Wet.
9								Refusal at 8.4'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-11

Project: 370 & 406 Orchard Street, Rochester, NY

Project No: 2508S-00

DAY Representative: Jeff Danzinger

Boring Location: See Site Plan

Drilling Contractor: Marcor Remediation, Inc.

Ground Surface Elevation: NA

Datum: NA

Drilling Rig: Geoprobe

Start Date: 12/13/00

Completion Date: 12/13/00

Sampling Method: Macrocore Direct Push

Borehole Diameter: 2.25 inches

Borehole Depth: 8.7 feet

Completion Method: Backfilled with cuttings

Water Level: 6.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	80	NA	0.0		Gray, black, reworked Sand and Silt, some Gravel, trace Organics and Coal (FILL). Moist.
3						0.0		... Red brown. Moist
4						0.0		... Red brown. Moist.
5						0.0		Red brown SILT, some fine sand. Moist.
6	NA	S-2	4-8	95	NA	0.0		
7						0.0		Brown fine SAND, little Silt and fractured Dolomite.
8	NA	S-3	8-8.7	100	NA	0.0		
9								Refusal at 8.7'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-12

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/13/00

Borehole Diameter: 2.25 inches

Water Level: Not encountered

Datum: NA

Completion Date: 12/13/00

Borehole Depth: 5.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	40	NA	0.0		Gray brown reworked Silt, some Sand and Gravel, trace Clay, Coal and gray Ash (FILL). Moist.
3						0.0		
4						0.0		... Red brown. Moist.
5	NA	S-2	4-5.5	75	NA	0.0		Red brown SILT, trace Sand and Gravel.
6						0.0		Refusal at 5.5'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090



BORING NUMBER: TB-13

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/13/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/13/00
Borehole Depth: 4.9 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Gray brown to red brown reworked Silt, some Sand and Gravel, trace Brick (FILL). Moist.
2	NA	S-1	0-4	45	NA	0.0		
3						0.0		
4	NA	S-2	4-4.9	50	NA			... Some Brick. Moist.
5								Refusal at 4.9'
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-14 (MW-2)

Project: 370& 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: 1.25" PVC Well

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: 98.74' **Datum:** 100.00'
Start Date: 12/13/00 **Completion Date:** 12/13/00
Borehole Diameter: 3.25 inches **Borehole Depth:** 6.5 feet
Water Level: 5.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Gray brown to red brown reworked Sand and Gravel, little to some Silt, trace Brick (FILL). Moist.
2	NA	S-1	0-4	80	NA	0.0		Light brown fine Sandy SILT, trace Gravel. Very moist.
3						0.0		
4						0.0		
5	NA	S-2	4-6.5	95	NA	0.0		Brown fine SAND and SILT, little Gravel. Moist to wet.
6						0.0		Fractured DOLOMITE, some Sand and Silt. Damp.
7								Refusal at 6.5'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-15

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/13/00

Borehole Diameter: 2.25 inches

Water Level: 5.0 feet

Datum: NA

Completion Date: 12/13/00

Borehole Depth: 6.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt. Gray black reworked Silt, Sand and Gravel, some Ash, Coal and Brick (FILL). Damp to moist.
2	NA	S-1	0-4	100	NA	0.0		
3						0.0		
4								... Moist.
5	NA	S-2	4-6	95	NA	0.0		Brown fine Sandy SILT, trace Gravel and Clay. ... Wet at 5.0'. ... Some fractured Dolomite.
6						0.0		
7								Refusal at 6.0'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-16

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/13/00 **Completion Date:** 12/13/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 8.0 feet
Water Level: 6.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Topsoil (FILL).
2	NA	S-1	0-4	70	NA	0.0		Gray, black, brown reworked Sand, Gravel and Silt, some Brick (FILL). Moist.
3						0.0		Red brown SAND and SILT, some Gravel. Moist.
4						0.0		
5						0.0		Red brown fine Sandy SILT, little to some Clay, trace Gravel.
6	NA	S-2	4-8	90	NA	0.0		... Wet at 6'.
7						0.0		
8						0.0		... Some fractured Dolomite.
9								Refusal at 8.0'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-17

Project: 370 & 406 Orchard Street, Rochester, NY

Project No: 2508S-00

DAY Representative: Jeff Danzinger

Boring Location: See Site Plan

Drilling Contractor: Marcor Remediation, Inc.

Ground Surface Elevation: NA

Datum: NA

Drilling Rig: Geoprobe

Start Date: 12/13/00

Completion Date: 12/13/00

Sampling Method: Macrocore Direct Push

Borehole Diameter: 2.25 inches

Borehole Depth: 5.5 feet

Completion Method: Backfilled with cuttings

Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Black brown reworked Sand, Gravel and Silt, little Slag and Coal (FILL). Moist.
2	NA	S-1	0-4	65	NA	0.0		Red brown SILT, some fine Sand and Clay, little Gravel. Moist.
3						0.0		
4						0.0		Red brown fine Sandy SILT. Very moist.
5	NA	S-2	4-5.5	100	NA	0.0		... Some fractured Dolomite.
6						0.0		Refusal at 5.5'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-18

Project: 370 & 406 Orchard Street, Rochester, NY

Project No: 2508S-00

DAY Representative: Jeff Danzinger

Boring Location: See Site Plan

Drilling Contractor: Marcor Remediation, Inc.

Ground Surface Elevation: NA

Datum: NA

Drilling Rig: Geoprobe

Start Date: 12/13/00

Completion Date: 12/13/00

Sampling Method: Macrocore Direct Push

Borehole Diameter: 2.25 inches

Borehole Depth: 5.5 feet

Completion Method: Backfilled with cuttings

Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1								Brown Topsoil.
2	NA	S-1	0-4	5	NA	0.0		
3								Light brown SILT, some Sand and fractured Dolomite. Moist.
4	NA	S-2	4-5.5	90	NA	0.0		
5								Refusal at 5.5'
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-19

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/13/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/13/00
Borehole Depth: 5.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Black brown reworked Silt and Sand, little Gravel, trace Coal and Brick (FILL). Moist. ... 0.1' thick layer of soft white Ash or other material.
2	NA	S-1	0-4	65	NA	0.0		
3						0.0		
4						0.0		
4	NA	S-2	4-5	100	NA	0.0		Brown SILT, some Clay, little fine Sand. Moist. ... Some Sand and fractured Dolomite. Moist.
5						0.0		Refusal at 5.0'
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-20

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/14/00 **Completion Date:** 12/14/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 6.0 feet
Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	70	NA	0.0		Black to gray brown reworked Sand and Silt, some Gravel, little Brick (FILL). Moist.
3						0.0		
4						0.0		
5	NA	S-2	4-6	100	NA	0.0		Brown SAND and fractured DOLOMITE, little Silt. Moist.
6						0.0		Red brown SILT and SAND. Very moist.
7								Refusal at 6.0'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-21 (MW-3)

Project: 370& 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: 1.25" PVC Well

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: 99.96'

Start Date: 12/14/00

Borehole Diameter: 3.25 inches

Water Level: 9.5 feet

Datum: 100.00'

Completion Date: 12/14/00

Borehole Depth: 11.0 feet

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Black, gray, brown reworked Silt and Sand, some Slag, Brick and Gravel, trace Ash (FILL). Moist.
2	NA	S-1	0-4	75	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown SILT, little to some Sand and Gravel, some Clay. Moist.
6	NA	S-2	4-8	90	NA	0.0		
7						0.0		
8						0.0		Fine SAND, little Silt. Moist.
9	NA	S-3	8-11	100		0.0		
10						0.0		
11						0.0		
12								Refusal at 11.0'
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-22

Project: 370 & 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/14/00

Borehole Diameter: 2.25 inches

Water Level: Not encountered

Datum: NA

Completion Date: 12/14/00

Borehole Depth: 23.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	85	NA	0.0		Black, gray, brown reworked Silt and Sand, little Clay, some Brick, Ash, Slag and Coal (FILL). Moist.
3						0.0		
4						0.0		
5						0.0		
6	NA	S-2	4-8	65	NA	0.0		Gray yellow Ash, some Coal (FILL). Moist.
7						0.0		
8						0.0		
9						0.0		Brown SILT, some Clay. Moist.
10	NA	S-3	8-12	90	NA	0.0		
11						0.0		... Gray, little Gravel. Moist.
12						0.0		
13						0.0		Gray brown CLAY and SILT, trace Gravel and Sand. Very moist.
14	NA	S-4	12-16	75	NA	0.0		
15						0.0		
16						0.0		
17						0.0		... Little Sand and Gravel. Moist.
18	NA	S-5	16-20	95	NA	0.0		
19						0.0		
20						0.0		
21	NA	S-6	20-23	100	NA	0.0		... Some Sand and Gravel. Very moist.
22						0.0		
23						0.0		... Piece of Wood.
24								Bottom at 23.0'
25								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-23

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/14/00 **Completion Date:** 12/14/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 5.0 feet
Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	65	NA	0.0		Gray brown reworked Silt and Sand, some Concrete and Brick, little Ash and Slag (FILL). Moist.
3						0.0		
4						0.0		
4	NA	S-2	4-5	0	NA			... No recovery.
5								Refusal at 5.0'
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-24

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/14/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/14/00
Borehole Depth: 4.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Asphalt.
2	NA	S-1	0-4	65	NA	0.0		Black brown reworked Silt and Sand, some Slag in top 1.0', trace Coal, Ash and Gravel (FILL). Moist.
3						0.0		Brown Clayey SILT, trace Sand and Gravel. Moist.
4	NA	S-2	4-4.5	80	NA	0.0		... Some Sand and fractured Dolomite. Moist.
5								Refusal at 4.5'
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090



BORING NUMBER: TB-25

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/14/00 **Completion Date:** 12/14/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 6.0 feet
Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Black brown reworked Silt and Sand, some Slag, little Gravel, trace Brick (FILL). Moist.
2	NA	S-1	0-4	60	NA	0.0		
3						0.0		
4						0.0		
5	NA	S-2	4-6	100	NA	0.0		Brown SILT and SAND, little Gravel. Moist.
6						0.0		Refusal at 6.0'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090



BORING NUMBER: TB-26

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/14/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/14/00
Borehole Depth: 5.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Silt Topsoil (FILL). Moist.
2	NA	S-1	0-4	60	NA	0.0		Reworked Silt, little Sand and Gravel, trace Coal (FILL).
3						0.0		
4						0.0		Red brown SILT, some Clay, little Sand. Moist.
5	NA	S-2	4-5	80	NA	0.0		... Trace Gravel and fractured Dolomite. Very moist.
6								Refusal at 5.0'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-27

Project: 370& 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings.

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 12/14/00 **Completion Date:** 12/14/00
Borehole Diameter: 2.25 inches **Borehole Depth:** 6.5 feet
Water Level: Not encountered

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Concrete.
2	NA	S-1	0-4	70	NA	0.0		Brown black reworked Silt and Sand, some Slag, trace Ash (FILL). Damp.
3						0.0		Red brown SILT, some Sand. Very moist.
4						0.0		
5	NA	S-2	4-6.5	90	NA	0.0		
6						0.0		
7								... Some fractured Dolomite. Moist.
8								Refusal at 6.5'
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-28

Project: 370& 406 Orchard Street, Rochester, NY

DAY Representative: Jeff Danzinger

Drilling Contractor: Marcor Remediation, Inc.

Drilling Rig: Geoprobe

Sampling Method: Macrocore Direct Push

Completion Method: Backfilled with cuttings

Project No: 2508S-00

Boring Location: See Site Plan

Ground Surface Elevation: NA

Start Date: 12/14/00

Borehole Diameter: 2.25 inches

Water Level: 5.8 feet

Datum: NA

Completion Date: 12/14/00

Borehole Depth: 6.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Concrete.
2	NA	S-1	0-4	70	NA	0.0		Brown black reworked Sand and Silt, some Slag, trace Coal (FILL). Damp.
3						0.0		
4						0.0		Brown SILT, some Sand. Moist.
5	NA	S-2	4-6.5	100	NA	0.0		... Red brown, some Sand and Clay, trace Gravel. Moist.
6						0.0		... Wet at 5.8'.
7								Refusal at 6.5'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-29

Project: 370& 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/14/00
Borehole Diameter: 2.25 inches
Water Level: 6.0 feet
Datum: NA
Completion Date: 12/14/00
Borehole Depth: 6.5 feet

Depth (feet)	Blows per 0.5	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Concrete.
2	NA	S-1	0-4	35	NA	0.0		Black, brown, gray reworked Silt and Sand, some Slag, little Coal, trace Brick and Gravel (FILL). Damp.
3						0.0		
4						0.0		Red brown SILT, some Sand and Clay. Very moist.
5	NA	S-2	4-6.5	100	NA	0.0		... Trace Gravel. Very moist.
6						0.0		... Wet at 6.0'. Gray brown. Petroleum type odor.
7						6.2		Refusal at 6.5'
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

Day Environmental, Inc.
2144 Brighton-Henrietta T.L. Rd.
Rochester, New York 14623
(716) 292-1090

BORING NUMBER: TB-30

Project: 370 & 406 Orchard Street, Rochester, NY
DAY Representative: Jeff Danzinger
Drilling Contractor: Marcor Remediation, Inc.
Drilling Rig: Geoprobe
Sampling Method: Macrocore Direct Push
Completion Method: Backfilled with cuttings

Project No: 2508S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 12/14/00
Borehole Diameter: 2.25 inches
Water Level: Not encountered
Datum: NA
Completion Date: 12/14/00
Borehole Depth: 5.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Concrete.
2	NA	S-1	0-4	60	NA	0.0		Dark brown reworked Silt, trace Sand, Clay, Gravel and Coal (FILL). Damp.
3						0.0		Red brown SILT, little Sand and Clay, trace Gravel. Moist.
4						0.0		
5	NA	S-2	4-5.5	65	NA	0.0		... Moist.
6						0.0		Refusal at 5.5'
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

APPENDIX D

Well Development Logs and Well Sampling Logs

**WELL DEVELOPMENT DATA
MW-1**

JOB#: 2508S-00

SITE LOCATION: 370 and 406 Orchard St. Rochester

DATE/ TIME	12/22/00	1100	1104	1107	1110	1115	
EVACUATION METHOD	3' Disposable Bailer						
PID/FID (PPM)	44.6						
DEPTH OF WELL (FT)	9.89					9.95	
STATIC WATER LEVEL (SWL) FT	7.86						
VOLUME EVACUATED (GAL)		0.13	0.13	0.13	0.13	0.13	
TOTAL VOLUME EVACUATED (GAL)	Initial	0.13	0.26	0.39	0.52	0.65	
TEMPERATURE (°C)	43.4	46.2	46.4	46.6	46.4	45.3	
pH	5.95	6.21	6.23	6.27	6.34	6.40	
CONDUCTIVITY (umho/cm)	1229	1042	1170	1144	1143	1127	
TURBIDITY (NTU)	-	-	-	-	-	-	
VISUAL OBSERVATION	Muddy	Muddy	Muddy	Muddy	Muddy	Muddy	

LEGEND: NC = Not Collected
ND = Not Detected

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

**WELL DEVELOPMENT DATA
MW-2**

JOB#: 2508S-00

SITE LOCATION: 370 and 406 Orchard St., Rochester

DATE/ TIME	12/22/00																			
EVACUATION METHOD	3' Disposable Bailer																			
PID/FID (PPM)	0.0																			
DEPTH OF WELL (FT)	6.32																			
STATIC WATER LEVEL (SWL) FT	DRY																			
VOLUME EVACUATED (GAL)																				
TOTAL VOLUME EVACUATED (GAL)																				
TEMPERATURE (°C)																				
pH																				
CONDUCTIVITY (umho/cm)																				
TURBIDITY (NTU)																				
VISUAL OBSERVATION																				

LEGEND: NC = Not Collected
ND = Not Detected

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

**WELL DEVELOPMENT DATA
MW-3**

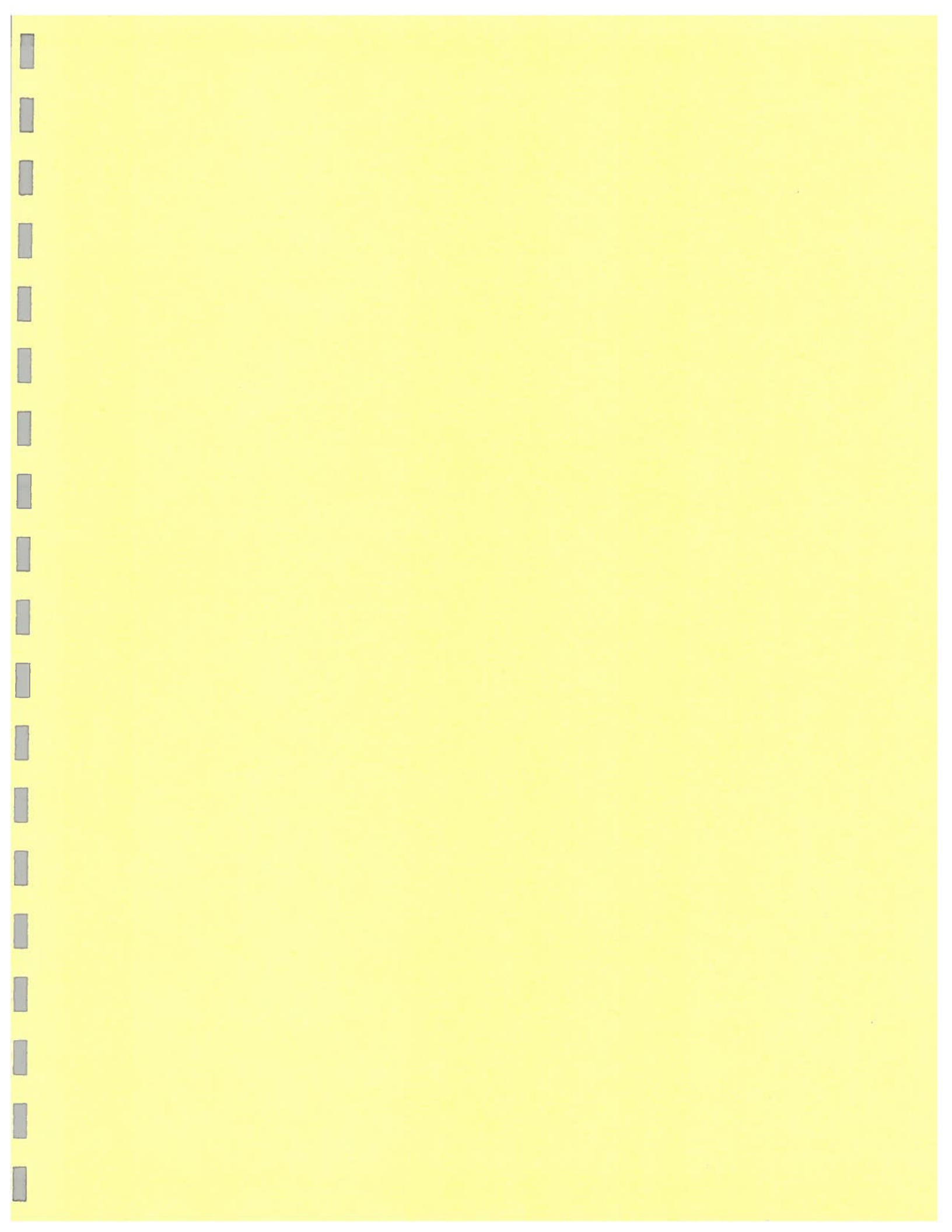
JOB#: 2508S-00

SITE LOCATION: 370 and 406 Orchard St. Rochester

DATE/ TIME	12/22/00	1010	1014	1017	1020	1024	
EVACUATION METHOD	3' Disposable Bailer						
PID/FID (PPM)	6.1						
DEPTH OF WELL (FT)	10.92						10.94
STATIC WATER LEVEL (SWL) FT	10.01						
VOLUME EVACUATED (GAL)		0.05	0.05	0.05	0.05	0.05	
TOTAL VOLUME EVACUATED (GAL)	Initial	0.05	0.10	0.15	0.20	0.25	
TEMPERATURE (°C)	54.6	51.6	50.3	49.6	49.3	48.0	
pH	6.51	6.41	6.40	6.29	6.27	6.24	
CONDUCTIVITY (umho/cm)	1228	1027	880	872	966	967	
TURBIDITY (NTU)	-	-	-	-	-	-	
VISUAL OBSERVATION	Muddy	Muddy	Muddy	Muddy	Muddy	Muddy	

LEGEND: NC = Not Collected
ND = Not Detected

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



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

WELL MW-1

SECTION 1 - SITE INFORMATION	
SITE LOCATION: <u>370 & 406 Orchard Street, Rochester, NY</u>	JOB #: <u>2508S-00</u>
PROJECT NAME: <u>Phase II Environmental Study</u>	DATE: <u>12/28/00</u>
SAMPLE COLLECTOR(S): <u>Aaron Farrell</u>	
WEATHER CONDITIONS: <u>Sunny, Breezy, ~20°F</u>	PID IN WELL (PPM): <u>14.6</u>

SECTION 2 - PURGE INFORMATION	
DEPTH OF WELL [FT]: <u>9.86</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
STATIC WATER LEVEL (SWL) [FT]: <u>8.32</u>	(MEASURED FROM T.O.C.)
DEPTH OF WATER COLUMN [FT]: <u>1.54</u>	(DEPTH OF WELL - SWL)
CALCULATED VOL. OF H ₂ O PER WELL CASING [GAL]: <u>0.1</u>	CASING DIA.: <u>1.25"</u>
CALCULATIONS:	
CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611
CALCULATIONS VOL. OF H ₂ O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT	
CALCULATED PURGE VOLUME [GAL]: <u>0.3</u>	(3 TIMES CASING VOLUME)
ACTUAL VOLUME PURGED [GAL]: <u>~0.3</u>	
PURGE METHOD: <u>3' disposable bailer</u>	PURGE START: <u>12:50</u> END: <u>12:55</u>

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS			
SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
2508S-MW01	12/28/00 @ 13:15	3' disposable bailer	8260 TCL & STARS Total RCRA metals TPH 310.13

SECTION 4 - WATER QUALITY DATA					
SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	VISUAL
8.34	7.4	7.6	-	-	Muddy, Petroleum-Type Odor

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

WELL MW-3

SECTION 1 - SITE INFORMATION	
SITE LOCATION: <u>370 & 406 Orchard Street, Rochester, NY</u>	JOB #: <u>2508S-00</u>
PROJECT NAME: <u>Phase II Environmental Study</u>	DATE: <u>12/28/00</u>
SAMPLE COLLECTOR(S): <u>Aaron Farrell</u>	
WEATHER CONDITIONS: <u>Sunny, Breezy, ~20°F</u>	PID IN WELL (PPM): <u>6.7</u>

SECTION 2 - PURGE INFORMATION	
DEPTH OF WELL [FT]: <u>10.93</u>	(MEASURED FROM TOP OF CASING - T.O.C.)
STATIC WATER LEVEL (SWL) [FT]: <u>10.34</u>	(MEASURED FROM T.O.C.)
DEPTH OF WATER COLUMN [FT]: <u>0.59</u>	(DEPTH OF WELL - SWL)
CALCULATED VOL. OF H ₂ O PER WELL CASING [GAL]: <u>0.04</u>	CASING DIA.: <u>1.25"</u>
CALCULATIONS:	
CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¾" (0.0625)	0.023
1" (0.0833)	0.041
1¼" (0.1041)	0.063
2" (0.1667)	0.1632
3" (0.250)	0.380
4" (0.3333)	0.6528
4½" (0.375)	0.826
6" (0.5000)	1.4688
8" (0.666)	2.611
CALCULATIONS VOL. OF H ₂ O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT	
CALCULATED PURGE VOLUME [GAL]: <u>0.11</u>	(3 TIMES CASING VOLUME)
ACTUAL VOLUME PURGED [GAL]: <u>DRY @ ~0.05</u>	
PURGE METHOD: <u>3' disposable bailer</u>	PURGE START: <u>12:32</u> END: <u>12:38</u>

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS			
SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
2508S-MW03	12/28/00 @ 14:00	3' disposable bailer	8260 TCL & STARS

SECTION 4 - WATER QUALITY DATA					
SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY μS/cm	TURBIDITY (NTU)	VISUAL
10.33	-	-	-	-	-

APPENDIX E

Analytical Laboratory Data

Soil Samples

PARADIGM
Environmental
Services, Inc.

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

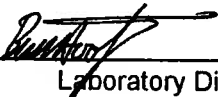
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental, Inc Lab Project No.: 00-2907
Client Job Site: 370 & 406 Orchard Street Lab Sample No.: 10300
Rochester, New York
Client Job No.: 2508S-00 Sample Type: Soil
Field Location: TB-1 (8-10.5') Date Sampled: 12/13/00
Field ID No: 2508-01 Date Received: 12/15/00
Date Analyzed: 12/22/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Light Weight PHC as Mineral Spirits	33,000	9,770

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

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

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

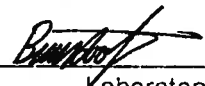
Laboratory Analysis For Petroleum Hydrocarbons in Soil/Solid Matrix

Client: Day Environmental, Inc Lab Project No.: 00-2907
Lab Sample No.: 10301
Client Job Site: 370 & 406 Orchard Street
Rochester, New York Sample Type: Soil
Client Job No.: 2508S-00
Date Sampled: 12/17/00
Field Location: TB-29 (6-6.5') Date Received: 12/15/00
Field ID No: 2508-02 Date Analyzed: 12/22/00

Petroleum Hydrocarbon	Result (ug/Kg)	Reporting Limit (ug/Kg)
Medium Weight PHC as Diesel Fuel	3,520,000	86,500

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

Comments: BDL denotes Below Detection Limit

Approved By: 
Laboratory Director

PARADIGM
Environmental
Services, Inc.

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

Client: **Day Environmental, Inc**

Lab Project No.: 00-2907

Client Job Site: 370 & 406 Orchard Street
 Rochester, New York

Sample Type: Water
 Method: EPA 9040


Client Job No.: 2508S-00

Date(s) Sampled: 12/13-14/2000
 Date Received: 12/15/2000
 Date Analyzed: 12/15/2000

Lab Sample No.	Field ID No.	Field Location	pH Results
10302	2508-03	TB-19 (0-4')	7.49
10303	2508-04	TB-22 (5-8')	8.24

ELAP ID No.: 10958

Comments:

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/Oil

Client: Day Environmental, Inc **Lab Project No.:** 00-2907
Client Job Site: 370 & 406 Orchard Street **Lab Sample No.:** 10301
Client Job No.: 2508S-00 **Sample Type:** Soil
Field Location: TB-29 (6-6.5') **Date Sampled:** 12/14/00
Field ID No: 2508-02 **Date Received:** 12/15/00
Date Analyzed: 12/22/00

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

Analytical Method: EPA 8082

ELAP ID No.: 10958

Comments: ND denotes Not Detected.

Approved By: 
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:	<u>Day Environmental, Inc.</u>	Lab Project No:	00-2907
Client Job Site:	370 + 406 Orchard Street Rochester, New York	Lab Sample No:	10300
Client Job No:	2508S-00	Sample Type:	Soil
Field Location:	TB-1 (8-10.5')	Date Sampled:	12/13/00
Field ID No:	2508-01	Date Received:	12/15/00
		Date Analyzed:	12/20/00

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 8.85	Benzene	ND< 8.85
Bromomethane	ND< 8.85	Chlorobenzene	ND< 8.85
Bromoform	ND< 8.85	Ethylbenzene	ND< 8.85
Carbon tetrachloride	ND< 8.85	Toluene	ND< 8.85
Chloroethane	ND< 8.85	m,p - Xylene	ND< 8.85
Chloromethane	ND< 8.85	o - Xylene	ND< 8.85
2-Chloroethyl vinyl ether	ND< 8.85	Styrene	ND< 8.85
Chloroform	ND< 8.85		
Dibromochloromethane	ND< 8.85		
1,1-Dichloroethane	ND< 8.85		
1,2-Dichloroethane	ND< 8.85		
1,1-Dichloroethene	ND< 8.85		
cis-1,2-Dichloroethene	ND< 8.85		
trans-1,2-Dichloroethene	ND< 8.85		
1,2-Dichloropropane	ND< 8.85		
cis-1,3-Dichloropropene	ND< 8.85		
trans-1,3-Dichloropropene	ND< 8.85		
Methylene chloride	ND< 22.1		
1,1,2,2-Tetrachloroethane	ND< 8.85		
Tetrachloroethene	ND< 8.85		
1,1,1-Trichloroethane	ND< 8.85		
1,1,2-Trichloroethane	ND< 8.85		
Trichloroethene	ND< 8.85		
Vinyl Chloride	ND< 8.85		
		<u>Ketones & Misc.</u>	
		Acetone	127
		Vinyl acetate	ND< 22.1
		2-Butanone	ND< 22.1
		4-Methyl-2-pentanone	ND< 22.1
		2-Hexanone	ND< 22.1
		Carbon disulfide	ND< 22.1

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 Soil/Sludge
(Additional 8260 Compounds)**

Client: Day Environmental, Inc.

Lab Project No.: 00-2907

Client Job Site: 370 + 406 Orchard Street
Rochester, New York

Lab Sample No.: 10300

Client Job No.: 2508S-00

Sample Type: Soil

Field Location: TB-1 (8-10.5')

Date Sampled: 12/13/00

Field ID No.: 2508-01

Date Received: 12/15/00

Date Analyzed: 12/20/00

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 8.85
Isopropylbenzene	ND< 8.85
n-Propylbenzene	ND< 8.85
1,3,5-Trimethylbenzene	ND< 8.85
tert-Butylbenzene	ND< 8.85
1,2,4-Trimethylbenzene	20.4
sec-Butylbenzene	18.0
p-Isopropyltoluene	52.0
n-Butylbenzene	ND< 8.85
Naphthalene	251

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, Inc.

Lab Project No: 00-2907

Client Job Site: 370 + 406 Orchard Street
Rochester, New York

Lab Sample No: 10301

Client Job No: 2508S-00

Sample Type: Soil

Field Location: TB-29 (6-6.5')

Date Sampled: 12/14/00

Field ID No: 2508-02

Date Received: 12/15/00

Date Analyzed: 12/20/00

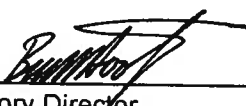
VOLATILE HALOCARBONS		RESULTS (ug/Kg)	VOLATILE AROMATICS		RESULTS (ug/Kg)
Bromodichloromethane		ND< 8.69	Benzene		ND< 8.69
Bromomethane		ND< 8.69	Chlorobenzene		ND< 8.69
Bromoform		ND< 8.69	Ethylbenzene		ND< 8.69
Carbon tetrachloride		ND< 8.69	Toluene		ND< 8.69
Chloroethane		ND< 8.69	m,p - Xylene		ND< 8.69
Chloromethane		ND< 8.69	o - Xylene		ND< 8.69
2-Chloroethyl vinyl ether		ND< 8.69	Styrene		ND< 8.69
Chloroform		ND< 8.69			
Dibromochloromethane		ND< 8.69	<u>Ketones & Misc.</u>		
1,1-Dichloroethane		ND< 8.69	Acetone		ND< 43.5
1,2-Dichloroethane		ND< 8.69	Vinyl acetate		ND< 21.7
1,1-Dichloroethene		ND< 8.69	2-Butanone		ND< 21.7
cis-1,2-Dichloroethene		ND< 8.69	4-Methyl-2-pentanone		ND< 21.7
trans-1,2-Dichloroethene		ND< 8.69	2-Hexanone		ND< 21.7
1,2-Dichloropropane		ND< 8.69	Carbon disulfide		ND< 21.7
cis-1,3-Dichloropropene		ND< 8.69			
trans-1,3-Dichloropropene		ND< 8.69			
Methylene chloride		ND< 21.7			
1,1,2,2-Tetrachloroethane		ND< 8.69			
Tetrachloroethene		ND< 8.69			
1,1,1-Trichloroethane		ND< 8.69			
1,1,2-Trichloroethane		ND< 8.69			
Trichloroethene		ND< 8.69			
Vinyl Chloride		ND< 8.69			

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 Soil/Sludge
(Additional 8260 Compounds)**

Client: Day Environmental, Inc. **Lab Project No.:** 00-2907
Client Job Site: 370 + 406 Orchard Street **Lab Sample No.:** 10301
Rochester, New York **Sample Type:** Soil
Client Job No.: 2508S-00 **Date Sampled:** 12/13/00
Field Location: TB-29 (6-6.5') **Date Received:** 12/15/00
Field ID No.: 2508-02 **Date Analyzed:** 12/20/00


VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 8.69
Isopropylbenzene	ND< 8.69
n-Propylbenzene	ND< 8.69
1,3,5-Trimethylbenzene	ND< 8.69
tert-Butylbenzene	ND< 8.69
1,2,4-Trimethylbenzene	ND< 8.69
sec-Butylbenzene	ND< 8.69
p-Isopropyltoluene	ND< 8.69
n-Butylbenzene	ND< 8.69
Naphthalene	ND< 21.7

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
Client Job Site: 370 & 406 Orchard Street
Rochester NY
Client Job No.: 2508S-00
Field Location: 2508-03/TB-19(0-4')
Field ID No.: N/A

Lab Project No.: 00-2907
Lab Sample No.: 10302
Sample Type: Soil
Date Sampled: 12/13/2000
Date Received: 12/15/2000

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	12/18/2000	SW846 6010	6.50
Barium	12/18/2000	SW846 6010	34.9
Cadmium	12/18/2000	SW846 6010	1.55
Chromium	12/18/2000	SW846 6010	26.9
Lead	12/19/2000	SW846 6010	35.5
Mercury	12/19/2000	SW846 7471	0.071
Selenium	12/18/2000	SW846 6010	2.58
Silver	12/18/2000	SW846 6010	<1.03

ELAP ID No.:10958

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.:** 00-2907
Client Job Site: 370 & 406 Orchard Street **Lab Sample No.:** 10303
Client Job No.: 2508S-00 **Sample Type:** Soil
Field Location: 2508-04/TB-22(5-8') **Date Sampled:** 12/14/2000
Field ID No.: N/A **Date Received:** 12/15/2000

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	12/18/2000	SW846 6010	10.4
Barium	12/18/2000	SW846 6010	94.1
Cadmium	12/18/2000	SW846 6010	<0.611
Chromium	12/18/2000	SW846 6010	11.7
Lead	12/19/2000	SW846 6010	231
Mercury	12/19/2000	SW846 7471	0.843
Selenium	12/18/2000	SW846 6010	1.22
Silver	12/18/2000	SW846 6010	<1.22

ELAP ID No.:10958

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
Client Job Site: 370 & 406 Orchard Street
Rochester NY
Client Job No.: 2508S-00
Field Location: 2508-05/TB-6(0-4')
Field ID No.: N/A

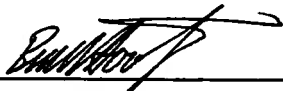
Lab Project No.: 00-2907
Lab Sample No.: 10304
Sample Type: Soil
Date Sampled: 12/13/2000
Date Received: 12/15/2000

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	12/18/2000	SW846 6010	8.89
Barium	12/18/2000	SW846 6010	110
Cadmium	12/18/2000	SW846 6010	0.861
Chromium	12/18/2000	SW846 6010	13.0
Lead	12/19/2000	SW846 6010	114
Mercury	12/19/2000	SW846 7471	0.370
Selenium	12/18/2000	SW846 6010	2.20
Silver	12/18/2000	SW846 6010	<0.957

ELAP ID No.:10958

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.:** 00-2907
Lab Sample No.: 10305
Client Job Site: 370 & 406 Orchard Street
Rochester NY **Sample Type:** Soil
Client Job No.: 2508S-00
Date Sampled: 12/13/2000
Field Location: 2508-06/TB-3(0-4') **Date Received:** 12/15/2000
Field ID No.: N/A

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Arsenic	12/18/2000	SW846 6010	9.72
Barium	12/18/2000	SW846 6010	85.7
Cadmium	12/18/2000	SW846 6010	0.963
Chromium	12/18/2000	SW846 6010	14.1
Lead	12/19/2000	SW846 6010	217
Mercury	12/19/2000	SW846 7471	0.510
Selenium	12/18/2000	SW846 6010	<0.534
Silver	12/18/2000	SW846 6010	<1.07

ELAP ID No.:10958

Comments:

Approved By: _____



Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

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

Semi-Volatile Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc. **Lab Project No.** 00-2907
Lab Sample No. 10300
Client Job Site: 370 + 406 Orchard Street
Rochester, New York **Sample Type:** Soil
Client Job No.: 2508S-00 **Date Sampled:** 12/13/00
Field Location: TB-1 (8-10.5') **Date Received:** 12/15/00
Field ID No.: 2508-01 **Date Analyzed:** 12/26/00

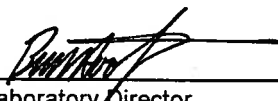
COMPOUND	RESULT (ug/Kg)
Naphthalene	23,400
Acenaphthene	ND< 19,500
Fluorene	ND< 19,500
Fluoranthene	ND< 19,500
Anthracene	ND< 19,500
Phenanthrene	29,700
Benzo (a) anthracene	ND< 19,500
Chrysene	ND< 19,500
Pyrene	ND< 19,500
Benzo (b) fluoranthene	ND< 19,500
Benzo (k) fluoranthene	ND< 19,500
Benzo (g,h,i) perylene	ND< 19,500
Benzo (a) pyrene	ND< 19,500
Dibenz (a,h) anthracene	ND< 19,500
Indeno (1,2,3-cd) pyrene	ND< 19,500

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM

**ENVIRONMENTAL
SERVICES, INC.**

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

Semi-Volatile Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc. **Lab Project No.** 00-2907
Lab Sample No. 10301
Client Job Site: 370 + 406 Orchard Street
Rochester, New York **Sample Type:** Soil
Client Job No.: 2508S-00
Field Location: TB-29 (6-6.5') **Date Sampled:** 12/14/00
Date Received: 12/15/00
Field ID No.: 2508-02 **Date Analyzed:** 12/22/00

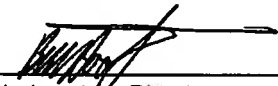
COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 346
Acenaphthene	ND< 346
Fluorene	ND< 346
Fluoranthene	ND< 346
Anthracene	ND< 346
Phenanthrene	ND< 346
Benzo (a) anthracene	ND< 346
Chrysene	ND< 346
Pyrene	ND< 346
Benzo (b) fluoranthene	ND< 346
Benzo (k) fluoranthene	ND< 346
Benzo (g,h,i) perylene	ND< 346
Benzo (a) pyrene	ND< 346
Dibenz (a,h) anthracene	ND< 346
Indeno (1,2,3-cd) pyrene	ND< 346

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM

ENVIRONMENTAL
SERVICES, INC.

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

SEMI-VOLATILES LABORATORY REPORT FOR SOIL/SOLIDS

Client:	Day Environmental, Inc.	Lab Project No.:	00-2907
Client Job Site:	370 + 406 Orchard Street Rochester, New York	Lab Sample No.:	10302
		Sample Type:	Soil
Client Job No.:	2508S-00	Sample Date:	12/13/2000
Field Location:	TB-19 (0-4)	Date Received:	12/15/2000
Field ID No.:	2508-03	Date Analyzed:	12/22/2000

COMPOUND	RESULT (ug/Kg)	COMPOUND	RESULT (ug/Kg)
Benzyl alcohol	ND< 918	2,4-Dinitrophenol	ND< 367
Bis (2-chloroethyl) ether	ND< 367	2,4-Dinitrotoluene	ND< 367
Bis (2-chloroisopropyl) ether	ND< 367	2,6-Dinitrotoluene	ND< 367
2-Chlorophenol	ND< 367	Fluorene	ND< 367
1,3-Dichlorobenzene	ND< 367	Hexachlorocyclopentadiene	ND< 367
1,4-Dichlorobenzene	ND< 367	2-Nitroaniline	ND< 918
1,2-Dichlorobenzene	ND< 367	3-Nitroaniline	ND< 918
Hexachloroethane	ND< 367	4-Nitroaniline	ND< 918
2-Methylphenol	ND< 367	4-Nitrophenol	ND< 918
4-Methylphenol	ND< 367	2,4,6-Trichlorophenol	ND< 367
N-Nitrosodimethylamine	ND< 367	2,4,5-Trichlorophenol	ND< 918
N-Nitroso-di-n-propylamine	ND< 367	4-Bromophenyl phenyl ether	ND< 367
Phenol	ND< 367	Di-n-butyl phthalate	ND< 367
Benzoic acid	ND< 918	4,6-Dinitro-2-methylphenol	ND< 918
Bis (2-chloroethoxy) methane	ND< 367	Fluoranthene	ND< 367
4-Chloroaniline	ND< 367	Hexachlorobenzene	ND< 367
4-Chloro-3-methylphenol	ND< 367	N-Nitrosodiphenylamine	ND< 367
2,4-Dichlorophenol	ND< 367	Pentachlorophenol	ND< 918
2,6-Dichlorophenol	ND< 367	Anthracene	ND< 367
2,4-Dimethylphenol	ND< 367	Phenanthrene	ND< 367
Hexachlorobutadiene	ND< 367	Benzidine	ND< 918
Isophorone	ND< 367	Benzo (a) anthracene	ND< 367
2-Methylnaphthalene	ND< 367	Bis (2-ethylhexyl) phthalate	ND< 367
Naphthalene	ND< 367	Butylbenzylphthalate	ND< 367
Nitrobenzene	ND< 367	Chrysene	ND< 367
2-Nitrophenol	ND< 367	3,3'-Dichlorobenzidine	ND< 367
1,2,4-Trichlorobenzene	ND< 367	Pyrene	991
2-Chloronaphthalene	ND< 367	Benzo (b) fluoranthene	ND< 367
Acenaphthene	ND< 367	Benzo (k) fluoranthene	ND< 367
Acenaphthylene	ND< 367	Benzo (g,h,i) perylene	ND< 367
4-Chlorophenyl phenyl ether	ND< 367	Benzo (a) pyrene	ND< 367
Dibenzofuran	ND< 367	Dibenz (a,h) anthracene	ND< 367
Diethyl phthalate	ND< 367	Di-n-octylphthalate	ND< 367
Dimethyl phthalate	ND< 918	Indeno (1,2,3-cd) pyrene	ND< 367

Analytical Method: EPA 8270

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By: _____


Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 * (800) 724-1997
 PROJECT NAME/SITE NAME:
 370 + 406 Orchard Street
 Rochester, New York

REPORT TO: INVOICE TO:

COMPANY: Day Environmental, Inc. COMPANY: Same CLIENT PROJECT #: 2508-00
 ADDRESS: 2144 BHTL Rd. ADDRESS: 00-2907
 CITY: Rochester CITY: Rochester TURNAROUND TIME: (WORKING DAYS)
 STATE: NY STATE: NY ZIP: 14623 ZIP: 14623
 PHONE: (716) 292-1090 PHONE: (716) 292-0425 FAX: FAX:
 ATTN: Jeff Deminger ATTN: STD 1 2 3 5 OTHER

COMMENTS: * Sample 2508-03/TB-19(0-4') - make sure "white material in sample jar is grabbed for testing."

DATE	TIME	COMPOSITE	GRAAB	SAMPLE LOCATION/FIELD ID	MATRIX	REQUESTED ANALYSIS										REMARKS	PARADIGM LAB SAMPLE NUMBER
						TPH 310.13	TCLTSTARS 8270	STARS 8270	PCB 8082	DH	Total REA Metals	BNA 8270	C	ONT	NUM		
1	12/13/00	0829	X	2508-01/TB-1(8-10.5')	S:1	X	X	X	X	X	X	X	X	X	X	X	10300
2	12/14/00	1309	X	2508-02/TB-29(6-6.5')	S:1	X	X	X	X	X	X	X	X	X	X	X	10301
3	12/13/00	1451	X	2508-03/TB-19(0-4')	S:1				X	X	X	X	X	X	X	X	10302
4	12/14/00	1007	X	2508-04/TB-22(5-8')	S:1				X	X	X	X	X	X	X	X	10303
5	12/13/00	0923	X	2508-05/TB-6(0-4')	S:1				X	X	X	X	X	X	X	X	10304
6	12/13/00	0846	X	2508-06/TB-3(0-4')	S:1				X	X	X	X	X	X	X	X	10305
7																	
8																	
9																	
10																	

****LAB USE ONLY****

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

Sampled By: [Signature] Date/Time: 12/15/00 10:00 Total Cost:
 Relinquished By: [Signature] Date/Time:
 Relinquished By: [Signature] Date/Time:
 Relinquished By: [Signature] Date/Time: 12/15/00 10:00 P.I.F.

Groundwater Samples

PARADIGM
Environmental
Services, Inc.

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

Laboratory Analysis For Petroleum Hydrocarbons in Water

Client:	<u>Day Environmental</u>	Lab Project No.:	00-2988
Client Job Site:	370 + 460 Orchard St	Lab Sample No.:	10550
Client Job No.:	2508S-00	Sample Type:	Water
Field Location:	MW-1	Date Sampled:	12/28/2000
Field ID No:	2508S-MW01	Date Received:	12/28/2000
		Date Analyzed:	01/05/2001

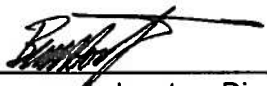
Petroleum Hydrocarbon	Result (ug/L)	Reporting Limit (ug/L)
Light Weight PHC as Gasoline	7,080	250

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

ELAP ID No.: 10958

Comments: BDL denotes Below Detection Limit

Approved By: _____


Laboratory Director

**PARADIGM
ENVIRONMENTAL
SERVICES, INC.**

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

Volatile Laboratory Analysis Report For Non-Potable Water

Client: Day Environmental Lab Project No.: 00-2988
 Client Job Site: 370 + 406 Orchard St. Lab Sample No.: 10550
 Client Job No.: 2508S-00 Sample Type: Water
 Field Location: MW-1 Date Sampled: 12/28/00
 Date Received: 12/28/00
 Field ID No.: 2508S-MW01 Date Analyzed: 12/28/00

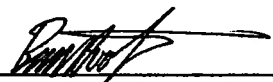
VOLATILE HALOCARBONS		RESULTS (ug/L)	VOLATILE AROMATICS		RESULTS (ug/L)
Bromodichloromethane	ND<	20.0	Benzene		33.7
Bromomethane	ND<	20.0	Chlorobenzene		ND< 20.0
Bromoform	ND<	20.0	Ethylbenzene		ND< 20.0
Carbon tetrachloride	ND<	20.0	Toluene		ND< 20.0
Chloroethane	ND<	20.0	m,p - Xylene		ND< 20.0
Chloromethane	ND<	20.0	o - Xylene		ND< 20.0
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			
1,2-Dichloroethane	ND<	20.0			
1,1-Dichloroethene	ND<	20.0			
cis-1,2-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			
Methylene chloride	ND<	50.0			
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			
			<u>Ketones</u>		
			Acetone		ND< 100
			Vinyl acetate		ND< 50.0
			2-Butanone		ND< 50.0
			4-Methyl-2-pentanone		ND< 50.0
			2-Hexanone		ND< 50.0
			Carbon disulfide		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
(Additional EPA 8260 Compounds)

Client: Day Environmental **Lab Project No.:** 00-2988
Client Job Site: 370 + 406 Orchard St. **Lab Sample No.:** 10550
Client Job No.: 2508S-00 **Sample Type:** Water
Field Location: MW-1 **Date Sampled:** 12/28/00
Field ID No.: 2508S-MW01 **Date Received:** 12/28/00
Date Analyzed: 12/28/00

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	ND< 20.0
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	ND< 20.0
sec-Butylbenzene	ND< 20.0
p-Isopropyltoluene	ND< 20.0
n-Butylbenzene	ND< 20.0
Naphthalene	ND< 50.0

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:	<u>Day Environmental</u>	Lab Project No.:	00-2988
Client Job Site:	370 + 406 Orchard St.	Lab Sample No.:	10551
Client Job No.:	2508S-00	Sample Type:	Water
Field Location:	MW-3	Date Sampled:	12/28/00
Field ID No.:	2508S-MW02	Date Received:	12/28/00
		Date Analyzed:	12/28/00

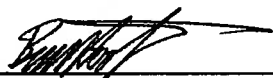
VOLATILE HALOCARbons	RESULTS (ug/L)	VOLATILE AROMATICS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00	Benzene	ND< 0.700
Bromomethane	ND< 2.00	Chlorobenzene	ND< 2.00
Bromoform	ND< 2.00	Ethylbenzene	ND< 2.00
Carbon tetrachloride	ND< 2.00	Toluene	ND< 2.00
Chloroethane	ND< 2.00	m,p - Xylene	ND< 2.00
Chloromethane	ND< 2.00	o - Xylene	ND< 2.00
2-Chloroethyl vinyl ether	ND< 2.00	Styrene	ND< 2.00
Chloroform	ND< 2.00		
Dibromochloromethane	ND< 2.00		
1,1-Dichloroethane	ND< 2.00		
1,2-Dichloroethane	ND< 2.00		
1,1-Dichloroethene	ND< 2.00		
cis-1,2-Dichloroethene	ND< 2.00		
trans-1,2-Dichloroethene	ND< 2.00		
1,2-Dichloropropane	ND< 2.00		
cis-1,3-Dichloropropene	ND< 2.00		
trans-1,3-Dichloropropene	ND< 2.00		
Methylene chloride	ND< 5.00		
1,1,2,2-Tetrachloroethane	ND< 2.00		
Tetrachloroethene	ND< 2.00		
1,1,1-Trichloroethane	ND< 2.00		
1,1,2-Trichloroethane	ND< 2.00		
Trichloroethene	ND< 2.00		
Vinyl Chloride	ND< 2.00		
		<u>Ketones</u>	
		Acetone	ND< 10.0
		Vinyl acetate	ND< 5.00
		2-Butanone	ND< 5.00
		4-Methyl-2-pentanone	ND< 5.00
		2-Hexanone	ND< 5.00
		Carbon disulfide	ND< 2.00

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
(Additional EPA 8260 Compounds)

Client: Day Environmental **Lab Project No.:** 00-2988
Client Job Site: 370 + 406 Orchard St. **Lab Sample No.:** 10551
Client Job No.: 2508S-00 **Sample Type:** Water
Field Location: MW-3 **Date Sampled:** 12/28/00
Field ID No.: 2508S-MW02 **Date Received:** 12/28/00
Date Analyzed: 12/28/00

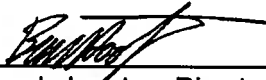
VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND< 2.00
Isopropylbenzene	ND< 2.00
n-Propylbenzene	ND< 2.00
1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
1,2,4-Trimethylbenzene	ND< 2.00
sec-Butylbenzene	ND< 2.00
p-Isopropyltoluene	ND< 2.00
n-Butylbenzene	ND< 2.00
Naphthalene	ND< 5.00

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

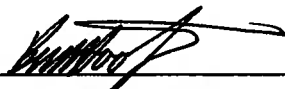
Client: Day Environmental **Lab Project No.:** 00-2988
Lab Sample No.: 10550
Client Job Site: 370 & 406 Orchard Street **Sample Type:** Water
Client Job No.: 2508S-00 **Date Sampled:** 12/28/2000
Field Location: MW-1 **Date Received:** 12/28/2000
Field ID No.: 2508S-MW01

Parameter	Date Analyzed	Analytical Method	Result (mg/L)
Arsenic	01/04/2001	EPA 6010	0.185
Barium	01/04/2001	EPA 6010	0.865
Cadmium	01/04/2001	EPA 6010	<0.005
Chromium	01/04/2001	EPA 6010	0.202
Lead	01/04/2001	EPA 6010	0.326
Mercury	01/02/2001	EPA 7470	0.0005
Selenium	01/04/2001	EPA 6010	0.073
Silver	01/04/2001	EPA 6010	0.023

ELAP ID No.:10958

Comments:

Approved By: _____



Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

179 Lake Avenue
 Rochester, NY 14608
 (716) 647-2530 * (800) 724-1997
 FAX: (716) 647-3311

CHAIN OF CUSTODY

REPORT TO:

INVOICE TO:

COMPANY: DAI ENVIRONMENTAL COMPANY: STATE CLIENT PROJECT #: 25085-00
 ADDRESS: 2144 BATA RD ADDRESS: 00-1908 LAB PROJECT #: 25085-00
 CITY: ROCHESTER CITY: STATE STATE: NY TURNAROUND TIME (WORKING DAYS): 1 2 3 5
 PHONE: 716-292-1890 PHONE: 716-292-1890 FAX: 716-292-1890 STD OTHER
 ATTN: JEFF DANZINGER ATTN: 1 2 3 5

PROJECT NAME/SITE NAME:

370 + 4th CORNHARD ST

COMMENTS:

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	CONTAINER NUMBERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
12/28/00	1315		X	MN-1/25085-MN001	GW	4	826 TLL 5TAPS	10550
12/28/00	1400		X	MN-3/25085-MN002	GW	2	TPT 310.13	10551
3							TOT 12VH/17H/5	
4								
5								
6								
7								
8								
9								
10								

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: PRESERVATIONS: HOLDING TIME: TEMPERATURE:

Sampled By:

AARON FARRELL

Date/Time:

12/28/00

Relinquished/By:

Aaron Farrell

Date/Time:

12/28/00

Received By:

L. Bethel

Date/Time:

12/28/00 14:20

Total Cost:

P.I.F.

DRAFT

PHASE II ENVIRONMENTAL STUDY

**370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK**

Prepared for: The City of Rochester
30 Church Street
Rochester, New York 14614

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

Project No.: 2508S-00

Revised Date: February 2001

TABLE OF CONTENTS

DRAFT

1.0	INTRODUCTION	1
1.1	Background	1
2.0	FIELDWORK AND ANALYTICAL LABORATORY TESTING	2
2.1	Test Boring Evaluation	2
2.2	Groundwater Evaluation	3
2.3	Field Observations	4
2.4	Analytical Laboratory Testing	5
2.5	Decontamination Procedures and Study-Derived Wastes	8
3.0	CONCLUSIONS AND RECOMMENDATIONS	9
4.0	ABBREVIATIONS	12

APPENDICES

Appendix A: Figures

Figure 1 - Project Locus Map

Figure 2 - Site Plan with Test Boring and Well Locations

Appendix B: Tables

Table 1 - Groundwater Elevation Data for 12/28/00

Table 2 - Soil Analytical Laboratory Testing Program

Table 3 - Total Petroleum Hydrocarbons - Soil Samples

Table 4 - Volatile Organic Compounds - Soil Samples

Table 5 - Semi-Volatile Organic Compounds - Soil Samples

Table 6 - Total RCRA Metals - Soil Samples

Table 7 - Groundwater Analytical Laboratory Testing Program

Table 8 - Total Petroleum Hydrocarbons - 12/28/00 Groundwater Sample

Table 9 - Volatile Organic Compounds - 12/28/00 Groundwater Samples

Table 10 - Total RCRA Metals - 12/28/00 Groundwater Sample

Appendix C: Test Boring Logs and Monitoring Well Logs

Appendix D: Well Development Logs and Well Sampling Logs

Appendix E: Analytical Laboratory Data

1.0 INTRODUCTION

This report prepared by Day Environmental, Inc. (DAY) summarizes the findings of a Phase II Environmental Study conducted at 370 & 406 Orchard Street, City of Rochester, County of Monroe, New York (Site). The general location of the Site is shown on Figure 1 (Project Locus Map) included in Appendix A. As shown on Figure 2 (Site Plan) included in Appendix A, the Site consists of two parcels that are not contiguous.

1.1 Background

DAY completed a Phase I Environmental Site Assessment (Phase I ESA) report (DAY file #1745E-98) dated December 20, 2000 for five parcels, including the two parcels that comprise the Site. The Phase I ESA report identified the following environmental concerns for the 370 Orchard Street and 406 Orchard Street parcels:

370 Orchard Street

1. Historical uses of adjoining properties (e.g. _____)
2. Abandoned dry cleaning machine and water heater

406 Orchard Street

1. Former Underground Storage Tank
2. Suspect and confirmed asbestos-containing material
3. Historical uses of the property and adjoining properties (e.g. chromium plating, _____)
4. Floor drains and trench drains

The City of Rochester did not identify the evaluation of Concern #2 (suspect and confirmed asbestos-containing material) for the 406 Orchard Street parcel as a requirement of this Phase II Environmental Study. Therefore, evaluation of the suspect and confirmed asbestos-containing material concern is not included as part of this Phase II Environmental Study.

↑
Let's discuss. We sample of SACM ever collected by Day & Analyzed? Were there any signs or labels identifying the SACM as containing asbestos?

1.2 Objectives

The objective of the Phase II investigation was to evaluate subsurface conditions, including soil, fill, and groundwater contamination, in the vicinity of the suspect environmental concerns.

2.0 FIELDWORK AND ANALYTICAL LABORATORY TESTING

As part of this Phase II Environmental Study, various tasks were performed on the Site including: a test boring evaluation, a groundwater evaluation, and analytical laboratory testing. These tasks and the associated findings are discussed below.

2.1 Test Boring Evaluation

On December 13 and December 14, 2000, thirty (30) test borings (i.e., TB-1 through TB-30) were advanced on the Site using vehicle-mounted Geoprobe System soil sampling equipment. DAY retained MARCOR Remediation, Inc. to advance these test borings. The test borings were sampled continuously and advanced through the overburden to depths ranging between approximately 4.5 feet (TB-24) and 23.0 feet (TB-22) below the ground surface. With the exception of test boring TB-22, equipment refusal (i.e., inferred top of bedrock) was encountered in the test borings at depths ranging between 4.5 feet (TB-24) and 11.0 feet (TB-21). The average depth to equipment refusal encountered at the 29 test boring locations was 6.6 feet.

Figure 2 (Appendix A) illustrates the locations of these test borings and their locations are further described below:

- Test Borings TB-1 through TB-14: 370 Orchard Street parcel
 - Test borings TB-1 through TB-4 were advanced along the ^{eastern} property line shared with an adjoining property formerly used as an automobile service and gasoline station (i.e., addressed as 935 West Broad Street).
 - Test Boring TB-5 was advanced in proximity to an abandoned dry cleaning machine.
 - The remaining test borings were advanced over the balance of the Site.
- Test borings TB-15 through TB-30: 406 Orchard Street parcel
 - Four of these test borings (TB-27, TB-28, TB-29 and TB-30) were advanced inside the existing building on the 406 Orchard Street parcel at, or in proximity to, trench drains and floor drains. *existing of former (i.e., filled in)*
 - Five of the test borings (TB-15, TB-16, TB-17, TB-25 and TB-26) were advanced west of the building on this parcel in an area suspected to be the location of a former underground storage tank and associated fuel dispensing unit.
 - The remaining test borings were advanced over the balance of the Site, *including the location at a former shed which was located immediately east of the existing building.*

A DAY representative observed the recovered soil samples in order to develop a stratigraphic description of the subsurface conditions encountered and to evaluate the recovered soil samples for evidence of suspect contamination (e.g., staining, unusual odors, presence of petroleum or chemical product, etc.). Portions of the recovered soil samples were also screened with a Photovac 2020IS photoionization detector (PID) equipped with a 10.6 eV lamp. The DAY representative recorded pertinent information for each test boring and subsequently prepared test boring logs (included in Appendix C).

Selected samples of fill or soil collected from the test borings were evaluated in the field for evidence of contamination (i.e., staining, odors, type of fill material, elevated PID readings, etc.). Other portions of the samples were retained for possible testing at Paradigm Environmental Services, Inc. (Paradigm), which is a New York State Department of Health (NYSDOH) ELAP-certified analytical laboratory.

2.2 Groundwater Evaluation

As part of the studies conducted, the test borings TB-1, TB-14 and TB-21 were converted into 1.25-inch diameter overburden groundwater monitoring wells that are designated as MW-1, MW-2, and MW-3. ~~Refer to Figure 2~~ (refer to Figure 2 included in Appendix A). Two of these wells (MW-1 and MW-3) were later developed, and groundwater samples were collected for analytical laboratory testing. Well MW-2 was dry (i.e., no measurable groundwater) and could not be sampled as part of this study.

State location of each well (e.g. MW-1 + MW-2 on 390 Orchard) and the rationale behind these locations (e.g. MW-1 near adjacent ASTs & oiling & greasing Bldg.)

Each well consists of a pre-cleaned approximate four-foot to five-foot long, 1.25-inch inner-diameter (ID), threaded, flush-jointed, No. 10 slot, Schedule 40 polyvinyl chloride (PVC) screen attached to flush-coupled riser casing of the same material. The well screens were installed to intercept the top of the water table observed in the overburden during advancement of the associated test borings. The well installations included a washed and graded sand pack surrounding the screen and about 1 to 5.5 feet of sand above the top of the screen. A bentonite seal was placed above the sand pack and the remaining annulus was filled with cement/bentonite grout. A steel protective curb box with locking cap was placed over the wells and cemented in place. Well details are included on the corresponding logs in Appendix C.

Monitoring Well Development

Monitoring wells MW-1 and MW-3 were developed by DAY on December 22, 2000. These wells were developed to restore natural hydraulic properties at the well locations to the extent possible. Well development was performed utilizing disposable bailers with dedicated cord. No fluids were added to the wells during development, and well development equipment was decontaminated prior to development of the well. Water quality readings (i.e., pH, conductance, and temperature) were collected before, during and after development. Copies of well development logs for these wells are included in Appendix D.

Monitoring Well Sampling

On December 28, 2000, wells MW-1 and MW-3 were purged by removing more than three well casing volumes of groundwater, and a groundwater sample was collected from each well (designated as samples 2508S-MW01 and 2508S-MW03) for subsequent laboratory analysis. Copies of well sampling logs are included in Appendix D.

The location of the three wells (MW-1 through MW-3) on the Site were tape-measured in relation to existing site structures or to site boundaries, and a licensed land surveyor surveyed their elevations. On December 28, 2000, DAY measured static water levels in the three wells using a Heron Model HO1L oil/water interface probe. Well MW-2 was dry (i.e., contained no measurable groundwater) at the time of the December 28, 2000 sampling event. The well elevations, static

You have this sample on "02" in several spots in the report & Table? Paradigm Report was "02".

Jett, are any of the wells at 554 Whitney close enough for triangulation of G.W. Flow direction?

water levels and calculated groundwater elevations are presented on Table 1 in Appendix B. Evidence of light non-aqueous phase liquid (LNAPL) was not detected in the wells using the Heron oil/water interface probe during this monitoring event. Since groundwater elevation data was not available for well MW-2, a groundwater potentiometric map could not be developed for December 28, 2000. However, the data does show that on December 28, 2000 the groundwater elevation at well MW-1 (90.78') was 1.56' higher than at well MW-3 (89.22'), which suggests that groundwater at the Site may generally flow towards the north.

2.3 Field Observations/Findings

↑ Former Canal is closer to 406 Orchard St. well than 370 Orchard St. well; may have influence also.

Field observations and findings based upon the work completed during this Phase II Environmental Study are summarized below, *and generally apply to both parcels.*

- Most test borings were advanced through asphalt pavement or concrete. Fill material generally consisting of mixtures of silt, sand, gravel with lesser amounts of clay, coal, ash, organics, brick, and slag was encountered beginning at the ground surface in each of the test borings. The fill material in the test borings excavated during this study extended from the ground surface to depths ranging between approximately 1.5 feet (TB-5, TB-6) and 8.0 feet (TB-22). Based on the observation of soil samples from the 30 test borings, the average thickness of the fill material on the Site is approximately 3.4 feet. A specific fill pattern was not identified.
- Soils beneath the fill material generally consisted of silt, sand or mixtures thereof with lesser amounts of gravel and clay. In many of the test borings, rock fragments (i.e., fractured Lockport Dolomite) were observed in samples collected near the bottom of the test borings. The thickness of the indigenous soil observed ranged between approximately 0.0 feet (TB-13 and TB-23) and 15.0 feet (TB-22) with an average thickness of 3.7 feet.
- The apparent groundwater table was encountered (i.e., as evidenced by wet soil samples and/or standing water in the test boring) in 15 of the 30 test borings advanced during this study. On December 28, 2000, groundwater was measured in wells MW-1 (TB-1) and MW-3 (TB-21) at depths of 8.32 feet and 10.34 feet below the ground surface, respectively. On December 28, 2000, there was no measurable groundwater in well MW-2 (TB-14).
- Field evidence of suspect petroleum or chemical contaminated soil (i.e., based upon PID readings greater than 5.0 ppm and observations including odors, staining, etc.) was detected on soil samples from 2 of the 30 test borings (i.e., TB-1 and TB-29). The contamination at these two locations was noted on wet soil samples near the bottom of these test borings (i.e., immediately above equipment refusal that inferred the top of bedrock). The peak PID readings measured at TB-1 and TB-29 were 430 ppm and 6.2 ppm, respectively. Petroleum-type odors were noted on the soil at these two locations.
- Peak PID readings measured at the other 28 test borings (i.e., TB-2 through TB-28 and TB-30) were 0.0 ppm and evidence of staining was not observed. However, ash material was observed in the fill material at many of these locations. In addition, a 0.1' thick layer of soft white unknown material (possibly ash) was observed at a depth of approximately 2.8 feet in test boring TB-19.

TB-5 had 0.6 ppm @ 6.5', so say less than 1.0 ppm ✓.

- Fill material was encountered in test boring TB-22 from the ground surface to a depth of 8 feet and between 5.0 feet to 8.0 feet this fill consisted of ash with some coal. This test boring as advanced to a depth of 23 feet below the ground surface without encountering equipment refusal, whereas equipment refusal (suggesting the inferred top of bedrock) was encountered at depths ranging between 4.5 feet (TB-24) and 11.0 feet (TB-21) at the other 29 test boring locations. The soils encountered beneath the fill material in this test boring appeared lacustrine in nature and a piece of wood was observed in the soil sample at a depth of 23 feet below the ground surface. As such, it is possible that the soil identified as indigenous beneath the fill was actually a fill material ^(see reworked indigenous soil). A review of Sanborn map and Plat Book information included in the Phase I ESA report indicated that the Erie Canal was located along the east side of Broad Street (i.e., east of TB-22) between the years of at least 1875 and 1918. It is possible that this test boring may have intercepted a structure, etc. that was once associated with the Erie Canal.
- The test boring logs included in Appendix D provide additional information regarding subsurface conditions, PID measurements, etc. encountered in each test boring.
- Evidence of contamination associated with floor drains and trench drains and the former underground storage tank at the 406 Orchard Street parcel was not encountered. Evidence of contamination associated with the abandoned dry cleaning machine at the 370 Orchard Street parcel was not encountered.

2.4 Analytical Laboratory Testing

Analytical laboratory testing for this project was completed by Paradigm. The following laboratory program was implemented on samples that were collected from test borings and monitoring wells:

Soil Samples

Six (6) soil samples were submitted for analytical laboratory testing. The specific locations, depth intervals, and test parameters for these soil samples are illustrated on Table 2 included in Appendix B, and summarized as follows:

- Sample 2508-01 from test boring TB-1 (8-10') was analyzed for United States Environmental Protection Agency (USEPA) target compound list (TCL) and New York State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series (STARS)-list volatile organic compounds (VOCs) using USEPA Method 8260; NYSDEC STARS-list base/neutral semi-volatile organic compounds (SVOCs) using USEPA Method 8270; and total petroleum hydrocarbons (TPH) using NYSDOH Method 310.13.
- Sample 2508-02 from test boring TB-29 (6-6.5') was analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260; NYSDEC STARS-list base/neutral SVOCs using USEPA Method 8270; TPH using NYSDOH Method 310.13; and polychlorinated biphenyls (PCBs) using USEPA Method 8082.
- Sample 2508-03 from test boring TB-19 (0-4') was analyzed for pH; total RCRA metals; and TCL base/neutral/acid SVOCs using USEPA Method 8270.

1
2
3

- Sample 2508-04 from test boring TB-22 (5-8') was analyzed for pH and total RCRA metals.
- Sample 2508-05 from test boring TB-6 (0-4') was analyzed for total RCRA metals.
- Sample 2508-06 from test boring TB-3 (0-4') was analyzed for total RCRA metals.

Groundwater Samples

Two groundwater samples were collected on December 28, 2000 from wells MW-1 and MW-3 (designated as 2508S-MW01 and 2508S-MW02, respectively). The groundwater analytical laboratory testing program is presented on Table 7 included in Appendix B.

03 or 02

- Sample 2508S-MW01 was analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260; TPH using NYSDOH Method 310.13; and total RCRA metals.
- Due to groundwater volume limitations caused by slow recharge at this well, Sample 2508S-MW02 was only analyzed for USEPA TCL and NYSDEC STARS-list VOCs using USEPA Method 8260.

Analytical Laboratory Test Results

Copies of analytical laboratory test results for the soil and groundwater samples are included in Appendix E. Tables summarizing the analytical laboratory data and providing a comparison to NYSDEC criteria are included in Appendix B. The test results for the samples are further discussed as follows:

Soil Samples

- As shown on Table 3 included in Appendix B, 33 mg/kg (ppm) of light-weight TPH designated as mineral spirits was detected in Sample 2508-01 from TB-1 (8-10'). 3,520 mg/kg or ppm of medium-weight TPH designated as diesel fuel was detected in Sample 2508-02 from TB-29 (6-6.5'). The NYSDEC's Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels (TAGM 4046) dated January 24, 1994 indicates that the soil cleanup objective for total VOCs is 10 ppm and for total SVOCs is 500 ppm. TPH is comprised primarily of VOCs and/or SVOCs. Also, although regulatory agencies in New York State have no specific cleanup criteria for TPH in soil, the NYSDEC and Monroe County Department of Health (MCDOH) in the Rochester, New York area have used a TPH cleanup value of 500 ppm for similar properties. Based on these considerations, the TPH test results for ~~at least the~~ soil sample from TB-29, indicate that regulatory agencies could require this TPH be addressed in some manner (i.e., remediated, control exposure to contamination, etc.).

Advanced inside the building at 406 Orchard St. near a former drain.

Advanced near the adjacent gasline station that borders 390 Orchard St.

minerals composed of 100ppm total nrobin

collected

- As shown on Table 4 included in Appendix B, VOCs were detected in Sample 2508-01 from TB-1 (8-10'), but were not detected above reported analytical laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5'). Four of the VOCs detected in Sample 2508-

01 (i.e., 1,2,4-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene and naphthalene) are typically associated with petroleum or hydrocarbon-based products. In addition, acetone was detected in this sample. As shown on Table 4, the concentration of naphthalene detected in Sample 2508-01 (i.e., 251 ug/kg or ppb) exceeded its toxicity characteristic leaching procedure (TCLP) alternative soil guidance value as referenced in the August 1992 NYSDEC Spill Technology and Remediation Series, STARS Memo #1, Petroleum-Contaminated Soil Guidance Policy (STARS Memo #1), but did not exceed its recommended soil cleanup objective as referenced in the January 24, 1994 NYSDEC TAGM 4046, as amended by the NYSDEC's supplemental Table 1 dated 1998. The concentrations of 1,2,4-trimethylbenzene, sec-butylbenzene, p-isopropyltoluene and acetone detected in Sample 2508-01 did not exceed their STARS TCLP alternative soil guidance values, ~~and~~ or TAGM 4046 recommended soil cleanup objectives.

Fuels or Lubricants.
?

- As shown on Table 5 included in Appendix B, SVOCs were detected above reported laboratory detection limits in Samples 2508-01 and 2508-03. SVOCs were not detected above reported laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5'). The SVOCs naphthalene and phenanthrene were detected in Sample 2508-01 from TB-01 (8-10') at concentrations of 23,400 ug/kg (ppb) and 29,700 ug/kg (ppb), respectively. The SVOC pyrene was detected in Sample 2508-03 from TB-19 (0-4') at a concentration of 991 ug/kg (ppb). These SVOCs are typically associated with petroleum or hydrocarbon-based products. The concentrations of SVOCs detected in Sample 2508-01 exceed STARS TCLP alternative soil guidance values and/or TAGM 4046 recommended soil cleanup objectives. The concentration of the SVOC pyrene detected in Sample 2508-03 did not exceed its STARS TCLP alternative soil guidance value or the TAGM 4046 recommended soil cleanup objective.

due to the complete combustion of organic matter.

- PCBs were not detected above analytical laboratory detection limits in Sample 2508-02 from TB-29 (6-6.5').
- As shown on Table 6 included in Appendix B, the RCRA metals arsenic, barium, cadmium, chromium, lead, mercury and selenium were detected in one or more of the four soil samples that were tested.
 - The concentrations of arsenic, barium, chromium, lead, and selenium were within their typical background ranges as referenced in NYSDEC TAGM 4046.
 - The concentrations of mercury in three of the samples, and cadmium in one sample, were above their typical background ranges as referenced in the January 24, 1994 NYSDEC TAGM 4046.
 - The concentrations of arsenic and mercury in Samples 2508-04, 2508-05 and 2508-06 appear to exceed their January 24, 1994 NYSDEC TAGM 4046 recommended soil cleanup objectives.
 - The concentrations of the metals barium, cadmium, chromium, lead, and selenium detected in the four samples were below their respective NYSDEC TAGM 4046 recommended soil cleanup objectives. [Note, as allowed by the NYSDEC on other projects, the NYSDEC's 1995 proposed recommended soil cleanup objectives for cadmium and chromium were used for comparison to the test results].

- The pH test results for Sample 2508-03 from TB-19 (0-4') and Sample 2508-04 from TB-22 (5-8') were 7.49 and 8.24 standard units, respectively.

Groundwater Samples

- As shown on Table 8, light-weight TPH identified as gasoline was detected in Sample 2508S-MW01 at a concentration of 7,080 ug/l (ppb). There are no NYSDEC cleanup criteria for TPH in groundwater.
- As shown on Table 9, only the VOC benzene was detected in Sample 2508S-MW01 at a concentration of 33.7 ug/l (ppb). VOCs were not detected above reported analytical laboratory detection limits in Sample 2508S-MW02. The concentration of benzene detected in Sample 2508S-MW01 exceeded its respective groundwater standard of 1.0 ug/l (ppb) as referenced in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1 document titled "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations" (TOGS 1.1.1) dated June 1998.
- *if it can be there??* As shown in Table 10, the metals arsenic, barium, chromium, lead, mercury, selenium and silver were detected at concentrations above reported analytical laboratory detection limits in Sample 2508S-MW01. The concentrations of arsenic, chromium, lead, and selenium exceed their respective groundwater standards and/or guidance values as referenced in the NYSDEC TOGS 1.1.1 dated June 1998. [Note: Groundwater is not used as a potable water supply at the Site. As such, the above standards may not be applicable.]

2.5 Decontamination Procedures and Study-Derived Wastes

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

Drill cuttings that were generated during this study were placed on the ground surface or used as backfill at their specific locations. Due to evidence of contamination, well development and purge waters from well MW-1 were placed in a New York State Department of Transportation (NYSDOT)-approved 30-gallon drum that was labeled and staged on-site. Well development and purge waters from well MW-3, and decontamination waters, were discharged to the ground surface at the Site.

3.0 CONCLUSIONS AND RECOMMENDATIONS

A previous Phase I ESA report identified environmental concerns for the 370 Orchard Street and 406 Orchard Street parcels. Intrusive work was performed as part of this Phase II Environmental Study in an effort to evaluate environmental conditions at the Site. The environmental concerns identified in the Phase I ESA report for the 370 Orchard Street parcel that were further evaluated as part of this study included: historical uses of adjoining properties; and abandoned dry cleaning machine and water heater. The environmental concerns identified in the Phase I ESA report for the 406 Orchard Street parcel that were further evaluated as part of this study included: ^{a former} underground storage tank; historical uses of the property and adjoining properties; and floor drains and trench drains.

This Phase II Environmental Study included: advancement of ³⁰ test borings; installation of 3 groundwater monitoring wells; field observations and PID screening on soil and groundwater samples; analytical laboratory testing of ⁶ soil and ³ groundwater samples; and evaluation of the data collected. The conclusions and recommendations developed by DAY based upon the work completed to date are summarized below.

Evidence of petroleum or hydrocarbon-based contamination was detected in soil and groundwater at only two of the 30 test locations at the Site (i.e., TB-1/MW-1 and TB-29). Some of the petroleum or hydrocarbon-based constituents detected at these two locations exceeded NYSDEC clean-up criteria. The contamination at these two locations was encountered in saturated soils immediately above the inferred top of bedrock. As such, it is likely that this contamination may also be present in the bedrock at these locations; however, the scope-of-work for this Phase II Environmental Study was generally limited to an assessment of overburden conditions. *? I don't like this*

The extent of petroleum or hydrocarbon-based contamination in the overburden soils on the 370 Orchard Street parcel appears limited to the area in proximity to TB-1. Analytical laboratory testing at TB-1/MW-1 indicate that light-weight TPH designated as mineral spirits/gasoline is present at this location. Evidence of this type of contamination was not detected at other nearby test locations (i.e., TB-2 and TB-12). Since petroleum or hydrocarbon-based contamination was not encountered in unsaturated soils above the water table at this parcel, the contamination encountered at TB-1 likely migrated on-site in groundwater from the adjoining off-site property (addressed as 935 West Broad Street) located east of the 370 Orchard Street parcel. This adjoining property was formerly used as a gasoline and service station. A review of historic Sanborn maps shows the off-site building closest to test boring TB-1 was labeled as "oiling and greasing" and that three approximately 30-foot long aboveground storage tanks were also located nearby on this adjoining property (refer to Figure 2 included in Appendix A).

The extent of petroleum or hydrocarbon-based contamination in the overburden soils on the 406 Orchard Street parcel appears limited to the area in proximity to TB-29. Analytical laboratory testing at TB-29 indicates that medium-weight TPH designated as diesel fuel is present at this location. Evidence of this type of contamination was not detected at other nearby test locations (i.e., TB-18, TB-19, TB-27 and TB-28). An on-site source of the petroleum or hydrocarbon-based contamination encountered at TB-29 was not identified. It is possible that this contamination has migrated on-site in groundwater from an ^{on-site a} off-site source, since the contamination was only encountered in the saturated soils at the bottom the test boring. An auto repair facility (addressed as 392 Orchard Street) is located on an adjoining property south of the 406 Orchard Street parcel (refer to Figure 2 included in Appendix A). *Advanced inside the existing building.*

Fill material generally consisting of silt, sand, gravel and mixtures thereof with lesser amounts of clay, coal, ash, organics, brick, and slag was encountered beginning at the ground surface in each of the test borings to depths up to 8.0 feet. Also, a pocket of ash with some coal was noted from 5.0 feet to 8.0 feet at test boring TB-22 on the 406 Orchard Street parcel. One sample of fill material from test boring TB-19 contained the SVOC pyrene, but at a concentration below NYSDEC recommended clean-up criteria. Total RCRA metals such as arsenic, cadmium and mercury were detected in one or more samples of fill material at concentrations exceeding typical background ranges and/or apparently above recommended soil cleanup objectives as referenced in the NYSDEC's TAGM 4046. The elevated concentrations of detected metals appear attributable to the fill material. Currently, this fill material is covered with paved surfaces or the existing building on the 406 Orchard Street parcel and does not appear to warrant remediation.

Based on the work conducted as part of this Phase II Environmental Study, the following items presented in the Phase I ESA report do not appear to have resulted in environmental impacts to the Site and are no longer considered to represent an environmental concern at this time:

- Abandoned dry cleaning machine or water heater on the 370 Orchard Street parcel. One test boring was advanced in this area, and evidence of VOC contamination was not encountered.
- ^{Former} Underground storage tank; and floor drains and trench drains on the 370 Orchard Street parcel. The suspected location of the former UST system was west of the building on this parcel. Five test borings were advanced in this area, and evidence of petroleum contamination was not encountered. Four test borings were advanced inside the building on this parcel. Two of the borings were advanced inside or next to floor drains or trench drains. Evidence of contamination was observed only in one test boring ^{TB-29} advanced inside a filled trench drain, but the contamination was encountered starting at an approximate depth of 6.0 feet near the inferred top of bedrock (i.e., the contamination was not observed in proximity to the near surface trench drain structure).

Recommendations

Based on the current use and improvement of the Site and the fact that on-site sources for the petroleum and hydrocarbon-based contamination were not identified during this study, further evaluation or remediation of subsurface environmental conditions are not recommended at this time. ~~However, it is recommended that~~ the findings of this study ^{could} be presented to the NYSDEC so that the NYSDEC can pursue evaluating the potential off-site sources of petroleum and hydrocarbon-based contamination that have been identified as part of this study.

If the Site is to be redeveloped, or if subsurface media are to be disturbed, it is recommended that an environmental management plan (EMP) be developed and implemented. The EMP should include a site-specific health and safety plan (HASP). The EMP and HASP would be used to assist in the proper handling, disposal or re-use of contaminated media, assist in protecting construction workers and nearby residents/occupants of adjoining properties against exposures to site contaminants, and specify environmental engineering controls (e.g., vapor barriers, passive vent systems, etc.) for planned structures, etc. if the Site is to be redeveloped. Appropriate regulatory agencies (e.g., Monroe County Department of Health, etc.) should be offered the opportunity to review and comment on the EMP and HASP.

Given the ~~adjacent~~ industrial uses of the adjacent properties

Also, further subsurface studies may be warranted in the future depending upon redevelopment plans. ~~For example, an evaluation of~~ ^{may be warranted} environmental conditions in bedrock ~~if~~ ^{may be warranted} construction of basements, sub-grade parking garages, etc. are planned that would require disturbance of the bedrock. In addition, future owners, developers, lending institutions, etc. may require evaluation of environmental conditions at the Site to further assess the potential risks (monetary, exposure, etc.) that could arise if contamination in the bedrock and underlying groundwater is significant.

As a precaution to reduce the potential for future environmental impact, it is recommended that the abandoned dry cleaning machine and apparent water heater on the 370 Orchard Street parcel be properly removed and disposed of off-site.

- Metals slightly elevated, but typical for industrial sites
- Ash + SVOCs are typical at industrial sites + contain metals + SVOCs
- Soil + fill are generally free of petroleum + VOCs
- Overburden g.w. on both sites evaluated + shows only low levels of VOCs + moderate TPH next to off-site source.
- Although ^{pet.}cont. near TB-1 + eastern property line on 370 Orchard are probably (likely) due to an off-site source, remediation or mitigation via engineering controls may be warranted ~~for~~ if redevelopment is proposed for the area near TB-1.

4.0 ABBREVIATIONS

DAY	Day Environmental, Inc.
EMP	Environmental Management Plan
ESA	Environmental Site Assessment
HASP	Health and Safety Plan
ID	Inner Diameter
LNAPL	Light Non-Aqueous Phase Liquid
MCDOH	Monroe County Department of Health
mg/kg	Milligram Per Kilogram
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PCB	Polychlorinated Biphenyls
PID	Photoionization Detector
ppb	Parts Per Billion
ppm	Parts Per Million
PVC	Polyvinyl Chloride
STARS	Spill Technology and Remediation Series
SVOC	Semi-Volatile Organic Compound
TCL	Target Compound List
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
ug/kg	Microgram Per Kilogram
ug/l	Microgram Per Liter
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

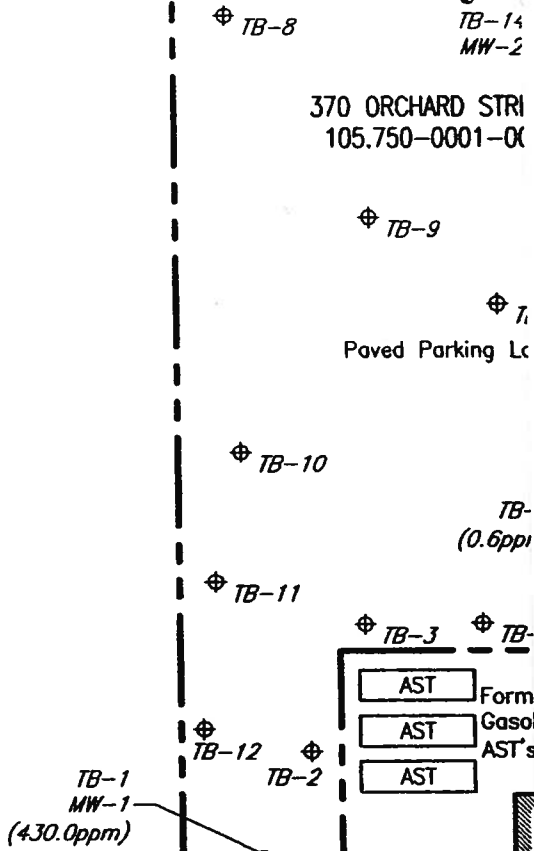
Ref:3

Time Plotted: Tue Jan 09 12:50 2001
File Name: \RoCity\2508\2508-2.dwg

Approximate ROW

1370

N



Former Oiling & Greasing

Former Gasoline Station

- Property Boundary
- Removal Storage Tank
- 3-Phase Storage Tank
- Groundwater Monitoring Well
- Building

Location of abandoned dry-cleaning labeled as using ethylene as the solvent
Location of former fuel

Location of former 550-gallon tank and storage tank (removed)
Rains and floor drains located at the building

370 ORCHARD STREET
105.750-0001-0X

DESIGNED BY	JAD	DATE	01/03/2001
DRAWN BY	TWW	DATE DRAWN	01/05/2001
SCALE	1" = 50'	DATE ISSUED	01/09/2001

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

DRAFT

PROJECT TITLE
370 & 406 ORCHARD STREET
ROCHESTER, NEW YORK

DRAWING TITLE
LIMITED PHASE II ENVIRONMENTAL STUDY

Site Plan With Test Boring And
Monitoring Well Locations

PROJECT NO.
2508S-00

FIGURE 2

SHEET 1 OF 1