5

DATA EVALUATION REPORT

151, 171, 173, 175, 177, 191, 425, AND 435 MOUNT HOPE AVENUE AND 562 FORD STREET ROCHESTER, NEW YORK

Prepared for: City of Rochester
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USTs formerly located in this area. The contaminants detected in the soil and groundwater consist primarily of volatile organic compounds typically associated with petroleum fuels and petroleum products, including gasoline.

Based upon the previous Phase II Environmental Studies completed at the South Site, the NYSDEC was notified of the subsurface conditions encountered and the NYSDEC subsequently assigned Spill #0070378 to the South Site. The Spill is currently listed as "active".

North Site: 151, 171, 173, 175, 177, and 191 Mt. Hope Avenue

The North Site has been used as a gasoline station(s), auto sales, railroad tack house, and a concrete plant. At least eight USTs have been located at the North Site. Previous Phase II Environmental Studies completed at the North Site indicate that soil and groundwater contamination is present at concentrations that exceed the Recommended Soil Cleanup Objectives identified in the *TAGM #4046* and ambient groundwater standards identified in the TOGS (1.1.1). There appears to be at least two sources of the contamination related to former tanks located in the North Site. The contaminants detected in the soil consist of aromatic volatile organic compounds (aromatic VOCs) and semi-volatile organic compounds (S-VOCs) and contaminants detected in the groundwater consist primarily of VOCs. The detected VOCs and S-VOCs in soil and groundwater are constituents typically found in petroleum fuels and/or petroleum products.

The NYSDEC was notified of subsurface conditions encountered at the North Site during the Phase II Environmental Studies and the NYSDEC subsequently assigned Spill #0070377 to the North Site. The spill is currently listed as "active".

1.3 Purpose

This Data Evaluation Report presents the findings of the studies recently completed, in conjunction with applicable data collected during previous studies, and it provides conclusions regarding the extent of impact of identified contamination on the South Site and the North Site. This report also presents data that was collected to assist in evaluating the potential for enhanced bioremediation of the groundwater. The information included in this report will be used to evaluate remedial options, which may be implemented in the future.

2.0 FIELD ACTIVITIES AND FINDINGS

Prior to conducting the recent studies at the North and South Site, DAY retained the services of a licensed surveyor to determine former property lines. The information obtained assisted DAY in defining the actual property boundaries (i.e., as compared to estimated boundaries obtained by evaluation of historic maps) and possible locations of former tanks (i.e., based on Sanborn Maps included in DAY's Phase I ESA dated October 24, 2000). [Note: The maps provided by DAY in this report represent the property lines determined by the survey completed as part of this study.]

DAY retained the services of Geomatrix Consultants (Geomatrix) to perform a geophysical survey on February 12 and February 13, 2001. This survey was conducted with a Geonic EM-61 electromagnetic metal detector to evaluate the location of magnetic anomalies that may be associated with buried tanks and/or piping. A 300 foot (ft) x 300 ft study area was surveyed on the South Site and a 90 ft x 310 ft area was surveyed on the North Site. Former tank locations identified on Sanborn Maps were used to determine the extent of the study area at each Site. A copy of the report generated by Geomatrix dated March 12, 2001 is enclosed in Appendix A. The findings of the geophysical studies conducted in the North Site are discussed in Section 2.1.1 and the findings of the geophysical studies conducted in the South Site are discussed in Section 2.2.1.

Subsequent to the geophysical survey, DAY performed various intrusive studies. A total of eleven test pits was excavated in the area of magnetic anomalies identified during the geophysical survey to assess the presence of USTs. Thirty test borings and two monitoring wells were installed in the North Site to delineate the extent of soil and groundwater contamination identified during previous Phase II Environmental Studies. Thirty-one test borings were advanced and four monitoring wells were installed to delineate the extent of soil and groundwater contamination in the South Site. The results of the test borings advanced on the North Site are discussed further in Section 2.1.2 and the results of test borings advanced on the South Site are discussed further in Section 2.2.2. In conjunction with these subsurface explorations, in-situ testing and screening and analytical laboratory testing was conducted (refer to Sections 2.1.3 and 2.2.3). In addition, a limited qualitative risk assessment was also conducted to evaluate potential receptors (e.g., nearby utilities) and impacts which may be attributable to the Sites (refer to Section 2.6), and hydraulic conductivity testing was conducted to determine aquifer characteristics of the North and South Sites (refer to Section 2.5.1 and 2.5.2).

The purpose of the additional studies was to delineate the extent of contamination identified during the previous studies completed at the Site, and to collect information required to evaluate potential remedial actions to be implemented at the Site.

2.1 North Site

A discussion of the geophysical studies/test pits, test borings and laboratory testing of soil samples completed in the North Site follows.

2.1.1 Geophysical Survey and Test Pits – North Site

The geophysical survey performed on the North Site identified three magnetic anomalies potentially indicative of tanks. As indicated in the Geomatrix report dated March 12, 2001 included in Appendix A, these anomalies are identified as E, F, and G. [Note: Other smaller magnetic anomalies were also identified at the North Site, which may be associated with smaller tanks or tank piping.] On April 12, 2001 test pits designated TP-10 through TP-12 were excavated on the North Site by Arrow Contracting (Arrow) using a Case 580K backhoe to further evaluate the magnetic anomalies identified. Magnetic anomalies E and F were determined to be manhole covers and test pits were not excavated in these areas. The test pits excavated on the North Site (i.e., test pits TP-10 through TP-13 were excavated to depths ranging from 7.0 feet (TP-11) to 10.0 feet (TP-10) below the ground surface. The location of the test pits are shown on Figure 2B. Fill material consisting of sand and silt, brick, asphalt, clay, slag, piping, etc. was encountered in each of the test pits. The test pits were terminated prior to encountering indigenous soil. No tanks were encountered in the test pits excavated on the North Site; however, a former pump island was encountered in test pit TP-11. [Note: Due to the presence of a concrete sidewalk and a park area, test pits were not excavated in the east-central portion of the North Site.] No soil samples were collected from the test pits for laboratory analysis. Copies of the test pit logs are included in Appendix B.

[Note: An additional test pit designated North (13'-14') was excavated at the Site on September 26, 2001 by Arrow to collect a soil sample for permeability testing by a geotechnical materials testing laboratory. The results of the permeability testing are discussed further in Section 2.1.3.]

2.1.2 Test Borings-North Site

Between May 7, 2001 and May 24, 2001, thirty test borings (designated TB-100 through TB-125, including TB-106C, TB-110B, as well as TB-A, and TB-B) were advanced in the North Site by Lyon Drilling, Inc. (Lyon) using truck-mounted Geoprobe System sampling equipment.

The test borings were advanced to depths that ranged between approximately 9.6 feet (i.e., TB-106) and 20 feet below the ground surface (i.e., TB-107, TB-110B, TB-114, TB-118, TB-125 and TB-B). The test borings were advanced to refusal or 20 feet below the ground surface, whichever was encountered first. When refusal was encountered in test borings at shallow depths, apparently due to larger fill materials (e.g., pieces of concrete), the test borings were offset and continued. These test borings are designated A, B, or C, (i.e., TB-106C and TB-110B) depending on the number of offsets required. A depth of 20 feet below the ground surface was not encountered in every test boring advanced at the Site. Soil samples were collected in continuous four-foot intervals from each test boring location using a disposable (i.e., one-use) clear plastic liner. Reusable Geoprobe System sampling equipment was decontaminated prior to each use via an alconox soap and tap water wash and a final rinse in tap water.

A DAY representative observed the samples collected and prepared a stratigraphic description of subsurface conditions encountered at each test boring location. In addition, the ambient air in the headspace above portions of selected samples was screened using a RAE MiniRae 2000 photoionization detector (PID) equipped with a 10.6 eV bulb. The PID was calibrated prior to use to respond to benzene using an isobutylene standard. The PID can detect total VOCs such as those associated with petroleum products. Observations regarding the soil/fill appearance, odors, and the measured peak PID readings are provided on the Test Boring Logs included in Appendix B. The peak PID readings measured at each test boring advanced during this study and the previous study at the North Site are also illustrated in Figure 2B. In addition, a contour map of the peak PID readings encountered in soil samples collected from the North Site at depths of 0'-8', 8'-12', and 12'-16' are included in Appendix A as Figure 2B-1, Figure 2B-2, and Figure 2B-3, respectively.

Based on the subsurface studies completed, an average thickness of approximately 11.5 feet of heterogeneous fill material was encountered at the North Site with depths ranging from 5.0 feet (i.e., TB-105 and TB-113) to a maximum of 20.0 feet (i.e., TB-107). The fill materials consisted primarily of sand, silt and gravel intermixed with cinders, slag, silt, and ash. This fill material is underlain by indigenous soil (i.e., excluding TB-107) consisting primarily of sand with varying amounts of silt and gravel, and lesser amounts of clay (i.e., apparent glacial till) that grades into weathered rock with depth. The apparent top of bedrock (i.e., as defined by the presence of rock fragments) was encountered at depths ranging from 10.5 feet (TB-101) to greater than 20 feet.

2.1.3 Laboratory Testing-North Site

Based on the field observations made during the fieldwork and the historical use of portions of the North Site, selected soil samples were submitted to Paradigm Environmental Services, Inc. (Paradigm) a New York State Department of Health (NYSDOH) approved laboratory for analysis. The selection of soil samples submitted for analytical laboratory testing was based on PID readings to determine the relationship of PID readings at the Site to aromatic VOC concentrations in the soil. In addition, some samples were selected to assess the areal and vertical extent of contamination (i.e., to evaluate the location at which concentrations in the soil no longer exceed recommended soil cleanup objectives identified in *TAGM #4046*). The soil sample collected test pit North (13'-14') was tested in a geotechnical laboratory to evaluate soil permeability. The samples submitted for testing included:

- Soil Samples TB-102 (11') and TB-106C (12.0') analyzed for New York State Department of Environmental Conservation (NYSDEC) Target Compound List (TCL) and STARS List VOCs via United States Environmental Protection Agency (USEPA) Method 8260;

- Soil Samples TB-101 (9.5'), TB-103 (13.5'), TB-104 (13'), TB-105 (12'-13'), TB-115 (11.5'), TB-116 (15'), and TB-116 (18.5') analyzed for NYSDEC STARS List VOCs via USEPA Method 8021;

- Soil Samples TB-102 (17.5'), TB-103 (10.5'), TB-105 (11'), TB-105 (12'-13'), TB-107 (15.0'), TB-111 (16'), and TB-115 (11.5') analyzed for STARS List semi-volatile organic compounds (S-VOCs) via USEPA Method 8270;

- Soil Samples TB-102 (14') and TB-116 (11.5') analyzed for Lead following a TCLP extraction;

- Soil Samples TB-101 (7'), TB-101 (9.5'), and TB-102 (17.5') analyzed for Total Organic Carbon;

- Soil samples TB-A (9.0') and TB-B (15.0') analyzed for RCRA metals and soil sample TB-A (9.0') analyzed for total cyanide; and

- Soil Sample North (13'-14') analyzed for permeability.

A copy of Paradigm's report for these samples and VanderHorst's permeability report for sample North (13'-14') is included in Appendix C. A summary of the detected aromatic VOCs and S-VOCs in soil samples collected from the North Site is included as Table I. As shown on Table I, the following test borings contained aromatic VOCs and/or S-VOCs at concentrations that exceed their respective recommended soil cleanup objectives identified in *TAGM #4046:*

- TB-107 (15.0): Pyrene (423 ppb) and Benzo (a) anthracene (370 ppb);

- TB-108 (11.0'): m,p-xylene (2490 ppb), o-xylene (15.7 ppb), 1,3,5-trimethylbenzene (6,420 ppb), and 1,2,4-trimethylbenzene (24,100 ppb);

- TB-6 (8'-12'): 1,3,5-trimethylbenzene (4,120 ppb) and 1,2,4-trimethylbenzene (16,400 ppb); and

- TB-11 (8'-12'): 1,3,5-Trimethylbenzene (4,760 ppb) and (34,400 ppb).

The remaining detected concentrations reported on Table I did not exceed recommended soil cleanup objectives identified in *TAGM #4046*.

A summary of the metals detected in soil samples TB-A (9.0') and TB-B (15.0') collected from the North Site are included in Table III. The metals detected at concentrations that exceed recommended soil cleanup objectives and/or eastern USA background concentrations identified in *TAGM #4046* in these samples are summarized below:

- TB-A (9.0'): calcium (53,400 ppm), magnesium (18,100 ppm), and zinc (50.3 ppm);

- TB-B (15.0'): arsenic (29.9 ppm), copper (3,170 ppm), selenium (4.38 ppm), and zinc (2,490 ppm).

Soil sample North (13'-14') was collected from a test pit excavated on the North Site and submitted to Vanderhorst Geotechnical Engineering, P.C. for permeability testing. As shown in Appendix C, this testing indicates that the permeability of the soil sample submitted for analysis is 2.5 x 10^{-6} cm/sec.

2.2 South Site

A discussion of the geophysical studies/test pits, test borings and laboratory testing completed in the South Site follows.

2.2.1 Geophysical Survey and Test Pits-South Site

The geophysical survey performed on the South Site detected four magnetic anomalies that may be indicative of tanks. The GeoMatrix report included in Appendix A, identifies these anomalies as A, B, C, and D. In addition, GeoMatrix identified several smaller anomalies in the South Site. To evaluate the anomalies identified by GeoMatrix, the test pits were excavated on the South Site (i.e., test pits TP-1 through TP-9) to depths ranging from 0.5 feet (TP-1) to 9.0 feet (TP-8) below the ground surface on April 11 and April 12, 2001. A manhole cover was encountered in test pit TP-1. An approximate 1,000-gallon UST was encountered in test pit TP-4 at a depth of approximately 3.0 feet below the ground surface. [Note: This UST was filled with water at the time it was encountered and the City of Rochester retained Marcor Remediation, Inc. to remove the water at the time the test pits were excavated. The tank was subsequently covered with the excavated soil to be removed during remedial activities.] No additional USTs were encountered during the excavation of test pits at the South Site; however, scrap steel (i.e., remains of a tank) was encountered in test pit TP-3 and an apparent former pump island was encountered in test pit TP-5. Fill material consisting of sand and silt, brick, asphalt, clay, slag, metal, piping, etc. was encountered in each of the test pits. [Note: The test pits were terminated prior to encountering indigenous soil.] The location of the test pits excavated at the South Site is included as Figure 2A. [Note: An additional test pit designated South (13') was excavated at the Site on September 26, 2001 to collect a soil sample for permeability testing. The results of the permeability testing are discussed further in Section 2.2.3.]

[Note: An additional test pit designated as South 13' was excavated at the Site on September 26, 2001 by Arrow to collect a soil sample for permeability testing by a geotechnical materials testing laboratory. The results of the permeability testing are discussed further in Section 2.1.3.]

2.2.2 Test Borings-South Site

On May 10, 2001 through May 25, 2001 thirty-one test borings (designated TB-127 through TB-157, including test borings TB-137A, TB-144A, TB-145A, and TB-147A, but not including test borings TB-126, TB-130 and TB-139) were advanced in the South Site by Lyon Drilling, Inc. using truck-mounted Geoprobe System sampling equipment. [Note: Test borings TB-126, TB-130 and TB-139 were not completed due to the presence of

utilities.]

The test borings were advanced to depths ranging between approximately 8.8 feet (i.e., TB-144) and 25.5 feet (i.e., TB-146) below the ground surface. [Note: When refusal was encountered in test borings at shallow depths, the test borings were offset and continued. The designation for these test borings ends with the letter A (e.g., TB-145A, TB-147A, etc.).] Soil samples were screened and the equipment was decontaminated similarly to that described for the test borings advanced on the North Site.

Observations regarding the soil/fill appearance, odors, and the measured peak PID readings are provided on the Test Boring Logs included in Appendix C. The peak PID readings measured in each test boring advanced during this study and the previous subsurface studies at the Site are illustrated in Figure 2A. In addition, a contour map of the peak PID readings encountered in soil samples at depths of 0'-8', 8'-12', and 12'-16' are included in Appendix A as Figure 2A-1, Figure 2A-2, and Figure 2A-3, respectively.

Heterogeneous fill was encountered at depths ranging from approximately 2.5 feet (TB-129) to 20.5 feet (i.e., TB-155) in the test borings advanced at the South Site with an average thickness of approximately 8 feet. This fill material consists primarily of sand, silt and gravel intermixed with cinders, slag, silt, and ash, etc. and it is underlain by indigenous soil consisting primarily of sand and silt with lesser varying amounts of gravel and clay. Apparent top of bedrock (i.e., as indicated by the presence of rock fragments) was encountered at depths ranging from 14.0 feet (TB-128) to 25.5 feet (TB-146).

2.2.3 Laboratory Testing-South Site

Based on the field observations and the historical uses of portions of the property, selected soil samples were submitted for analysis to Paradigm. These samples included:

- Soil Samples TB-143 (21.0') and TB-151 (17.5') analyzed for New York State Department of Environmental Conservation (NYSDEC) Target Compound List (TCL) and STARS List VOCs via United States Environmental Protection Agency (USEPA) Method 8260;

- Soil Samples TB-131 (10.0'), TB-134 (13.5'), TB-136 (15'), TB-138 (11.5'), TB-137A (18.5') analyzed for NYSDEC STARS List VOCs via USEPA Method 8021;

- Soil Samples TB-131 (10.0'), TB-133 (11'), TB-136 (15'), TB-138 (11.5'), TB-142 (12.5'), TB-149 (7.5), and TB-153 (5.5') analyzed for STARS List semi-volatile organic compounds (S-VOCs) via USEPA Method 8270;

- Soil Samples TB-151 (7.5'), TB-143 (21.0'), and TB-145A (15.0') analyzed for Lead following a TCLP extraction; and

- Soil Samples TB-134 (13.5') and TB-136 (15') analyzed for Total Organic Carbon.

An additional sample was collected and submitted to VanderHorst for geotechnical laboratory testing. This sample and the testing completed are listed below.

- Soil Sample South (13') was analyzed for permeability.

A copy of Paradigm's report for these samples [and VanderHorst's permeability testing report for soil sample South (13')] is included in Appendix C. In addition, a summary of the detected aromatic VOCs and S-VOCs in soil samples collected from the South Site is included in Table II. As shown on Table II, the following test borings contained aromatic VOCs and/or S-VOCs at concentrations that exceed recommended soil cleanup objectives identified in *TAGM #4046*:

- TB-131 (10.0'): Ethylbenzene (78,900 ppb), m,p-Xylene (371,000), o-Xylene (47,500 ppb), Isopropylbenzene (17,600 ppb), n-Propylbenzene (64,600 ppb), 1,3,5-Trimethylbenezene (127,000 ppb), 1,2,4-Trimethylbenzene (368,000 ppb), and Naphthalene (60,100 ppb);

- TB-134 (13.5'): Benzene (1,130 ppb) and m,p-Xylene (1,280 ppb);

- TB-143 (21.0'): m,p-Xylene (1,450 ppb);

- TB-151 (17.5'): m,p-Xylene (3,180 ppb).

- TB-13 (8'-12'): Toluene (259,000 ppb), Ethylbenzene (209,000 ppb), m,p,-xylene (853,000 ppb), o-xylene (355,000 ppb), Isopropylbenzene (27,200 ppb), n-propylbenzene (86,600 ppb), 1,3,5-Trimethylbenzene (160,000 ppb), 1,2,4-Trimethylbenzene (557,000E), p-Isopropyltoluene (28,500 ppb), and Naphthalene (88,300 ppb);

- TB-15 (6'-8'): Benzo (b) fluoranthene (1,388 ppb), Benzo (k) fluoranthene (1,322 ppb), Benzo (a) pyrene (779 ppb), Chrysene (1,139 ppb), Benzo (a) anthracene (1,033 ppb);

- TB-16 (6'-8'): Benzo (b) fluoranthene (15,455 ppb), Benzo (k) fluoranthene (9,309 ppb), Benzo (a) pyrene (4,025 ppb), Chrysene (6,720 ppb), Benzo (a) anthracene (6,107 ppb) and Dibenz (a,h) anthracene (947 ppb).

The remaining detected concentrations reported on Table II did not exceed recommended soil cleanup objectives identified in *TAGM #4046*.

Soil sample South (13') was collected from a test pit excavated from the South Site and submitted to VanderHorst Geotechnical Engineering, P.C. for permeability testing. As shown in Appendix C, the permeability of this soil sample is reportedly 1.5×10^{-5} cm/sec.

2.3 Groundwater Evaluation

On May 24, 2001 through May 30, 2001, five new overburden groundwater monitoring

wells (i.e., designated MW-101 through MW-105) and one new bedrock groundwater monitoring well (i.e., designated MW-106) were installed by Lyon. Monitoring wells MW-101 and MW-102 were installed on the North Site and monitoring wells MW-103 through MW-106 were installed on the South Site. [Note: Monitoring wells MW-1 and MW-2 were installed on the North Site and MW-4 was installed on the South Site during previous studies.] The locations of these wells are illustrated on Figure 2A and 2B.

Lyon utilized a truck-mounted CME 55 drill-rig to advance and install these wells. Soil samples were collected continuously in two-foot intervals using a 2-inch ID split spoon sampler in monitoring well locations where test borings were not advanced as part of this study (i.e., continuous samples were not collected in monitoring wells if the monitoring wells were installed at locations where other test borings were advanced at the Site.] The monitoring wells were installed with their screen set at depths ranging between 20.0 feet (i.e., MW-102 and MW-105) and 25.0 feet (i.e., MW-101) below the ground surface.

To evaluate if the bedrock groundwater has been impacted by the VOC contamination present in the overburden, monitoring well MW-106 was augered to an auger refusal depth of 24.8 feet and approximately 11 feet of bedrock core was subsequently removed to a depth of approximately 35.4 feet below the ground surface. The underlying competent bedrock generally consists of gray, slightly weathered, dolomite containing pits, vugs, calcite and little fracturing. Few vertical fractures appeared to occur at the overburden/bedrock interface (i.e., weathered bedrock) and the rock quality is generally good to excellent. The rock quality data was measured at 90% at a depth of 24.8 feet to 29.8 feet and increased to 92.6% from 29.8 feet to 34.8 feet, average rock quality data of the bedrock encountered in monitoring well MW-106 is 91.3%. [Note: Monitoring well MW-106 was placed in the vicinity of MW-4 (i.e., the location where the highest concentration of VOCs were detected in the overburden groundwater during previous studies completed at the Site).]

The recovered soil samples were observed by a DAY representative for evidence of suspect contamination (e.g., staining, odors, etc.). Portions of the recovered soil samples were also screened with the PID in order to evaluate if VOCs were present in the samples. The DAY representative recorded pertinent information for each well in a field logbook, whereupon portions of the information were subsequently transcribed onto well logs, which are included in Appendix B.

The groundwater monitoring wells were constructed of pre-cleaned five-foot long, 2-inch I.D., threaded, flush-jointed, No. 10 slot, schedule 40 PVC screens with attached riser casing of the same material. With the exception of monitoring well MW-106 installed in bedrock, the well screens were installed to intersect and extend above the top of the water table observed at the time of installation. The well installations include a washed and graded sand pack surrounding the screens and a bentonite seal above the sand pack. The annulus space between the top of the bentonite seal and the top foot of the test boring at each well was filled with cement grout. The top of the PVC riser was cut below grade and fitted with a locking cap. A flush-mounted curb box was sealed in place at the ground surface with concrete. These construction details are illustrated on the well logs included in Appendix B.

Soil cuttings, decontamination water, and well water generated during the well installation work were placed in New York State Department of Transportation (NYSDOT)-approved 55-gallon drums that were labeled and staged on-site. These materials will ultimately require disposal in accordance with applicable regulations.

Monitoring Well Development and Sampling

On June 4, 2001, groundwater monitoring wells MW-101 through MW-105 were developed by removing 3 to 5 well volumes of groundwater from each well or until dryness [i.e., approximately 0.5 gallons (MW-104) to 3.0 gallons (MW-105)]. Well development was completed utilizing a centrifugal pump and dedicated tubing. No fluids were added to the wells during development. The pH, specific conductivity, and temperature were measured during development of the monitoring wells. Well development equipment was decontaminated prior to use in each well. [Note: Approximately 130 gallons of water was purged from monitoring well MW-106 to remove the drilling water used during rock coring.]

On June 7, 2001, the depth to static water within each of the monitoring wells at the Site (i.e., MW-1, MW-2, MW-4 and MW-101 through MW-106) was measured. Also, each well was purged prior to sampling by evacuating a minimum of three well casing volumes of water, or to dryness using the same equipment utilized for developing the wells. After adequate time was allowed for each well to recharge, groundwater samples were collected for analytical laboratory testing (samples designated as MW-1, MW-2, MW-4 and MW-101 through MW-106). Each well was sampled using new, dedicated disposable bailers with new dedicated nylon cord. In addition to the volume of groundwater necessary to satisfy the laboratory container requirements, an additional volume was obtained at each well for field measurements. The pH, specific conductivity, and temperature of water samples was measured using a Horiba Water Quality Monitor and for Iron using a Hach field test kit. The field measurement data and sampling data are presented on Monitoring Well Sampling Logs included in Appendix D. The groundwater samples were delivered to Paradigm for subsequent laboratory analysis.

2.3.1 Laboratory Testing

The analytical laboratory testing results of the groundwater samples submitted for testing from each study area are discussed below.

2.3.1.1 North Site

Each of the groundwater samples collected from the North Site was analyzed by Paradigm for NYSDEC STARS-list S-VOCs via USEPA Method 8270, groundwater samples MW-1, MW-2, and MW-102 were also analyzed for STARS list VOCs via USEPA Method 8021 and groundwater sample MW-101 was also analyzed for TCL and STARS List VOCs via USEPA Method 8260. In addition, groundwater samples MW-1, MW-2, and MW-101 were analyzed for biochemical oxygen demand (BOD), chemical oxygen demand (COD),

and manganese.

A copy of Paradigm's analytical laboratory report is included in Appendix C. The detected total amount of VOCs detected in groundwater at the North Site ranged from 209.62 ppb (MW-102) to 2,583.1 ppb (MW-2). A total VOCs in groundwater contour map of the North Site is included as Figure 2A-4. As shown, the concentration of VOCs appears consistent throughout the Site (i.e., in the 2,000 ppb range) with the exception of monitoring well MW-102. The concentration of benzene in groundwater samples collected from the North Site ranged from 1.6 ppb (MW-102) to 250 ppb (MW-2). The detected concentrations of VOCs and S-VOCs in the groundwater samples collected from the North Site are summarized in Table IV. A summary of the VOCs detected in groundwater samples collected from the monitoring wells in the North Site in exceedence of the ambient groundwater standards identified in the NYSDEC Technical and Operational Guidance Series 1.1.1 [TOGS (1.1.1)] are presented below:

- MW-1: Benzene (11.0 ppb), Ethylbenzene (160 ppb), m,p-Xylene (520 ppb), Isopropylbenzene (42.0 ppb), n-Propylbenzene (85.6 ppb), 1,3,5-Trimethylbenzene (264 ppb), 1,2,4-Trimethylbenzene (886 ppb), and Naphthalene (271 ppb);

- MW-2: Benzene (250 ppb), Ethylbenzene (141 ppb), m,p-Xylene (200 ppb), Isopropylbenzene (60.7 ppb), n-Propylbenzene (88.4 ppb), 1,3,5-Trimethylbenzene (312 ppb), 1,2,4-Trimethylbenzene (1,430 ppb), and Naphthalene (201 ppb);

- MW-101: Benzene (57.2 ppb), Toluene (426 ppb), Ethylbenzene (208 ppb), m,p-Xylene (873 ppb), o-Xylene (231 ppb), 1,3,5-Trimethylbenzene (97.0 ppb), and 1,2,4-Trimethylbenzene (118 ppb); and

- MW-102: Benzene (1.6 ppb), Ethylbenzene (83.0 ppb), m,p,-Xylene (13.7 ppb), Isopropylbenzene (44.0 ppb), n-Propylbenzene (50.2 ppb), 1,2,4-Trimethylbenzene (15.1 ppb).

[Note: Specific VOCs (i.e., Toluene, etc.) may not have been detected in the groundwater samples collected from the North Site due to elevated detection limits.] .

The concentration of iron present in the groundwater samples collected from the North Site ranged from 0.0 mg/l (MW-101) to 5.4 mg/l (MW-1). The concentration of COD detected in groundwater samples collected from the North Site ranged from 35 mg/l (i.e., MW-1) to 44 mg/l (i.e., MW-2 and MW-101). The concentration of BOD detected in groundwater samples collected from the North Site ranged from 2.94 mg/l (i.e., MW-1) to 8.37 mg/l (i.e., MW-101). The concentration of manganese detected in groundwater samples collected from the North Site ranged from 0.099 mg/l (i.e., MW-101) to 0.256 mg/l (i.e., MW-1)

2.3.1.2 South Site

Each of the groundwater samples collected from the South Site were analyzed by Paradigm for NYSDEC STARS-list S-VOCs via USEPA Method 8270, groundwater samples MW-4,

MW-104 through MW-106 were also analyzed for STARS list VOCs via USEPA Method 8021 and groundwater sample MW-103 was also analyzed for TCL and STARS List VOCs via USEPA Method 8260. In addition, groundwater samples MW-103, MW-104, and MW-106 were analyzed for biochemical oxygen demand (BOD), chemical oxygen demand (COD), and manganese.

A copy of Paradigm's analytical laboratory report is included in Appendix C. The detected total amount of VOCs detected in groundwater at the South Site ranged from 0.0 ppb (MW-106) 39,703 ppb (MW-4). A total VOCs in groundwater contour map of the North Site is included as Figure 2B-4. As shown, the concentration of VOCs appears to be the most concentrated in the vicinity of monitoring well MW-4 and there appears to be other possible sources of contamination in the vicinity of monitoring well MW-104 and/or MW-105. The concentration of benzene in groundwater samples collected form the South Site ranged from 0.0 ppb (MW-106) to 8,300 ppb (MW-4). The detected concentrations of VOCs and S-VOCs in the groundwater samples collected from the South Site are summarized in Table IV. A summary of the VOCs detected in groundwater samples collected from monitoring wells at the South Site in exceedence of the ambient groundwater standards identified in the NYSDEC Technical and Operational Guidance Series 1.1.1 [TOGS (1.1.1)] are presented below:

- MW-4: Benzene (8,300 ppb), Toluene (12,100 ppb), Ethylbenzene (2,480 ppb), m,p-Xylene (9,290 ppb), o-Xylene (3,490 ppb), Isopropylbenzene (42.0 ppb), n-Propylbenzene (265 ppb), 1,3,5-Trimethylbenzene (660 ppb), 1,2,4-Trimethylbenzene (2,230 ppb), and Naphthalene (888 ppb);

- MW-103: Benzene (71.7 ppb), Toluene (11.5 ppb), Ethylbenzene (10.7 ppb), m,p-Xylene (27.2 ppb), o-Xylene (11.9 ppb), Isopropylbenzene (42.4 ppb), n-Propylbenzene (64.3 ppb), 1,3,5-Trimethylbenzene (9.0 ppb), 1,2,4-Trimethylbenzene (7.22 ppb), Naphthalene (26.3 ppb), and Methylene Chloride (17.2 ppb);

- MW-104: Benzene (1,400 ppb), Toluene (29.7 ppb), Ethylbenzene (297 ppb), m,p-Xylene (45.9 ppb), Isopropylbenzene (51.8 ppb), n-Propylbenzene (92.2 ppb), 1,2,4-Trimethylbenzene (89.5 ppb), and Naphthalene (120 ppb);

- MW-105: Benzene (740 ppb), Toluene (131 ppb), Ethylbenzene (165 ppb), m,p-Xylene (588 ppb), o-Xylene (203 ppb), n-Propylbenzene (21.5 ppb), 1,3,5-Trimethylbenzene (41.3 ppb), and 1,2,4-Trimethylbenzene (133 ppb).

[Note: Specific VOCs (i.e., Isopropylbenzene, etc.) may not have been detected in the groundwater samples collected from the North Site due to elevated detection limits.] .

The concentration of iron present in the groundwater samples collected from the South Site ranged from 0.0 mg/l (MW-106) to 5.4 mg/l (MW-103). The concentration of COD detected in groundwater samples collected from the South Site ranged from 11 mg/l (i.e., MW-106) to 100 mg/l (i.e., MW-4). The concentration of BOD detected in the

groundwater in the South Site ranged from 6.24 mg/l (i.e., MW-106) to 48.1 mg/l (i.e., MW-4). The concentration of manganese detected in the groundwater samples collected from the South Site ranged from 0.039 mg/l (i.e., MW-106) to 0.126 mg/l (MW-103).

2.4 Potentiometric Surface Map

The location of the new wells were determined in the field by tape measuring from previously existing wells and well casing elevations were surveyed to an assumed datum of 100.00 feet by a licensed surveyor. DAY measured static water levels in each well on June 7, 2001 and the elevation, the static water level, and the calculated groundwater elevation for each well are presented in Table V.

2.4.1 North Site

The groundwater level data collected on June 7, 2001 was used to develop a groundwater potentiometric surface map (Figure 3A). The potentiometric surface map indicates that groundwater at the North Site generally flows to the west in the direction of Mount Hope Avenue. The hydraulic gradient of the South Site is approximately 0.04 feet/foot.

2.4.2 South Site

The groundwater level data collected on June 7, 2001 was used to develop a groundwater potentiometric surface map (Figure 3B). The potentiometric surface map indicates that groundwater at the South Site appears to generally flow to the east/southeast. The hydraulic gradient of the south Site is approximately 0.01 feet/foot.

2.5 Hydraulic Conductivity

On July 13, 2001, the depth to water within monitoring wells MW-2, MW-101, MW-102, MW-103, MW-4, and MW-105 was measured. A solid slug of known volume (i.e., length of PVC pipe filled with concrete and capped at each end) was then introduced into each well ("slug in") and subsequently extracted ("slug out"). An In-situ mini troll 3000 transducer and connecting cable was placed in the monitoring wells prior to installing the slug. At the instant the "slug" is introduced or removed from the well, depth to water measurements were collected using a transducer and electronically input into a datalogger. Depth to static water level was recorded every 3 seconds for the first two minutes. After two minutes, depth to static water level was then measured every 30 seconds, and every one-minute to five minutes thereafter. The data from each slug test was then input into Super Slug, an aquifer slug test analysis software program, and evaluated using the Bouwer and Rice evaluation method. The results of the hydraulic conductivity testing from the slug tests are provided in Appendix E and discussed below.

2.5.1 North Site

The results of the monitoring well MW-2 "slug in" test indicated a hydraulic conductivity of 2.19×10^{-1} feet/day (i.e., 7.73×10^{-5} cm/sec) and a "slug out" hydraulic conductivity of 8.26×10^{-1} feet/day (i.e., 2.92×10^{-4} cm/sec). The results of the MW-101 "slug in" test indicated

a hydraulic conductivity of 2.04 X 10^{-1} feet/day (i.e., 7.20 x 10^{-5} cm/sec) and a "slug out" hydraulic conductivity of 7.96 X 10^{-1} feet/day (i.e., 2.81 x 10^{-4} cm/sec). The results of the MW-102 "slug in" test indicated a hydraulic conductivity of 4.36 X 10^{-1} feet/day (1.54 x 10^{-4} cm/sec) and a "slug out" hydraulic conductivity of 1.11 feet/day (3.93 x 10^{-4} cm/sec). The average hydraulic conductivity measured in the wells tested within the North Site is 5.98 x 10^{-1} feet/day (i.e., 2.11 x 10^{-5} cm/sec).

2.5.2 South Site

The results of the MW-4 "slug in" test indicated a hydraulic conductivity of 3.22 feet/day (i.e., 1.14 x 10^{-3} cm/sec) and a "slug out" hydraulic conductivity of 4.38 feet/day (i.e., 1.55 x 10^{-3} cm/sec). The results of the MW-101 "slug in" test indicated a hydraulic conductivity of 4.94 X 10^{-1} feet/day (i.e., 1.74 x 10^{-4} cm/sec) and a "slug out" hydraulic conductivity of 9.22 X 10^{-1} feet/day (i.e., 3.25 x 10^{-4} cm/sec). The results of the MW-105 "slug in" test indicated that a hydraulic conductivity of 6.61 X 10^{-1} feet/day (i.e., 2.33 x 10^{-4} cm/sec) and a "slug out" hydraulic conductivity of 1.29 feet/day (i.e., 4.57 x 10^{-4} cm/sec). The average hydraulic conductivity measured in the wells tested within the South Site is 1.83 feet/day (i.e., 6.46 x10^{-4} cm/sec).

2.6 Qualitative Risk Assessment

DAY completed a qualitative risk assessment on June 19, 2001 to evaluate potential receptors (i.e., areas of potential migration) of the contamination present on the Site. The type and distance of potential receptors (e.g., sewers, telephone vaults, electrical vaults, water lines, etc.) on and in the immediate vicinity of the Site were identified. [Note: Potential receptors located on the Gateway Commons property were not evaluated as part of this Qualitative Risk Assessment since DAY was unable to access residences at the Gateway Commons property.]

Subsequent to identifying potential receptors of contamination, the on-site receptors and selected off-site receptors in proximity to the Site were evaluated to assess impact from the Site. To the extent possible, this included screening of air space within accessible below-grade receptors using a PID, and a combustible gas indicator/explosimeter. Available information regarding visual and olfactory observations was also recorded for each receptor evaluated. A diagram presenting the location of the environmental receptors and their respective, PID, O_2, and lower explosive limit (LEL) measurements is provided in Figure 4A and 4B.

Although several manholes appear to be slightly oxygen deficient (i.e., 17.5% O_2 in R-18, 19% O_2 in R-19, etc.) and/or contain a lower explosive limit slightly above background (i.e., 0.1%) [i.e., R-7, R-18, R-19, etc.], these readings did not indicate that receptors in proximity to the Site or at the Site (i.e., no PID readings greater than 0.3 ppm, no odors, etc.). In addition, personnel from Monroe County Pure Waters stated that there has been no complaints of unusual odors, vapors, or other indications that contaminants are present in the sewer system located in the immediate vicinity of the Site.

3.0 SUMMARY AND CONCLUSIONS

The findings of the previous studies and the studies performed as part of this project were cumulatively evaluated. A summary of the findings and conclusions and a discussion of the preferred remedial option for the Site are presented below. [Note: A more detailed description of the preferred remedial technologies to be implemented at the Site are presented in a separate document entitled *Corrective Active Plan 151, 171, 173, 175, 177, 191, 425, and 435 Mount Hope Avenue and 562 Ford Street Rochester, New York* (to be submitted subsequent to this Data Report)].

3.1 North Site

Geophysical Studies identfied several magnetic anomalies in the southern portion and central portion of the North Site. The subsequent excavation of test pits in these areas indicated that the magnetic anomalies present on the southern portion of the North Site were primarily apparently related to fill material (i.e., metal debris, footers, etc.). Although USTs were not encountered in these test pits, an apparent former pump island was encountered in test pit TP-11. Due to the presence of concrete sidewalk and park area, test pits were not excavated in the central portion of the North Site.

Based on the subsurface studies completed, heterogeneous fill material consisting primarily of sand, silt and gravel intermixed with cinders, slag, silt, and ash was encountered beginning at the ground surface at the North Site to depths ranging from 5.0 feet to 20.0 feet. The average thickness of the heterogeneous fill material in the North Site is about 11.5 feet. This fill material is underlain by indigenous soil (i.e., excluding TB-107) consisting primarily of sand with varying amounts of silt and gravel and lesser amounts of clay that grades into weathered rock with depth. The apparent top of bedrock (i.e., as defined by the presence of rock fragments) was encountered at depths ranging from 10.5 feet to greater than 20 feet.

The studies completed in the North Site identified evidence of subsurface petroleum contamination that appears to be related to at least two sources and potentially other sources ased on PID readings and VOCs in groundwater (i.e., MW-2). One potential source is located on the southern portion of the North Site (i.e., in the vicinity of test boring TB-116) and another potential source appears to be located on the northern portion of the North Site (i.e., in the vicinity of test boring TB-102). This contamination is primarily composed of aromatic VOCs; however, S-VOCs are present in at least one of the test borings advanced at the North Site (i.e., test boring TB-111). Elevated PID readings are present along the northeastern portion of the North Site (i.e., in the vicinity of TB-101 and TB-104) potentially suggesting that contamination from the Site has extended beyond the eastern property line of the Site. In addition, elevated PID readings are present along the southern portion of the North Site (i.e., test boring TB-115 and TB-116) possibly indicating that an additional contaminant source may exist south of the North Site.

The soil/fill also appears to be impacted in areas by the metals calcium (53,400 ppm),

magnesium (18,100 ppm), and zinc (50.3 ppm) detected in soil sample TB-A (9.0') at concentrations exceeding their respective recommended soil cleanup objectives and/or eastern USA background concentrations identified in the *TAGM #4046* and the metals arsenic (29.9 ppm), copper (3,170 ppm), selenium (4.38 ppm), and zinc (2,490 ppm) detected in soil sample TB-B (15.0') at concentrations that exceed their respective recommended soil cleanup objective and/or eastern USA background concentrations identified in *TAGM #4046*. The elevated concentrations of metals appears attributable to fill materials present at the Site.

As part of this study, two additional monitoring wells were installed at the North Site (i.e., MW-101 and MW-102). [Note: Monitoring wells MW-1 and MW-2 were previously located at the Site.] As indicated in Table IV, each of the samples collected from the monitoring wells sampled in the North Site is impacted by VOCs and the S-VOC naphthalene at concentrations that exceed ambient groundwater standards identified in the TOGS (1.1.1). Groundwater present in the monitoring wells at the North Site ranged in depths of approximately 15.45 feet (MW-2) to 17.54 feet (MW-1) below the ground surface and groundwater in the North Site appears to flow to the east.

Based upon the findings of the subsurface studies completed at the North Site, remediation appears warranted to "close" or "inactivate" Spill #007307.

It is currently anticipated that a source removal in conjunction with in-situ oxidation is the preferred remedial option for the Site. VOC impacted soil exhibiting PID readings greater than 300 ppm will be removed from the North Site to a depth of approximately 8 feet below the ground surface.

Following the soil removal and prior to backfilling the excavation, it is anticipated that contamination present in the soil and groundwater at depths greater than 8 feet below the ground surface will be treated through in-situ chemical oxidation through the injection of Fenton's reagent. DAY will retain the services of a subcontractor to determine the solution to be injected into the subsurface. A series of injection points will be placed within the area of impact at the Site and a Fenton's reagent compound or similar will be injected into the ground. The number of injections will depend on the field testing during the in-situ oxidation work. Once the field testing indicates that the Site has been adequately remediated, the injection points will be removed from the ground and backfilled with bentonite/grout. Subsequent to decommissioning the injection points, the excavation will be backfilled to grade. Confirmatory soil and groundwater samples will be collected from the Site to ascertain that the VOCs have been adequately removed.

why fenton's as opposed to O2 injection

In addition, DAY will develop a site specific Environmental Management Plan (EMP) and Health and Safety Plan (HASP) for the North Site. The EMP and HASP is intended to be used by developers, construction workers, engineers/architects, maintenance personnel, City of Rochester employees, or other entities involved with the redevelopment of the Site and/or the potential disturbance of subsurface media (i.e., soil, fill materials, or groundwater) at the Site.

3.2 South Site

Geophysical studies completed on the South Site identified the presence of four magnetic anomalies possibly indicative of tanks (i.e., designated A through D). Test pits were excavated in each of these locations, in addition to other locations that could indicate the presence of piping and/or small tanks. [Note: As requested by the City of Rochester, test pits were not excavated in the area of the sidewalk.] An approximate 1,000-gallon UST was encountered approximately 3 feet below the ground surface in Test Pit TP-4 (i.e., identified as magnetic anomaly C). In addition, a manhole buried about 6 inches below the ground surface was encountered in test pit TP-1 (i.e., magnetic anomaly A), scrap tank remains were encountered in test pit TP-3 (i.e., magnetic anomaly D), and an apparent former pump island was encountered in test pit TP-5 (i.e., magnetic anomaly B). The additional test pits excavated at the South Site encountered fill material consisting of rock, brick, glass, slag, ash, pipe, etc. to depths up to 9.0 feet (TP-8) below the ground surface.

The subsurface studies completed in the South Site identified heterogeneous fill material consisting primarily of sand, silt and gravel intermixed with cinders, slag, silt, and ash, etc. at depths ranging from approximately 2.5 feet to 20.5 feet below the ground surface with an average thickness of approximately 8 feet. This fill material is underlain by indigenous soil consisting primarily of sand and silt with lesser varying amounts of gravel and clay. Apparent top of bedrock (i.e., as indicated by the presence of rock fragments) was encountered at depths ranging from 14.3 feet to 25.5 feet below the ground surface.

Subsurface contamination in the South Site appears to be related to two potential sources. One source area appears to be located in proximity to test borings TB-135, TB-136, TB-137 and TB-157 where peak PID readings ranging from 2,089 ppm to 9999+ ppm were measured. A second source appears to be located in proximity to test borings TB-143, TB-146, TB-147, and TB-151 where peak PID readings ranging from 2,043 ppm to 5,611 ppm were measured.

The contamination detected on the soil samples collected from the South Site appears to be primarily composed of aromatic VOCs. [Note: S-VOCs were encountered in previous studies at the Site in samples from test borings TB-16 and TB-15; however, the S-VOCs appear to be related to fill material present at the Site; rather than attributable to petroleum fuels or petroleum products from leaking tank systems.] Contamination is present along the northern and southern portion of the South Site. The distribution of the contamination suggests the possibility of off-site contamination from these source areas and/or an off-site contaminant source is impacting the Site (i.e., more elevated PID readings were encountered on the adjoining property to the north during previous studies).

As part of this study, four additional monitoring wells were installed at the South Site (i.e., MW-103 through MW-106) to evaluate groundwater conditions. [Note: Monitoring well MW-4 was installed at the Site as part of previous studies.] With the exception of monitoring well MW-106, which has its screen installed in the bedrock, each of the wells present at the South Site are overburden wells. As indicated in Table IV, groundwater samples collected from monitoring wells MW-4 and MW-103 through MW-105 contain

VOCs and the S-VOC naphthalene) at concentrations that exceed ambient groundwater standards identified in the TOGS (1.1.1). No VOCs or S-VOCs were detected above laboratory detection limits in groundwater samples collected from monitoring well MW-106, indicating that groundwater within the bedrock has not been impacted at the Site. Groundwater present in the monitoring wells at the North Site ranged in depths of approximately 13.51 feet (MW-106) to 17.77 feet (MW-104) below the ground surface and groundwater flow is generally to the ~~east/southeast~~. ? SW?

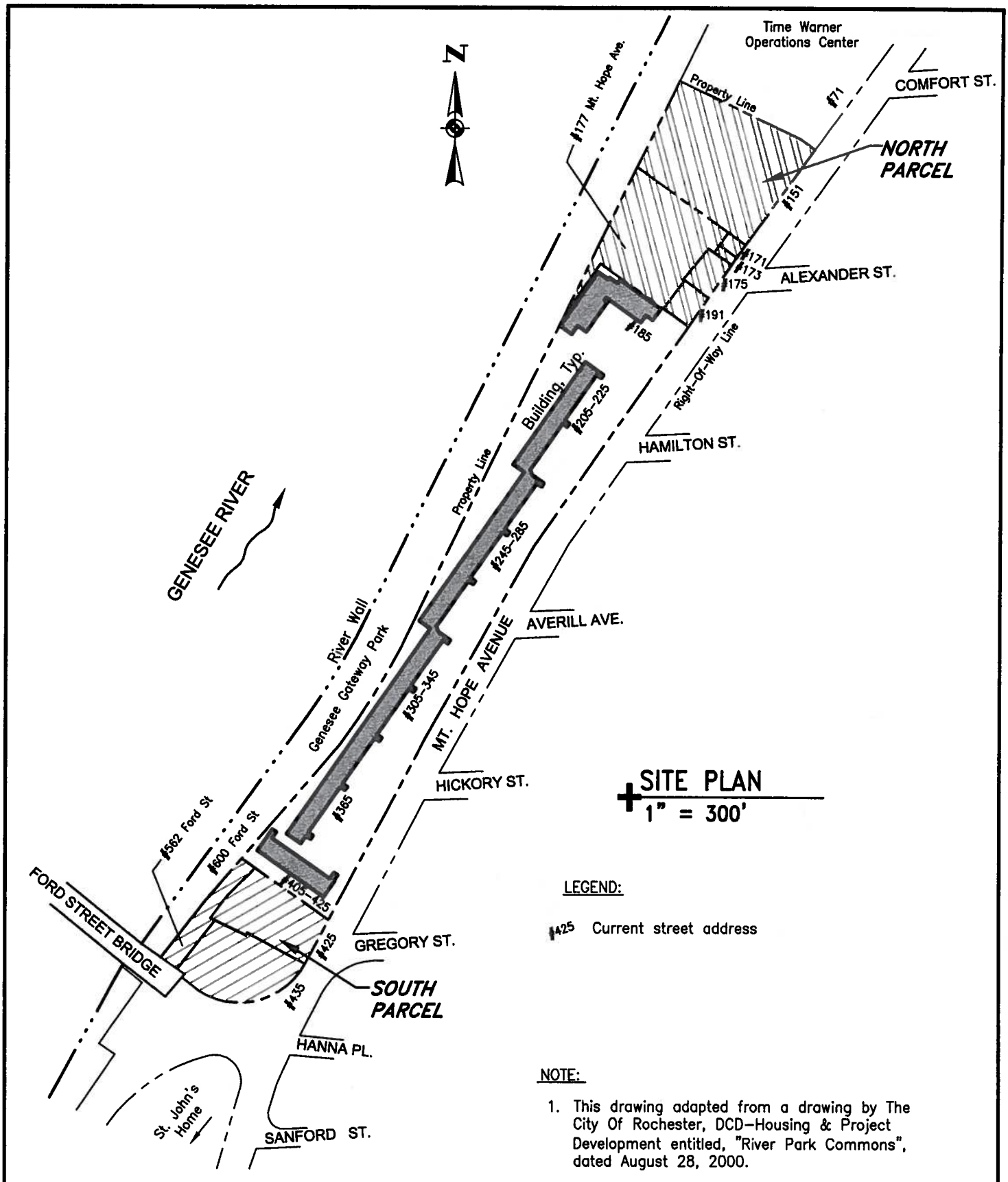
Based upon the findings of the subsurface activities completed at the South Site, remediation appears warranted to "close" or "inactivate" Spill # 0070378.

It is currently anticipated that a source removal in conjunction with in-situ oxidation is the preferred remedial option for the Site. VOC impacted soil exhibiting PID readings greater than 300 ppm will be removed from portions of the South Site to an approximate depth of approximately 15 feet below the ground surface, depending on the amount of "clean" soil overlying the contaminated soil.

Following the soil removal and prior to backfilling the excavation, contaminated soil and groundwater remaining at the Site will be treated through in-situ chemical oxidation through the injection of Fenton's reagent. The in-situ oxidation and the collection of confirmatory soil samples will be conducted similarly to that described above for the North Site.

vs. O_2 injection?

FIGURES



DATE 02-08-2002 DRAWN BY Tww SCALE 1" = 300'	**day** DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14614-1008	PROJECT TITLE MT. HOPE AVENUE ROCHESTER, NY PHASE II ENVIRONMENTAL STUDY DRAWING TITLE Project Locus Map	PROJECT NO. 2506S-00 **FIGURE 1**

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Time Printed: Mon Feb 11 09:20 2002

Ref4: MtHopeBase-1.dwg
Ref5:
Ref6:

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Ref2: 2506-45.dwg
Ref3: 2506-2.dwg

Xerox230AnsB-2; 11 x 17

Time Plotted: Mon Feb 11 10:20 2002
File Name: Phase2\2506\2506-46.dwg

SITE PLAN
1" = 50'

LEGEND:

TB-147 2451ppm — Test Boring Location With Peak Photoionization Detector (PID) Reading Recorded In Parts Per Million (ppm) Advanced May 2001

TB-15 3.0ppm — Test Boring Location With Peak PID Reading Recorded In ppm Advanced September 2000

MW-4 2073ppm/209.2ppm — Groundwater Monitoring Well Location With Peak PID Reading In ppm/Total Volitile Organic Compound (VOC) Concentration For Groundwater Sample Recorded In ppm, Sampled June 7, 2001

TP-6 0.0ppm — Test Pit Location With Peak PID Reading Recorded In ppm, Excavated 4-12-2001

Approximate Location Of Former And/Or Current Underground Storage Tank

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

FIELD VERIFIED BY	JSB
DATE	08-2001
DRAWN BY	Tww
DATE DRAWN	11-2001
SCALE	1" = 50'
DATE ISSUED	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

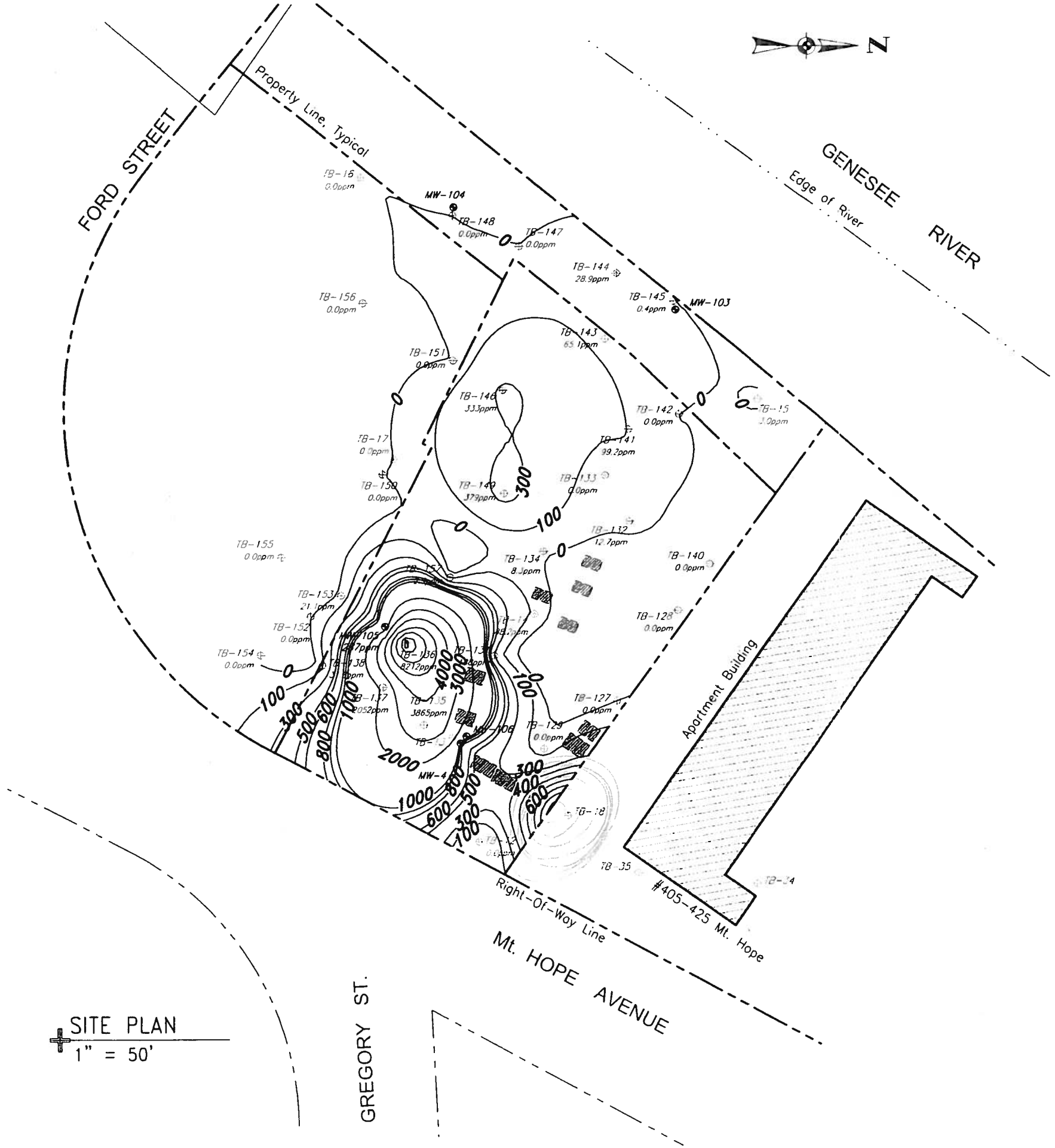
PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Test Boring & Groundwater Monitoring Well Locations

PROJECT NO
2506S-00

FIGURE 2A



SITE PLAN
1" = 50'

LEGEND:

MW-105 1287ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
100	Contour Of Total VOC In Soil, At Depth Of 0 Feet To 8 Feet, With ppm Value Noted
	Approximate Location Of Former And/Or Current Underground Storage Tank
TB-149 379ppm	Test Boring Location With Peak Photoionization (PID) Reading In ppm. Test Borings Were Advanced September 2000 And May 2001

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. PID readings on soil samples were obtained between May 10 and May 25, 2001.

FIELD VERIFIED BY	JSB
DATE	01-2002
DRAWN BY	Tww
DATE DRAWN	01-2002
SCALE	1" = 50'
DATE ISSUED	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Contours Of Total VOC's In Soil At Depth Of 0 Feet To 8 Feet

PROJECT NO.
2506S-00

FIGURE 2A-1

Ref1: 2506-26.dwg
Ref2: 2506-25.dwg
Ref3: MtHopeBase-1.dwg
Ref4: South0'-8'.dwg
Ref5:
Ref6:
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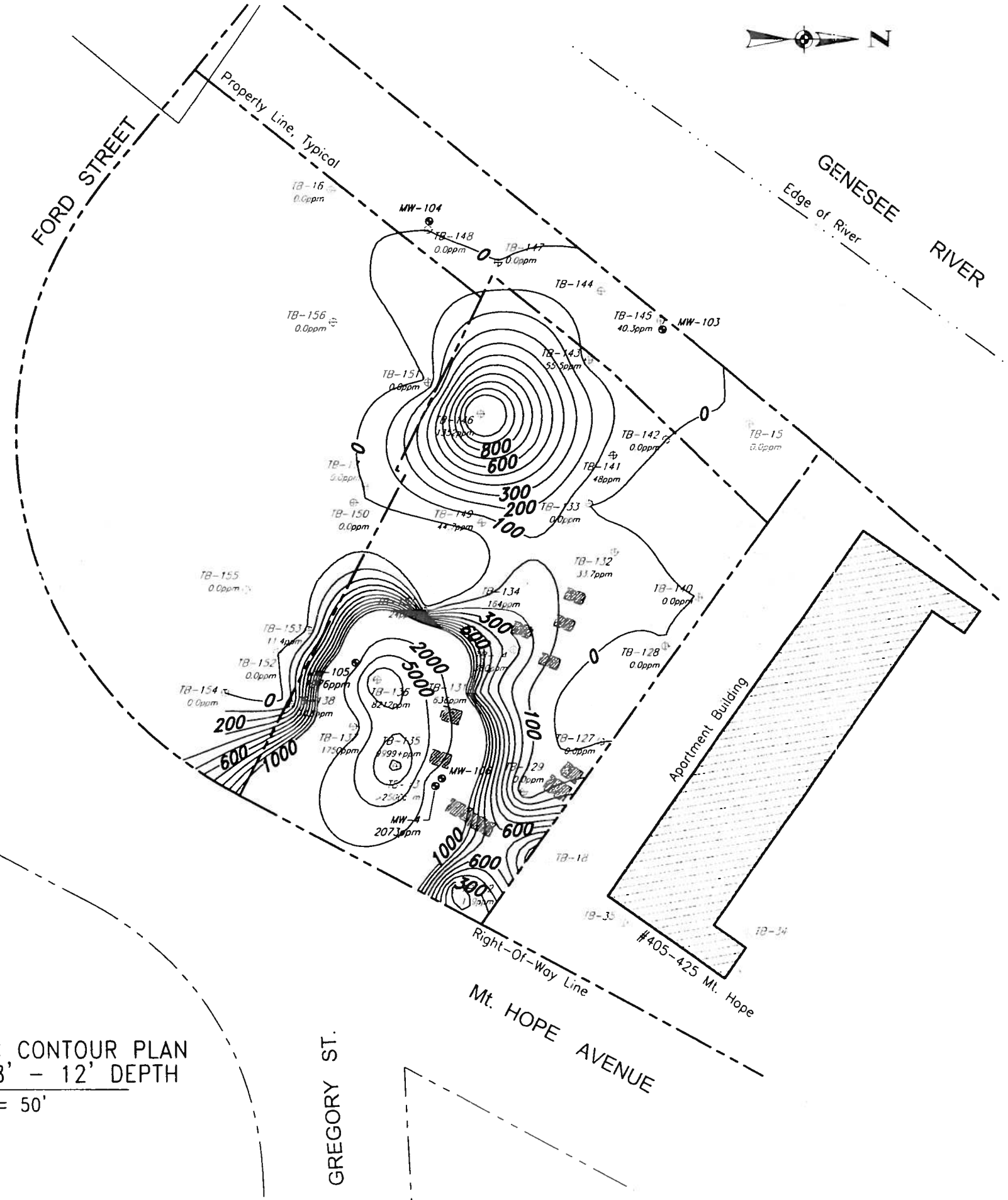
Time Plotted: Fri Feb 08 15:50 2002
File Name: Phase2\2506\2506-24.dwg



VOC CONTOUR PLAN
@ 8' – 12' DEPTH
1" = 50'

LEGEND:

MW-105 1287ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
100	Contour Of Total VOC In Soil, At Depth Of 8 Feet To 12 Feet, With ppm Value Noted
	Approximate Location Of Former And/Or Current Underground Storage Tank
TB-149 379ppm	Test Boring Location With Peak Photoionization (PID) Reading In ppm. Test Borings Were Advanced September 2000 And May 2001

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD–Housing & Project Development entitled "River Park Commons", dated Augus 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. PID readings on soil samples were obtained between May 10 and May 25, 2001.

DATE	FIELD VERIFIED BY	DATE DRAWN	DRAWN BY	DATE ISSUED	SCALE
01-2002	JSB	01-2002	Tww	02-08-2002	1" = 50'

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Contours Of Total VOC's In Soil At Depth Of 8 Feet To 12 Feet

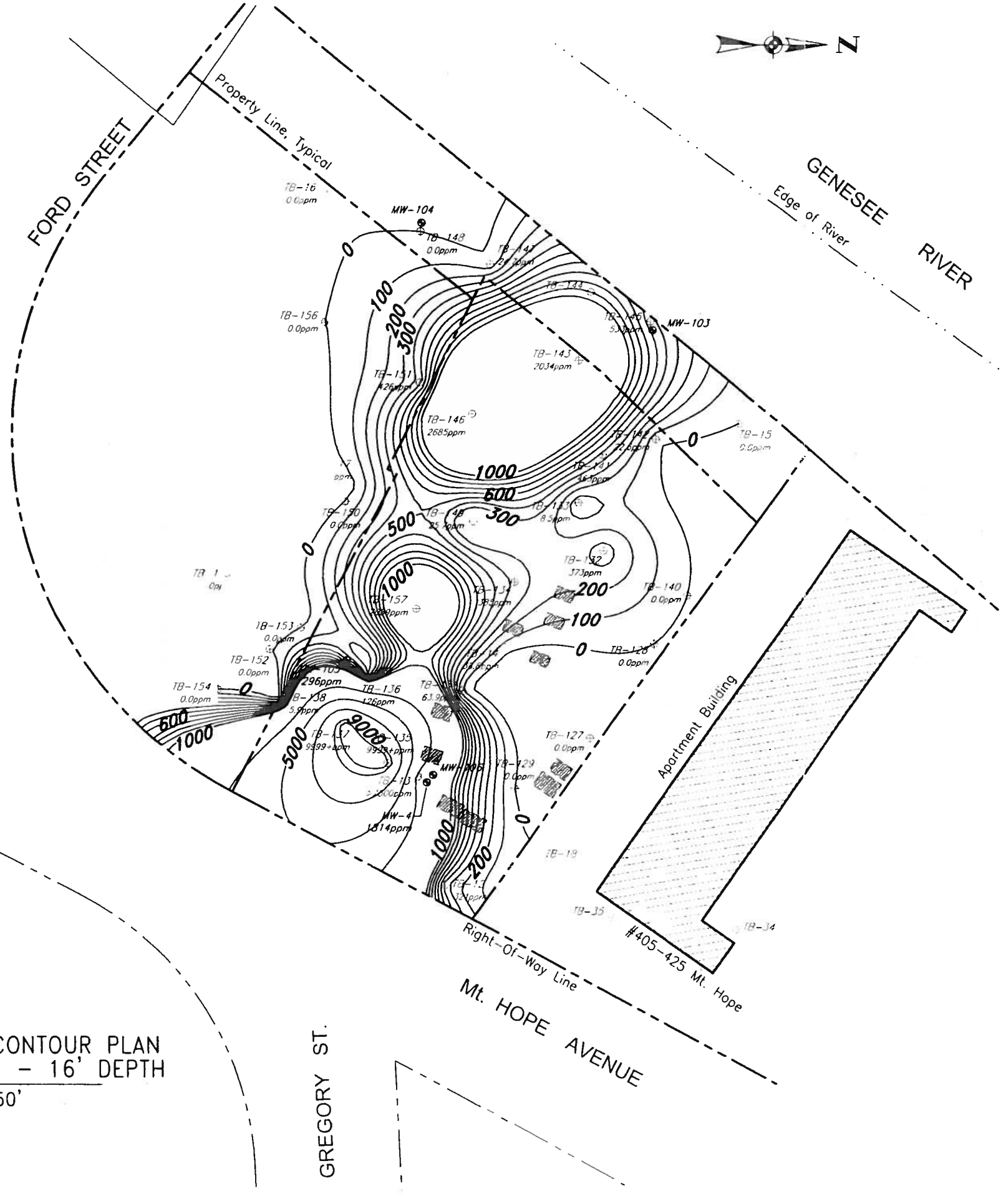
PROJECT NO.
2506S-00

FIGURE 2A-2

Ref1: 2506-28.dwg
Ref2: 2506-27.dwg
Ref3: MtHopeBase-1.dwg
Ref4: South8'-12' dwg
Ref5:
Ref6:

Xerox230AnsB-2, 11 x 17

Time Plotted: Fri Feb 08 15:52 2002
File Name: Phase2\2506\2506-29.dwg



VOC CONTOUR PLAN
@ 12' - 16' DEPTH
1" = 50'

LEGEND:

- MW-105 296ppm — Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
- 100 — Contour Of Total VOC In Soil, At Depth Of 12 Feet To 16 Feet, With ppm Value Noted
- Approximate Location Of Former And/Or Current Underground Storage Tank
- TB-149 25.7ppm — Test Boring Location With Peak Photoionization (PID) Reading In ppm. Test Borings Were Advanced September 2000 And May 2001

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. PID readings on soil samples were obtained between May 10 and May 25, 2001.

FIELD VERIFIED BY	DATE
JSB	01-2002
DRAWN BY	DATE DRAWN
Tww	01-2002
SCALE	DATE ISSUED
1" = 50'	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Contours Of Total VOC's In Soil At Depth Of 12 Feet To 16 Feet

PROJECT NO.
2506S-00

FIGURE 2A-3

Ref1: 2506-32.dwg
Ref2: 2506-31.dwg
Ref3: MtHopeBase-1.dwg
Ref4: South12'-16'.dwg
Ref5:
Ref6:

Xerox230AnsiB-2: 11 x 17

Time Plotted: Fri Feb 08 15:55 2002
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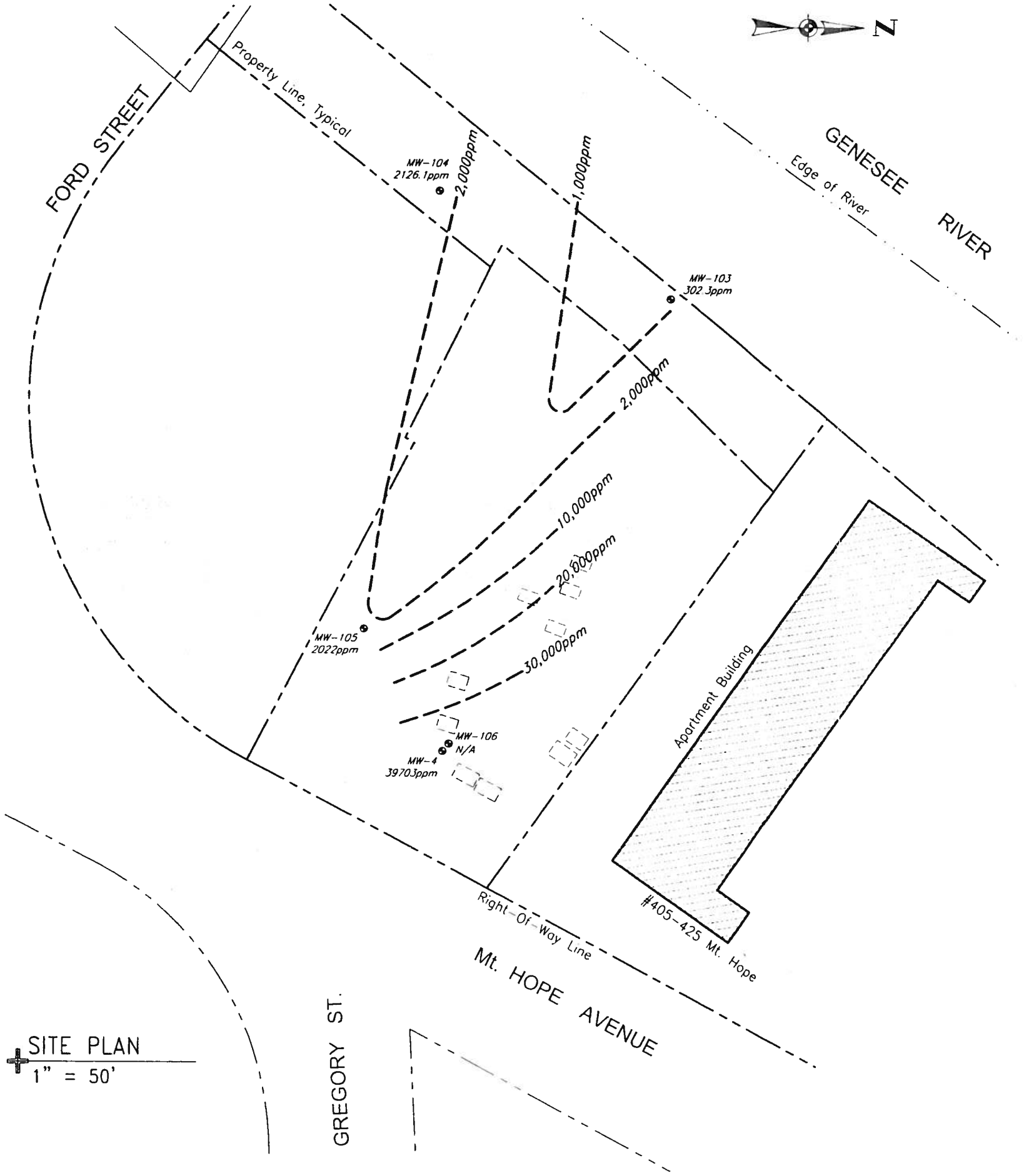


SITE PLAN
1" = 50'

LEGEND:

MW-104 ● 2126.1ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
——2,000ppm	Total VOC In Groundwater Contour With ppm Value
▭	Approximate Location Of Former And/Or Current Underground Storage Tank

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD–Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. Groundwater samples were obtained on June 07, 2001.

FIELD VERIFIED BY	JSB
DATE	01-2002
DRAWN BY	Tww
DATE DRAWN	01-2002
SCALE	1" = 50'
DATE ISSUED	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Total VOC's In Groundwater Contour Map

PROJECT NO.
2506S-00

FIGURE 2A-4

Ref1: 2506-20.dwg
Ref2: 2506-22.dwg
Ref3: MtHopeBase-1.dwg

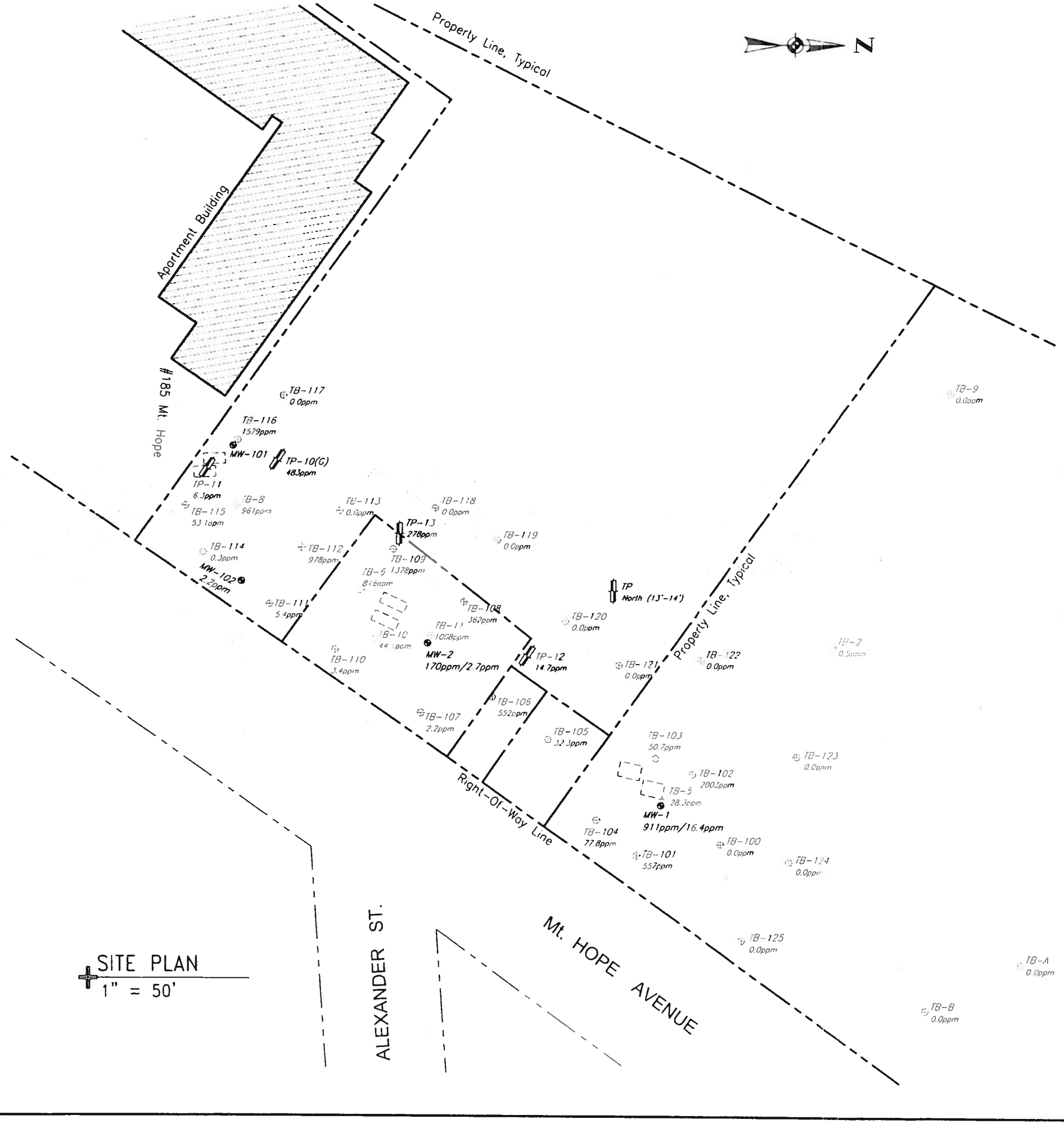
Xerox230AnsiB-2; 11 x 17

Time Plotted: Mon Feb 11 10:45 2002
File Name: Phase2\2506\2506-23.dwg

Ref1: 2506-41.dwg
Ref2: 2506-2.dwg
Ref3: MtHopeBase-1.dwg

Xerox230Ans\B-2; 11 x 17

Time Plotted: Fri Feb 08 15:58 2002
File Name: Phase2\2506\2506-42.dwg



SITE PLAN
1" = 50'

LEGEND:

- TB-106 552ppm — Test Boring Location With Peak Photoionization Detector (PID) Reading Recorded In Parts Per Million (ppm) Advanced May 2001
- TB-8 961ppm — Test Boring Location With Peak PID Reading Recorded In ppm Advanced September 2000
- MW-2 170ppm/2.7ppm — Groundwater Monitoring Well Location With Peak PID Reading In ppm/Total Volitile Organic Compound (VOC) Concentration For Groundwater Sample Recorded In ppm, Sampled June 7, 2001
- TP-13 278ppm — Test Pit Location With Peak PID Reading Recorded In ppm, Excavated 4-12-2001
- Approximate Location Of Former And/Or Current Underground Storage Tank

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

FIELD VERIFIED BY	JSB
DATE	01-2002
DRAWN BY	Tww
DATE DRAWN	01-2002
SCALE	1" = 50'
DATE ISSUED	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

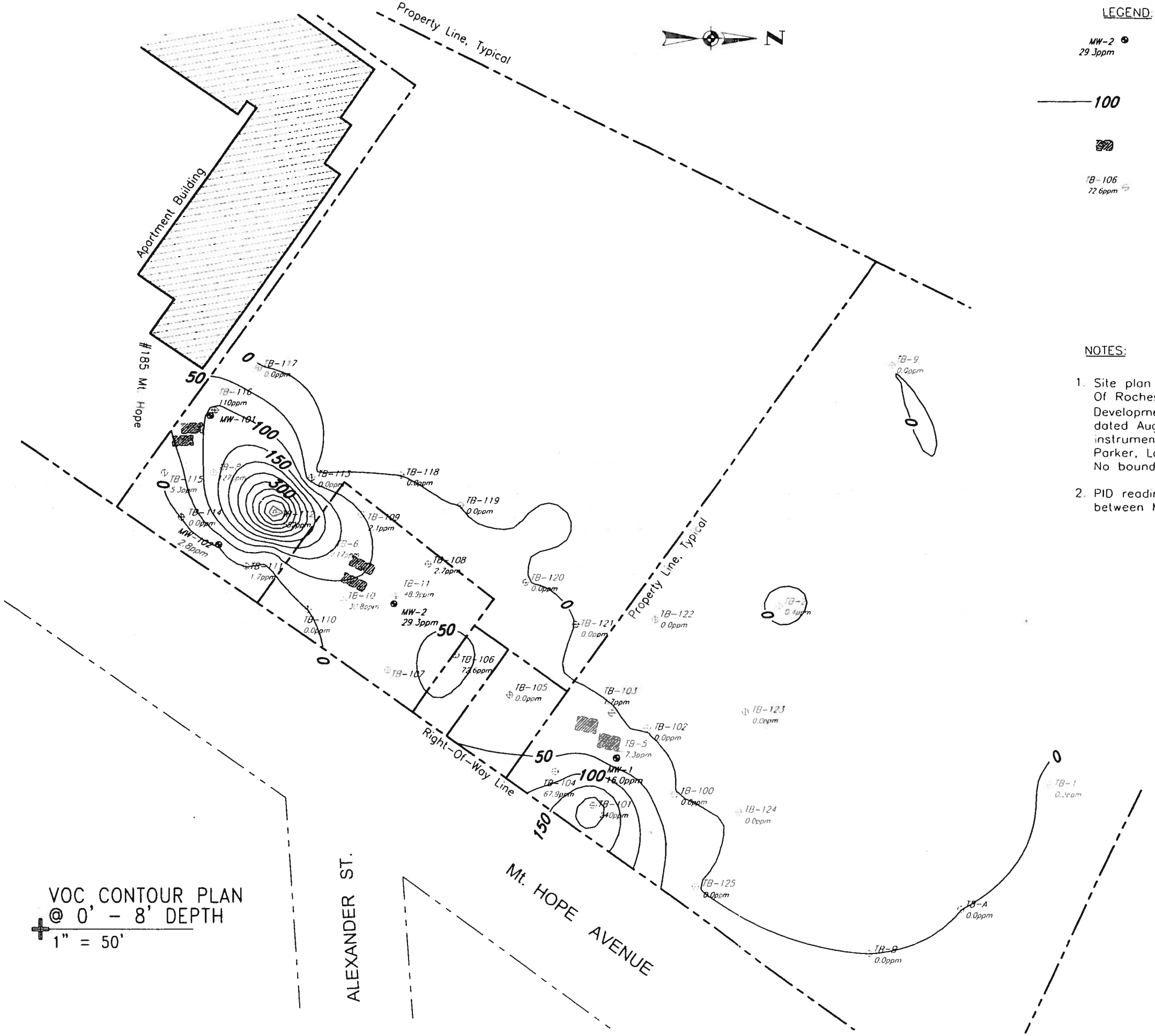
PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - North Parcel
Test Boring & Groundwater Monitoring Well Locations

PROJECT NO.
2506S-00

FIGURE 2B



VOC CONTOUR PLAN
@ 0' - 8' DEPTH
1" = 50'

LEGEND:

MW-2 29.3ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
100	Contour Of Total VOC In Soil, At Depth Of 0 Feet To 8 Feet, With ppm Value Noted
	Approximate Location Of Former And/Or Current Underground Storage Tank
TB-106 72.6ppm	Test Boring Location With Peak Photoionization (PID) Reading In ppm. Test Borings Were Advanced September 2000 And May 2001

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. PID readings on soil samples were obtained between May 07 and May 24, 2001.

FIELD VERIFIED BY	DATE	DRAWN BY	DATE DRAWN	SCALE	DATE ISSUED
JSB	01-2002	Tww	01-2002	1" = 50'	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt Hope Avenue - North Parcel
Contours Of Total VOC's In Soil At Depth Of 0 Feet To 8 Feet

PROJECT NO.
2506S-00

FIGURE 2B-1

Ref1: 2506-26.dwg
Ref2: 2506-38.dwg
Ref3: MtHopeBase-1.dwg
Ref4: North'0'-8'.dwg
Ref5:
Ref6:

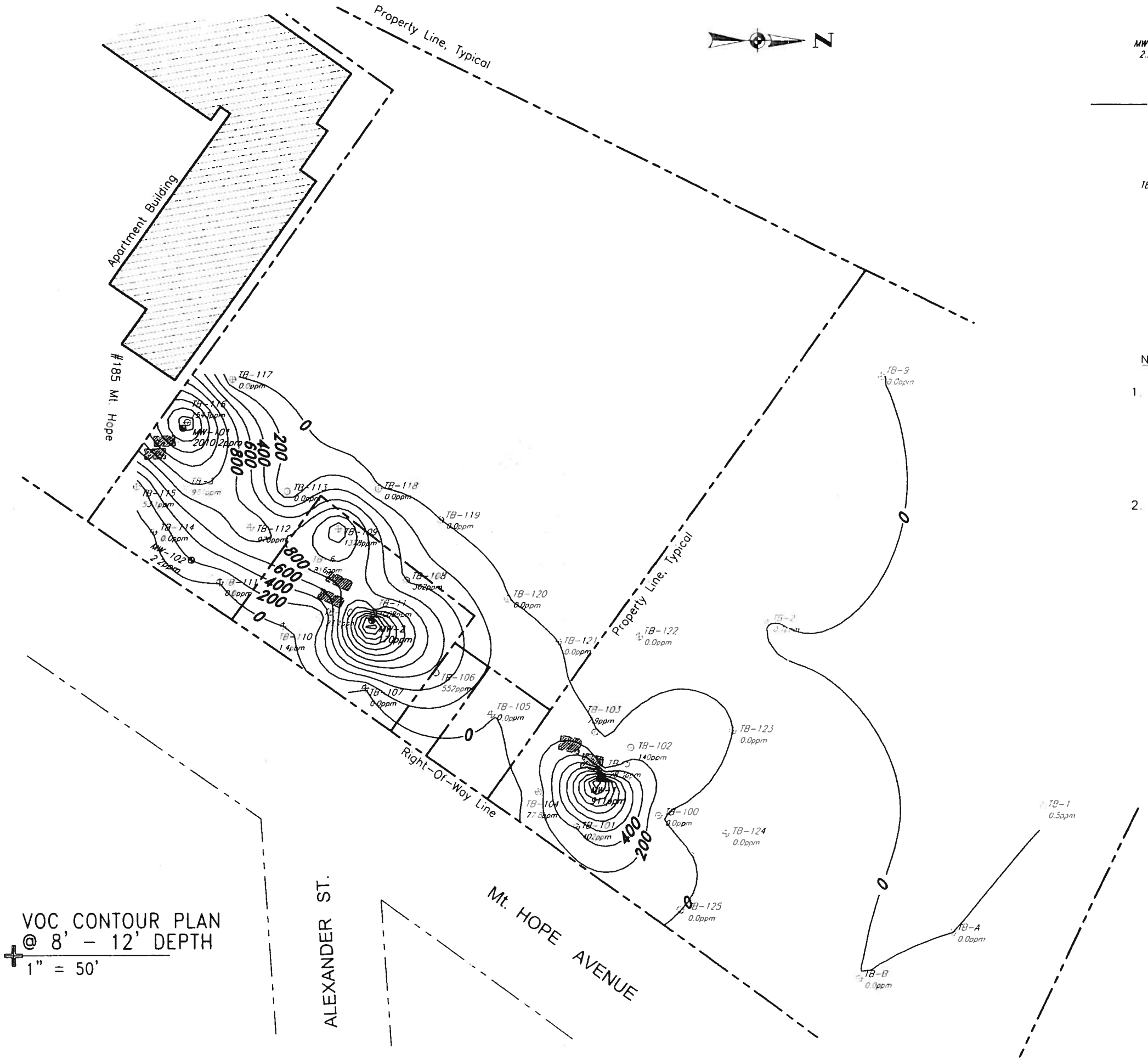
Xerox230Ans:B-2; 11 x 17

Time Plotted: Fri Feb 08 15:45 2002
File Name: Phase2\2506\2506-39.dwg

Ref1: 2506-28.dwg
Ref2: 2506-35.dwg
Ref3: MtHopeBase-1.dwg
Ref4: North8'-12'.dwg
Ref5:
Ref6:

Xerox230AnsiB-2; 11 x 17

Time Plotted Fri Feb 08 15:35 2002
File Name: Phase2\2506\2506-34.dwg



VOC CONTOUR PLAN
@ 8' – 12' DEPTH
1" = 50'

LEGEND:

MW-102 2.2ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
200	Contour Of Total VOC In Soil, At Depth Of 8 Feet To 12 Feet, With ppm Value Noted
	Approximate Location Of Former And/Or Current Underground Storage Tank
TB-103 7.9ppm	Test Boring Location With Peak Photoionization (PID) Reading In ppm. Test Borings Were Advanced September 2000 And May 2001

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. PID readings on soil samples were obtained between May 07 and May 24, 2001.

FIELD VERIFIED BY	DATE
JSB	01-2002
DRAWN BY	DATE DRAWN
Tww	01-2002
SCALE	DATE ISSUED
1" = 50'	02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

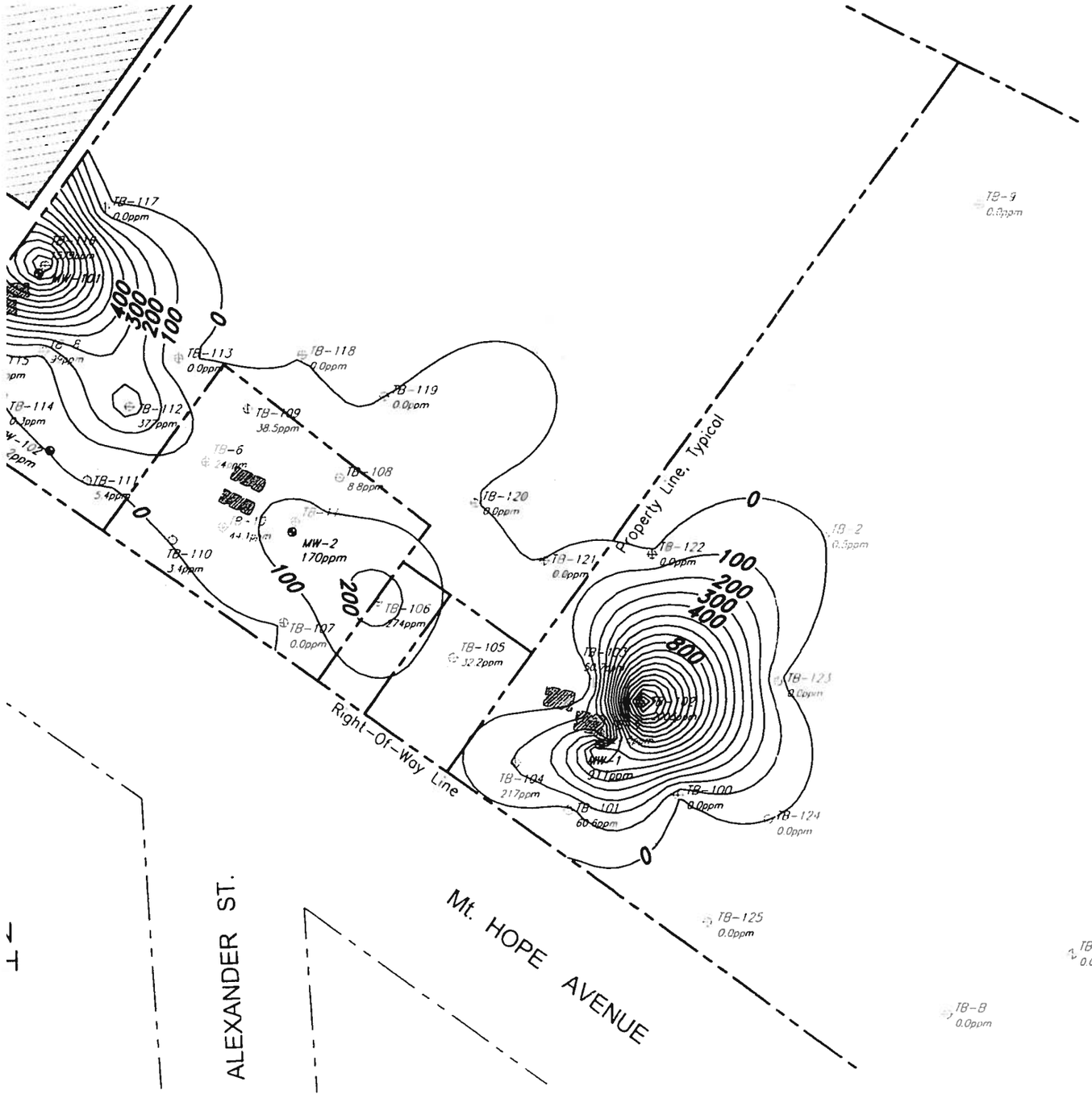
PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - North Parcel
Contours Of Total VOC's In Soil At Depth Of 8 Feet To 12 Feet

PROJECT NO.
2506S-00

FIGURE 2B-2



NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD–Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

2. PID readings on soil samples were obtained between May 07 and May 24, 2001.

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

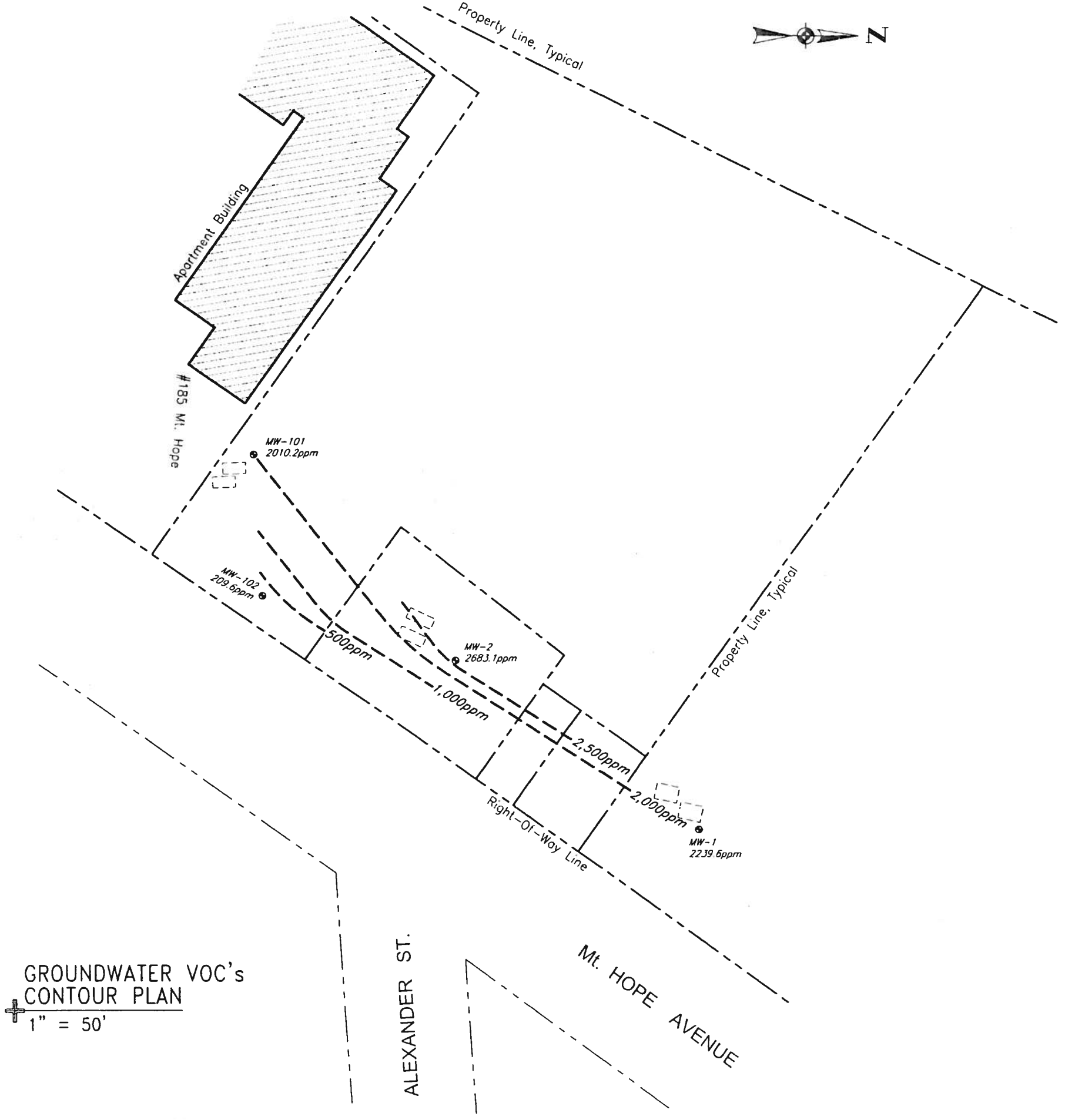
PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - North Parcel
Contours Of Total VOC's In Soil At Depth Of 12 Feet To 16 Feet

PROJECT NO.
2506S-00

FIGURE 2B-3



GROUNDWATER VOC's
CONTOUR PLAN
1" = 50'

LEGEND:

MW-2 2683.1ppm	Groundwater Monitoring Well Location With Total Volitile Organic Compound (VOC) Reading In Parts Per Million (ppm)
——2,000ppm	Total VOC In Groundwater Contour With ppm Value
[ ]	Approximate Location Of Former And/Or Current Underground Storage Tank

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD–Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. Groundwater samples were obtained on June 07, 2001.

FIELD VERIFIED BY: JSB	DATE: 01-2002
DRAWN BY: Tww	DATE DRAWN: 01-2002
SCALE: 1" = 50'	DATE ISSUED: 02-08-2002

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - North Parcel
Total VOC's In Groundwater Contour Map

PROJECT NO.
2506S-00

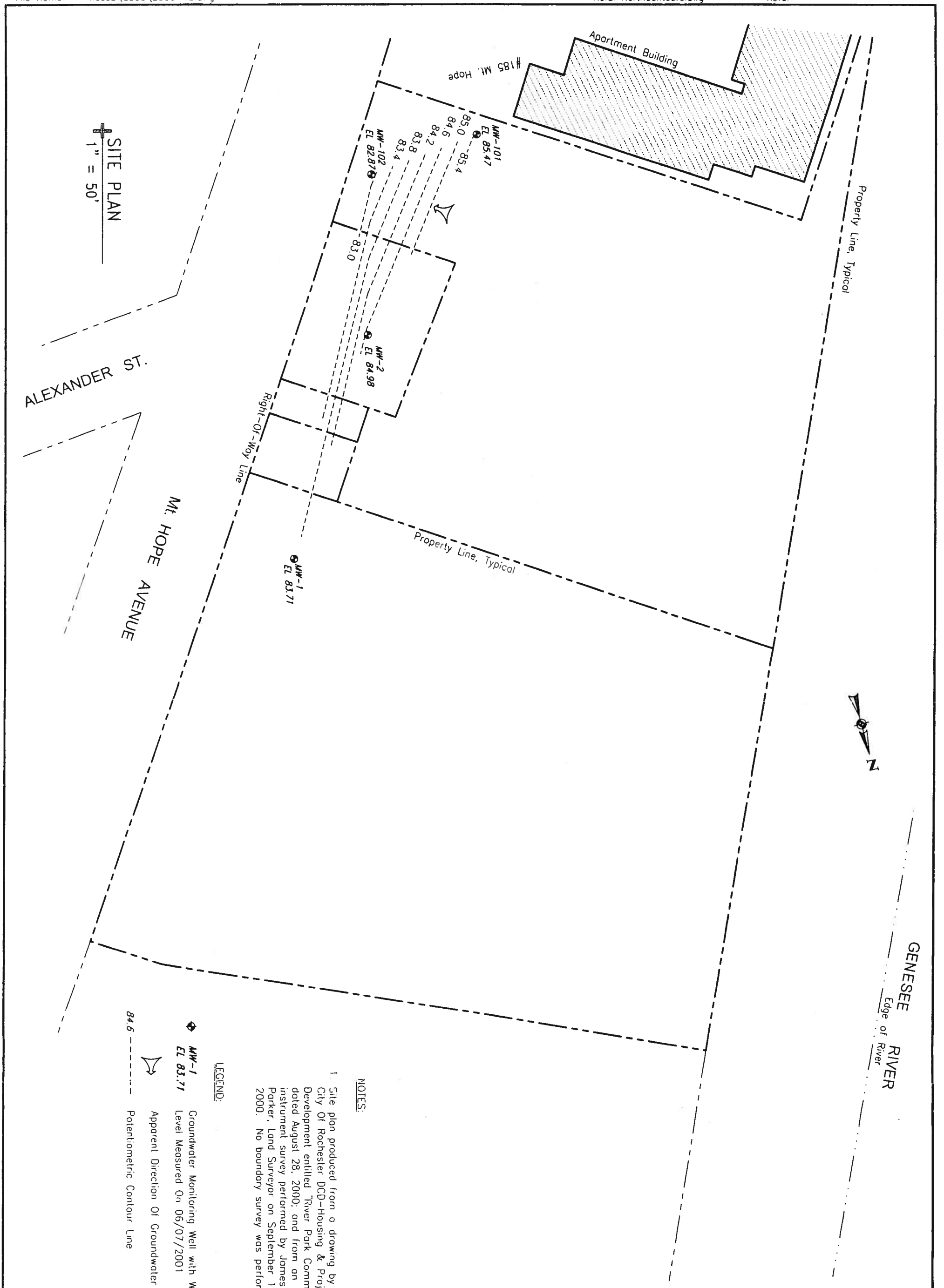
FIGURE 2B-4

Ref1: 2506-20.dwg
Ref2: 2506-21.dwg
Ref3: MtHopeBase-1.dwg

Xerox230AnsiB-2; 11 x 17

Time Plotted: Mon Feb 11 11:05 2002
File Name: Phase2\2506\2506-33.dwg

Time Plotted: Fri Feb 08 16:30 2002
File Name: Phase2\2506\2506-13.dwg
Xerox230AnsiB-2: 11 x 17
Ref1: 2506-2.dwg
Ref2: MtHopeBase-1.dwg
Ref3: NorthContours.dwg
Ref4:
Ref5:
Ref6:



NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

LEGEND:

- MW-1 EL 83.71 — Groundwater Monitoring Well with Water Level Measured On 06/07/2001
- Apparent Direction Of Groundwater Flow
- 84.6 — Potentiometric Contour Line

FIGURE 3A

PROJECT NO. 2506S-00

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

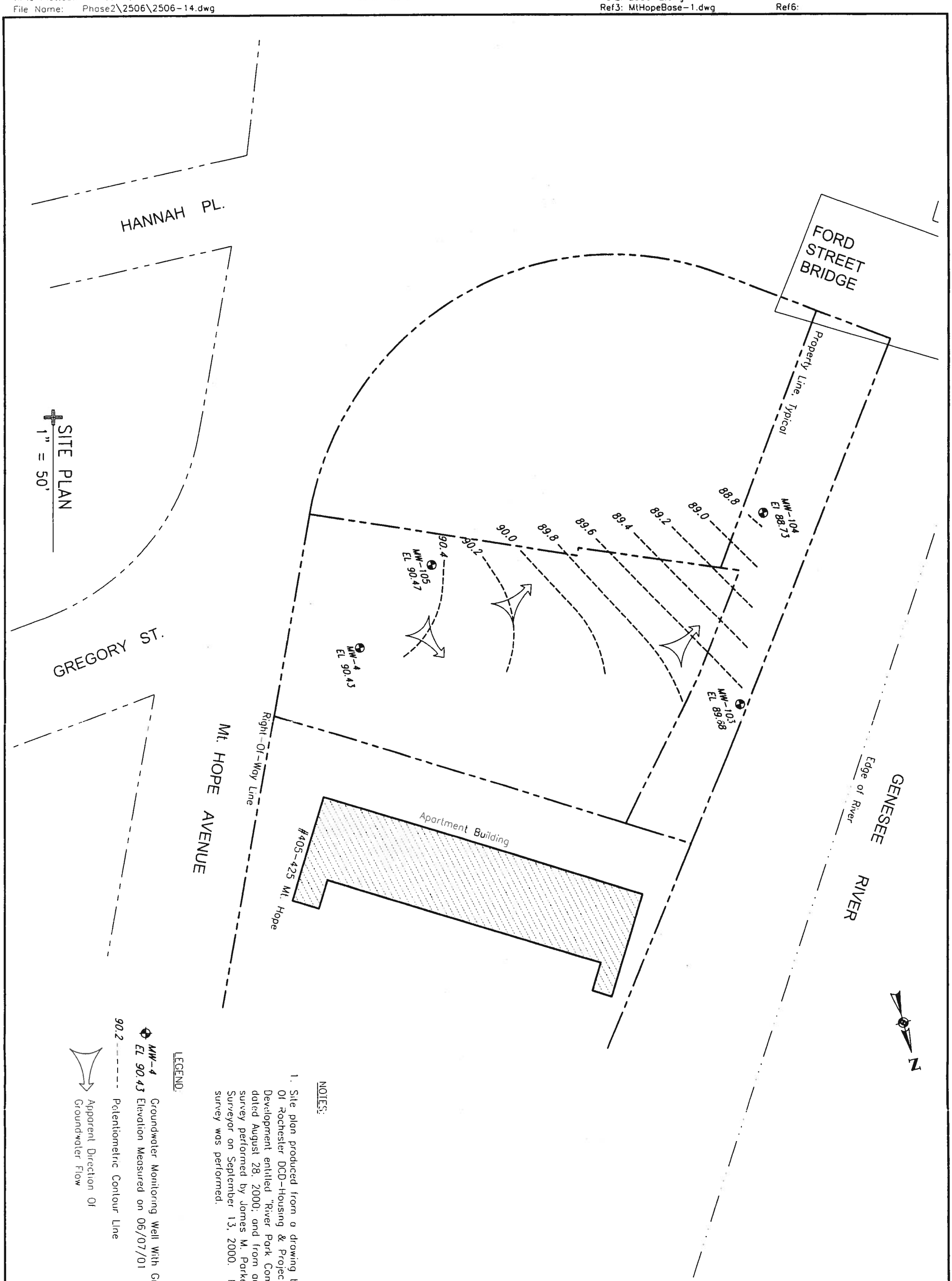
PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - North Parcel
Potentiometric Contour Map For June 07, 2001

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

FIELD VERIFIED BY	DATE
JSB	07-2001
DRAWN BY	DATE DRAWN
RJK/Tw	08-2001
SCALE	DATE ISSUED
1" = 50'	02-08-2002

Time Plotted: Fri Feb 08 16:25 2002
File Name: Phase2\2506\2506-14.dwg
Xerox230AnsiB-2: 11 x 17
Ref1: 2506-10b.dwg
Ref2: 2506-2.dwg
Ref3: MtHopeBase-1.dwg
Ref4:
Ref5:
Ref6:



SITE PLAN
1" = 50'

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

LEGEND:

MW-4 EL 90.43 — Groundwater Monitoring Well With Groundwater Elevation Measured on 06/07/01

90.2 ----- Potentiometric Contour Line

Apparent Direction Of Groundwater Flow

PROJECT NO 2506S-00

FIGURE 3B

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY

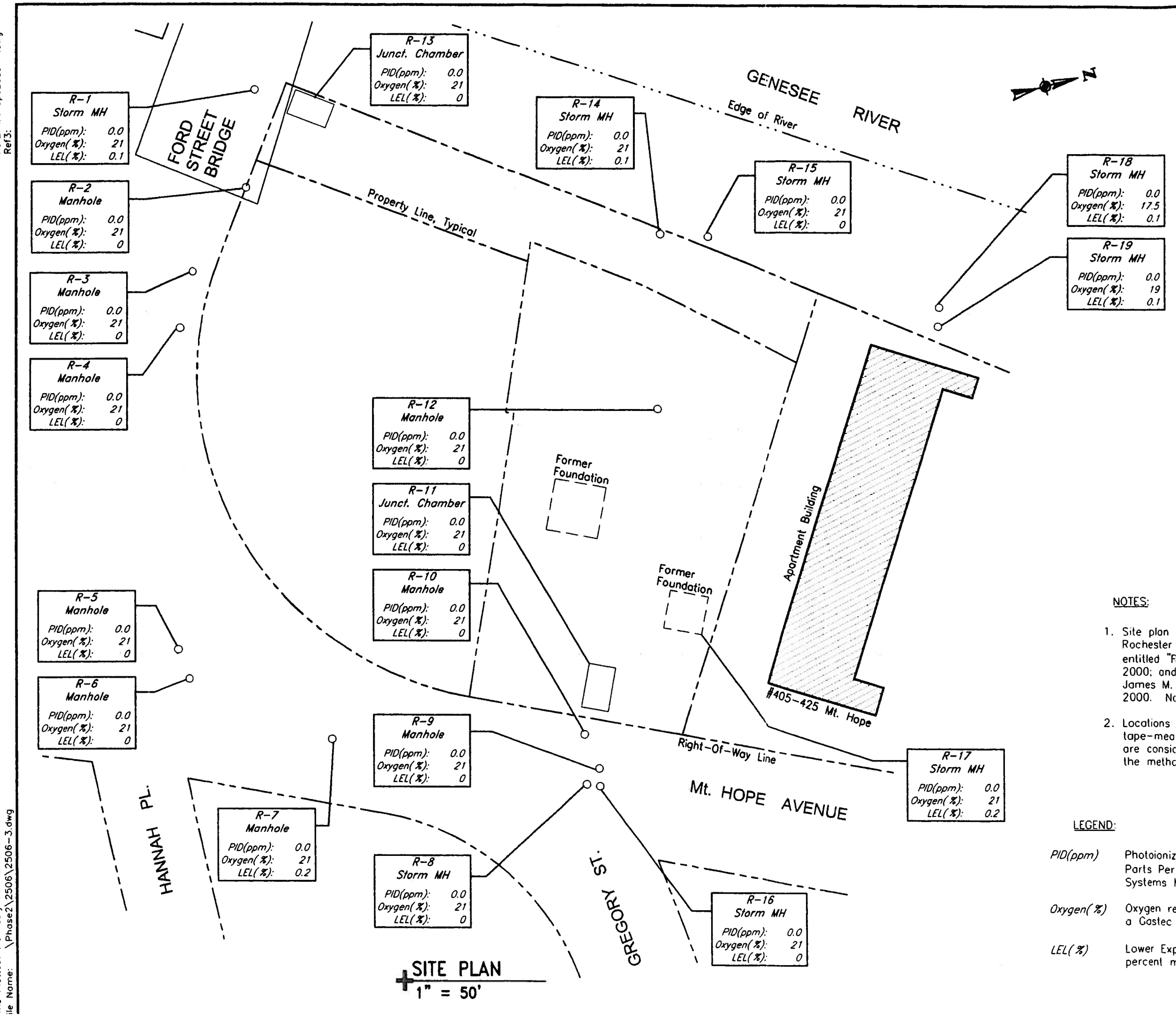
PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
Mt. Hope Avenue - South Parcel
Potentiometric Contour Map for June 07, 2001

day
DAY ENVIRONMENTAL, INC.
ENVIRONMENTAL CONSULTANTS
ROCHESTER, NEW YORK 14614-1008

FIELD VERIFIED BY	DATE
JSB	06-2001
DRAWN BY	DATE DRAWN
Tww	11-2001
SCALE	DATE ISSUED
1" = 50'	02-08-2002

Ref1: 2506-2.dwg
Ref2: MtHopeBase-1.dwg
Ref3:



SITE PLAN
1" = 50'

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.
2. Locations of receptor monitoring points tape-measured from existing site structures, and are considered accurate to the degree implied by the method used.

LEGEND:

PID(ppm)	Photoionization Detector (PID) reading recorded in Parts Per Million (ppm) measured using a RAE Systems Minirae 2000 with a 10.6 eV lamp
Oxygen(%)	Oxygen reading recorded in percent measured using a Gastec Model GT201
LEL(%)	Lower Explosive Limit (LEL) reading recorded in percent measured using a Gastec Model GT201

day
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FIELD VERIFIED BY	JSB
DATE	07/2001
DRAWN BY	Tww
DATE DRAWN	07/2001
SCALE	1" = 40'
DATE ISSUED	07/09/2001

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY
PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
South End Potential Receptor Monitoring Location Plan

PROJECT NO.
2506S-00

FIGURE 4A

SHEET 1 OF 2

Plotted: Mon July 09 13:50 2001
File Name: \Phase2\2506\2506-3.dwg
1x1

Ref1: 2506-2.dwg
Ref2: MtHopeBase-1.dwg
Ref3:

GENESEE RIVER
Edge of River

Property Line, Typical

N

R-22
Storm MH
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-23
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-24
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-25
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-26
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-27
Manhole
PID(ppm): 0.3
Oxygen(%): 21
LEL(%): 0

Apartment Building

#185 Mt. Hope

Property Line, Typical

No Access

R-20
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-21
Storm MH
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-28
Manhole
PID(ppm): 0.0
Oxygen(%): 19.5
LEL(%): 0

Right-Of-Way Line

No Access

R-29
Manhole
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

R-30
PID(ppm): 0.0
Oxygen(%): 21
LEL(%): 0

Mt. HOPE AVENUE

ALEXANDER ST.

SITE PLAN
1" = 50'

NOTES:

1. Site plan produced from a drawing by the City Of Rochester DCD-Housing & Project Development entitled "River Park Commons", dated August 28, 2000; and from an instrument survey performed by James M. Parker, Land Surveyor on September 13, 2000. No boundary survey was performed.

2. Locations of receptor monitoring points tape-measured from existing site structures, and are considered accurate to the degree implied by the method used.

LEGEND:

PID(ppm)	Photoionization Detector (PID) reading recorded in Parts Per Million (ppm) measured using a RAE Systems Minirae 2000 with a 10.6 eV lamp
Oxygen(%)	Oxygen reading recorded in percent measured using a Gastec Model GT201
LEL(%)	Lower Explosive Limit (LEL) reading recorded in percent measured using a Gastec Model GT201

FIELD VERIFIED BY	JSB
DATE	07/2001
DRAWN BY	Tww
DATE DRAWN	07/2001
SCALE	1" = 40'
DATE ISSUED	07/06/2001

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

PROJECT TITLE
MT. HOPE AVENUE
ROCHESTER, NY
PHASE II ENVIRONMENTAL STUDY

DRAWING TITLE
North End Potential Receptor Monitoring Location Plan

PROJECT NO.
2506S-00

FIGURE 4B

SHEET 2 OF 2

Time Plotted: Fri July 06 11:40 2001
File Name: \Phase2\2506\2506-4.dwg

TABLE I

DETECTED VOLATILE ORGANIC COMPOUNDS AND SEMI-VOLATILE ORGANIC COMPOUNDS IN SOIL
(results reported in parts per billion)

NORTH SITE
151-191 MT. HOPE AVENUE
ROCHESTER, NY

DETECTED COMPOUNDS	RECOMMENDED SOIL CLEANUP OBJECTIVES (1)	TB-101 (9.5') PID=57.0	TB-102 (11.0') PID=59.3	TB-103 (13.5') PID=50.7	TB-105 (12'-13') PID=32.3	TB-106C (12.0') PID=552	TB-107 (15.0') PID=2.2	TB-108 (11.0') PID=362	TB-115 (11.5') PID=53.1	TB-116 (15.0') PID=160	TB-116 (18.5') PID=17.6	TB-5 (10'-12') (8/23/00) PID=28.3	TB-6 (8'-12') (8/23/00) PID=816	TB-8 (8'-10') (8/23/00) PID=961	TB-11 (8'-12') (8/24/00) PID=1008
Toluene	1,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	34.5	ND	ND	ND	199
Ethylbenzene	5,500	329	ND	ND	ND	12.1	ND	752	ND	153	ND	ND	ND	800	343
m,p-Xylene	1,200 (total)	559	ND	ND	ND	ND	ND	**2,490**	ND	274	195	ND	625	264	661
o-Xylene	1,200 (total)	ND	ND	ND	ND	ND	ND	**15.7**	ND	20.3	37.5	ND	ND	21.1	73.1
Isopropylbenzene	5,000	83.3	578	ND	ND	ND	ND	974	ND	23.4	11.7	ND	203	69.4	1,490
n-Propylbenzene	14,000	495	1,990	27.7	ND	14.4	ND	2,530	ND	42.3	20.5	ND	4,530	214	3,710
1,3,5-Trimethylbenzene	3,300	1,140	ND	ND	ND	ND	ND	**6,420**	ND	128	42.9	ND	**4,120**	460	**4,760E**
1,2,4-Trimethylbenzene	13,000	3,720	1,330	79.3	12.3	72.8	ND	**24,100***	ND	349	124	ND	**16,400**	2,230E	**34,400E**
Sec-Butylbenzene	25,000	86.1	1,240	11.5	ND	ND	ND	1,950	ND	ND	ND	ND	586	55.7	3,170
p-Isopropyltoluene	11,000	84.8	1,230	ND	ND	11.1	ND	4,250	15.5	13.2	ND	ND	1,030	157	7,030E
n-Butylbenzene	18,000	ND	2,070	ND	ND	23.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	13,000	546	ND	ND	ND	ND	ND	1,510	ND	132	71.2	ND	1,650	448	1,510
Fluoranthene	50,000	ND	ND	ND	ND	ND	983	ND	826	ND	96.5	NA	NA	NA	882
Benzo (b) fluoranthene	1,100	ND	ND	ND	ND	ND	380	ND	394	ND	ND	NA	NA	NA	ND
Benzo (k) fluoranthene	1,100	ND	ND	ND	ND	ND	369	ND	365	ND	ND	NA	NA	NA	ND
Benzo (a) pyrene	61	ND	ND	ND	ND	ND	**423**	ND	**353**	ND	ND	NA	NA	NA	ND
Pyrene	50,000	ND	ND	ND	ND	ND	1,220	ND	909	ND	ND	NA	NA	NA	1,140
Chrysene	400	ND	ND	ND	ND	ND	382	ND	382	ND	ND	NA	NA	NA	ND
Benzo (a) anthracene	224	ND	ND	ND	ND	ND	**370**	ND	**393**	ND	ND	NA	NA	NA	ND
Fluorene	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	485
Anthracene	50,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA	415
Phenanthrene	50,000	ND	ND	ND	ND	ND	ND	ND	615	ND	ND	NA	NA	NA	1,600

ND = Not Detected above laboratory detection limits.
(1) = January 1994, Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels and/or recommended soil cleanup objectives as identified in NYSDEC Memorandum Determination of Soil Cleanup Levels, December, 2000.
* = Denotes estimated value. Sample concentration exceeds calibration range.
Bold denotes exceedence of the NYSDEC recommended soil cleanup objective.
PID=2 2 =Maximum PID reading measured above soil sample.

TABLE II

DETECTED VOCS AND S-VOCS IN SOIL
(results reported in parts per billion)

SOUTH SITE
425 & 435 MT. HOPE AVENUE AND 562 FORD STREET
ROCHESTER, NY

DETECTED COMPOUNDS	RECOMMENDED SOIL CLEANUP OBJECTIVES (1)	TB-131 (10.0') PID = 273	TB-134 (13.5') PID = 385	TB-136 (15') PID = 80.4	TB-143 (21.0') PID = 350	TB-145A (15.0') PID = 533	TB-147 (18') PID = 203	TB-151 (17.5') PID = 426	TB-137A (18.5') PID = 285	TB-13 (8'-12') PID=2,500+	TB-15 (6'-8') PID=3.0	TB-16 (6'-8') PID=0.0	TB-14 (8'-12') PID=360
Benzene	60	ND	**1,130**	ND	ND	ND	ND	ND	**185**	ND	ND	NA	ND
Toluene	1,500	ND	92.4	ND	ND	ND	ND	ND	51.3	**259,000**	50.4	NA	596
Ethylbenzene	5,500	**78,900**	136	23.7	367	2,810	244	1,060	351	**209,000**	14.6	NA	191
m,p-Xylene	1,200 (total)	**371,000**	**1,280**	8.38	**1,450**	167	212	**3,180**	516	**853,000E**	30.2	NA	**1,130**
o-Xylene	1,200 (total)	**47,500**	123	ND	558	ND	ND	58.9	84.3	**355,000**	17.6	NA	442
Isopropylbenzene	5,000	**17,600**	1530	22.7	ND	2,030	240	ND	27.1	**27,200**	ND	NA	348
n-Propylbenzene	14,000	**64,600**	2,530	30.2	298	7,400	1270	ND	89.3	**86,600**	ND	NA	1,050
1,3,5-Trimethylbenzene	3,300	**127,000**	159	15.8	874	1,280	1140	274	78.4	**160,000**	ND	NA	989
Tert-butylbenzene	NA	ND	26.4	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND
1,2,4-Trimethylbenzene	13,000	**368,000**	914	ND	3,340	ND	5920	1070	645	**557,000E**	19.2	NA	7,730
Sec-Butylbenzene	25,000	ND	217	ND	ND	797	ND	ND	ND	12,900	ND	NA	285
p-Isopropyltoluene	11,000	ND	36.0	ND	208	510	251	ND	ND	**28,500**	ND	NA	154
n-Butylbenzene	18,000	ND	207	ND	ND	2,640	ND	ND	ND	ND	ND	NA	ND
Naphthalene	13,000	**60,100**	174	43.6	547	6,090	1880	ND	204	**88,300**	ND	NA	1,850
Fluoranthene	50,000	ND	NA	ND	NA	NA	NA	NA	NA	NA	1,172	3,165	NA
Benzo (b) fluoranthene	1,100	ND	NA	ND	NA	NA	NA	NA	NA	NA	**1,388**	**15,455E**	NA
Benzo (k) fluoranthene	1,100	ND	NA	ND	NA	NA	NA	NA	NA	NA	**1,322**	**9,309E**	NA
Benzo (a) pyrene	61	ND	NA	ND	NA	NA	NA	NA	NA	NA	**779**	**4,025**	NA
Pyrene	50,000	ND	NA	ND	NA	NA	NA	NA	NA	NA	2,955	12,021E	NA
Chrysene	400	ND	NA	ND	NA	NA	NA	NA	NA	NA	**1,139**	**6,720**	NA
Benzo (a) anthracene	224	ND	NA	ND	NA	NA	NA	NA	NA	NA	**1,033**	**6,107**	NA
Bis 2 ethyl hexyl phthalate	50,000	ND	NA	ND	NA	NA	NA	NA	NA	NA	ND	1,535	NA
Benzo (g,h,I) perylene	50,000	ND	NA	ND	NA	NA	NA	NA	NA	NA	ND	2,625	NA
Dibenz (a,h) anthracene	14	ND	NA	ND	NA	NA	NA	NA	NA	NA	ND	**947**	NA
Ideno (1,2,3-cd)pyrene	3,200	ND	NA	ND	NA	NA	NA	NA	NA	NA	ND	2,525	NA
Phenanthrene	50,000	ND	NA	ND	NA	NA	NA	NA	NA	NA	1,229	543	NA

ND = Not Detected above laboratory detection limits.
(2) = January 1994, Technical and Administrative Guidance Memorandum: Determination of Soil Cleanup Objectives and Cleanup Levels and/or recommended soil cleanup objectives as identified in NYSDEC Memorandum Determination of Soil Cleanup Levels, December, 2000.
E = Denotes estimated value. Sample concentration exceeds calibration range.
PID=0.0 = Maximum PID reading measured above sample.
Bold denotes exceedence of the NYSDEC recommended soil cleanup objective

TABLE III

SUMMARY OF DETECTED METALS
NORTH SITE
151-191 MT. HOPE AVENUE
ROCHESTER, NEW YORK
(results are in parts per million)

DETECTED METAL	RECOMMENDED SOIL CLEANUP OBJECTIVE (1)	EASTERN U.S.A BACKGROUND (1)	TB-A (9.0')	TB-B (15.0')
Aluminum	SB	33,000	5,850	6,550
Arsenic	7.5 or SB	3-12	2.27	**29.9**
Barium	300 or SB	15-600	56.4	76.6
Cadmium	1 or SB *(10)*	0.1-1	ND	6.55
Calcium	SB	130-35,000	**53,400**	7,310
Chromium	10 or SB *(50)*	1.5-40	7.25	9.92
Cobalt	30 or SB	2.5-60	4.55	10.7
Copper	25 or SB	1-50	22.8	**3,170**
Iron	2,000 or SB	2,000-550,000	**11,900**	**26,300**
Lead	SB	200-500*	22.1	165
Magnesium	SB	100-5,000	**18,100**	479
Manganese	SB	50-5,000	502	175
Nickel	13 or SB	0.5-25	9.77	**20.9**
Potassium	SB	8,500-43,000	1,620	888
Selenium	2 or SB	0.1-3.9	1.59	**4.38**
Silver	SB	N/A	1.03	ND
Sodium	SB	6,000-8,000	237	204
Vanadium	150 or SB	1-300	14.2	27.1
Zinc	20 or SB	9-50	**50.3**	**2,490**

ND = Not Detected above laboratory detection limits.
(1) = Recommended soil cleanup Objectives and Eastern USA background concentrations identified in NYSDEC 1994 TAGM #4046
SB = Site Background
N/A = Document does not contain a background concentration for that particular compound.
* = Indicates average background levels in metropolitan or suburban areas or near highways as indicated in the TAGM # 4046.

Bold denotes concentration exceeds the recommended soil cleanup objective identified in the NYSDEC TAGM #4046 and/or the 1995 proposed TAGM #4046 (for cadmium and chromium only).

TABLE IV

GROUNDWATER ANALYTICAL TEST RESULTS
MT. HOPE AVENUE
ROCHESTER, NEW YORK
(results are in parts per billion)

DETECTED COMPOUNDS	AMBIENT GROUNDWATER STANDARDS (1)	MW-1 (NORTH SITE)	MW-2 NORTH SITE)	MW-4 (SOUTH SITE)	MW-101 (NORTH SITE)	MW-102 (NORTH SITE)	MW-103 (SOUTH SITE)	MW-104 (SOUTH SITE)	MW-105 (SOUTH SITE)	MW-106 (SOUTH SITE)
Benzene	1.0	**11.0**	**250**	**8,300**	**57.2**	**1.6**	**71.7**	**1,400**	**740**	ND
Toluene	5.0	ND	ND	**12,100**	**426**	ND	**11.5**	**29.7**	**131**	ND
Ethylbenzene	5.0	**160**	**141**	**2,480**	**208**	**83.0**	**10.7**	**297**	**165**	ND
m,p-Xylene	5.0	**520**	**200**	**9,290**	**873**	**13.7**	**27.2**	**45.9**	**588**	ND
o-Xylene	5.0	ND	ND	**3,490**	**231**	ND	**11.9**	ND	**203**	ND
Isopropylbenzene	5.0	**42.0**	**60.7**	ND	ND	**44.0**	**42.4**	**51.8**	ND	ND
n-Propylbenzene	5.0	**85.6**	**88.4**	**265**	ND	**50.2**	**64.3**	**92.2**	**21.5**	ND
1,3,5-Trimethylbenzene	5.0	**264**	**312**	**660**	**97.0**	ND	**9.0**	ND	**41.3**	ND
1,2,4-Trimethylbenzene	5.0	**886**	**1,430**	**2,230**	**118**	**15.1**	**7.22**	**89.5**	**133**	ND
Sec-Butylbenzene	5.0	ND	ND	ND	ND	2.02	2.88	ND	ND	ND
Naphthalene	10.0	**271**	**201**	**888**	ND	ND	**26.3**	**120**	ND	ND
Methylene Chloride	5.0	**N/A**	N/A	N/A	ND	N/A	**17.2**	N/A	N/A	ND
Total VOCs	1,000	**2,239.6**	**2,683.1**	**39,703**	**2,010.2**	209.62	302.3	**2,126.1**	**2,022.8**	ND

N/A = Sample not analyzed for particular compound
ND = Not Detected above laboratory detection limits.
(1) =Ambient groundwater standards or guidance values identified in the NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1)
886 = bold denotes exceedence of ambient groundwater standard identified in the TOGS (1.1.1)

TABLE V

GROUNDWATER ELEVATION DATA
6/7/01
SOUTH SITE
425, 435 MT. HOPE AVENUE AND 562 FORD STREET
ROCHESTER, NEW YORK

Monitoring Well	Elevation of Top of PVC Casing (Ft.)	Static Water Level from Top of PVC Casing (Ft.)	Groundwater Elevation (Ft.)
MW-4	103.02	12.59	90.43
MW-103	105.32	15.64	89.68
MW-104	106.73	18.00	88.73
MW-105	104.71	14.24	90.47
MW-106	102.75	13.13	89.62

GROUNDWATER ELEVATION DATA
6/7/01
NORTH SITE
151-191 MT. HOPE AVENUE
ROCHESTER, NEW YORK

Monitoring Well	Elevation of Top of PVC Casing (Ft.)	Static Water Level from Top of PVC Casing (Ft.)	Groundwater Elevation (Ft.)
MW-1	100.16	16.45	83.71
MW-2	98.69	13.71	84.98
MW-101	100.18	14.71	85.47
MW-102	98.45	15.58	82.87

TABLE V

GROUNDWATER ELEVATION DATA
8/2/01
SOUTH SITE
425, 435 MT. HOPE AVENUE AND 562 FORD STREET
ROCHESTER, NEW YORK

Monitoring Well	Elevation of Top of PVC Casing (Ft.)	Static Water Level from Top of PVC Casing (Ft.)	Groundwater Elevation (Ft.)
MW-4	103.02	12.88	90.14
MW-103	105.32	15.64	89.65
MW-104	106.73	17.77	88.96
MW-105	104.71	14.52	90.19
MW-106	102.75	13.51	89.24

GROUNDWATER ELEVATION DATA
8/2/01
NORTH SITE
151-191 MT. HOPE AVENUE
ROCHESTER, NEW YORK

Monitoring Well	Elevation of Top of PVC Casing (Ft.)	Static Water Level from Top of PVC Casing (Ft.)	Groundwater Elevation (Ft.)
MW-1	100.16	17.54	82.62
MW-2	98.69	15.45	83.24
MW-101	100.18	16.88	83.30
MW-102	98.45	16.72	81.73

TABLE VI

FIELD TEST RESULTS
6/7/01
SOUTH SITE
425, 435 MT. HOPE AVENUE AND 562 FORD STREET
ROCHESTER, NEW YORK

Monitoring Well	Iron	COD	BOD	Manganese
MW-4	5.0 mg/l	100 mg/l	48.1 mg/l	0.085 mg/l
MW-103	5.4 mg/l	22 mg/l	11.3 mg/l	0.126 mg/l
MW-104	4.4 mg/l	N/A	N/A	N/A
MW-105	1.6 mg/l	N/A	N/A	N/A
MW-106	0.0 mg/l	11 mg/l	6.24 mg/l	0.039 mg/l

FIELD TEST RESULTS
6/7/01
NORTH SITE
151-191 MT. HOPE AVENUE
ROCHESTER, NEW YORK

Monitoring Well	Iron	COD	BOD	Manganese
MW-1	5.4 mg/l	35 mg/l	2.94 mg/l	0.256 mg/l
MW-2	5.2 mg/l	44 mg/l	4.83 mg/l	0.054 mg/l
MW-101	0.0 mg/l	44 mg/l	8.37 mg/l	0.099 mg/l
MW-102	3.3 mg/l	N/A	N/A	N/A

APPENDIX A

GEOMATRIX REPORT

338 Harris Hill Road, Suite 201
Williamsville, New York 14221
(716) 565-0624 • FAX (716) 565-0625

GEOMATRIX

March 12, 2001
7056

John Blanchard
Day Environmental, Inc.
2144 Brighton-Henrietta Townline Rd
Rochester, NY 14623

Subject: **Geophysical Survey Results – Mt. Hope Site, Rochester, NY**

Dear Mr. Blanchard:

INTRODUCTION

This report presents the results of a geophysical investigation performed at a property located along Mt. Hope Ave. in Rochester, NY. The areas surveyed are adjacent to an apartment building complex. Historical information compiled by others indicates a potential for underground storage tanks (USTs) to exist beneath the site. A geophysical survey was performed by Geomatrix Consultants, Inc. (Geomatrix) to map the distribution of buried metals in an attempt to locate anomalies indicative of underground storage tanks (USTs). The survey was performed on February 12 and 13, 2001 utilizing electromagnetic techniques. Two areas of the site were surveyed, a 300 ft x 300 ft parcel south of the apartment buildings (Southern Parcel) and a 90ft x 310 ft parcel to the north of the apartment buildings (Northern Parcel). Both survey areas were primarily grass covered with some portions surfaced in concrete.

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

METHODOLOGY

A reference grid was installed to facilitate data acquisition along lines spaced three feet apart. The grid was marked with orange and red spray paint. For the Southern Parcel, grid coordinate 315N, 100E was established at the southwest corner of the apartment building. Grid North for the Southern Parcel was taken as the direction perpendicular to the southern wall of the apartment building. The Grid North for the Northern Parcel was taken as the direction parallel to the sidewalk bounding the west side of Mt. Hope Ave.

The site was geophysically surveyed using the Geonics EM61. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator which is interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured by two, 3.28 foot by 1.64 foot (1 meter by ½ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.

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

RESULTS

The EM61 data from the Southern and Northern Parcels are shown in Figures 1 and 2, respectively. The color bar to the right of each map indicates the colors associated with the respective measured values. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 15 mVolts) likely contain buried metals. These areas are depicted in shades of light green through purple on the figures.

The two most apparent features in the Southern Parcel (Figure 1) are a large circular buried metal anomaly and an east west trending linear anomaly. The circular anomaly corresponds with a circular concrete pad that is likely reinforced with metal. The linear anomaly corresponds with a concrete walkway that is also likely contains reinforcement metal.

The most notable feature in the Northern Parcel (Figure 2) is a spatially large buried metal anomaly located in the center of the parcel. This anomaly corresponds with a concrete pad surrounding a small park-like area.

Anomalies interpreted to be significant, relative to the objective of this investigation, are alphabetically labeled on the figures and discussed below. It is possible that any of the additional above background responses may be related to a UST, however, it is more likely that they are associated with minor amounts of buried metals.

Anomalies A, B, C, and D – Anomalies A, B, C, and D are buried metal anomalies observed in the Southern Parcel. These anomalies may represent UST(s).

Anomalies E, F, and G – Anomalies E, F and G are buried metal anomalies that are located in the Northern Parcel. Anomalies E and/or F are small enough to possibly represent a manhole cover(s) or drainage catch basin(s) that may have been un-noted during the survey. Alternatively, they may represent UST(s). Anomaly G is a buried metal anomaly located south of Anomalies E and F that may represent a UST

LIMITATIONS

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

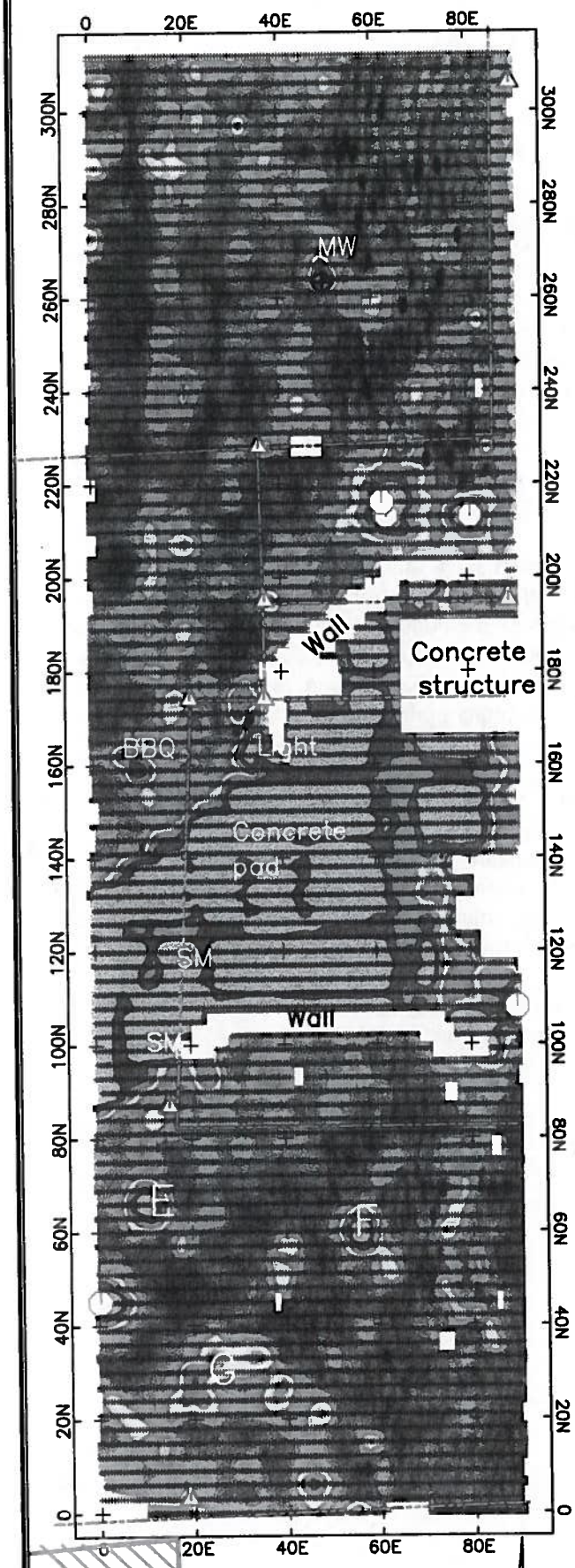
CONCLUSIONS

The geophysical investigation at the Mount Hope Site appears to have been successful at mapping the distribution of buried metals. A total of 7 buried metal anomalies were identified that may represent USTs. It is possible that any of the additional above background responses may be indicative of USTs however it is believed that they are more likely related to miscellaneous buried or surface metal.

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

Sincerely yours,
GEOMATRIX CONSULTANTS, INC.

John Luttinger
Project Geophysicist



Scale 1:300

10 0 10 20 30

(feet)

90 East line along sidewalk on west side of Mt. Hope Ave.

Surveyed Point/boundary pin

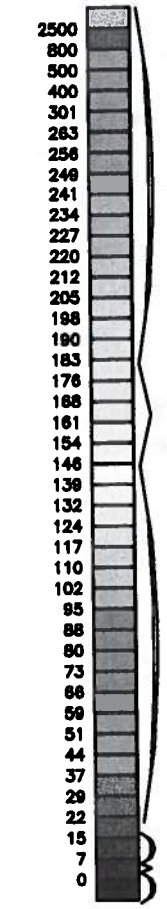
Manhole

Monitoring Well

geophysical measurement point and line location, 3 ft line spacing 0.6 ft measurement spacing.

A Geophysical anomaly discussed in report

Approx. location property boundaries



Surface or buried metals

Background

EM61 Response (mVolts)

Grid North

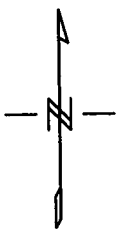


Figure 2

Geophysical Survey Results
Color Contours of EM61 Data
(mVolts)

Mt. Hope Ave Site
Northern Parcel
Rochester, NY
Day Environmental

Geomatrix (716) 565-0624

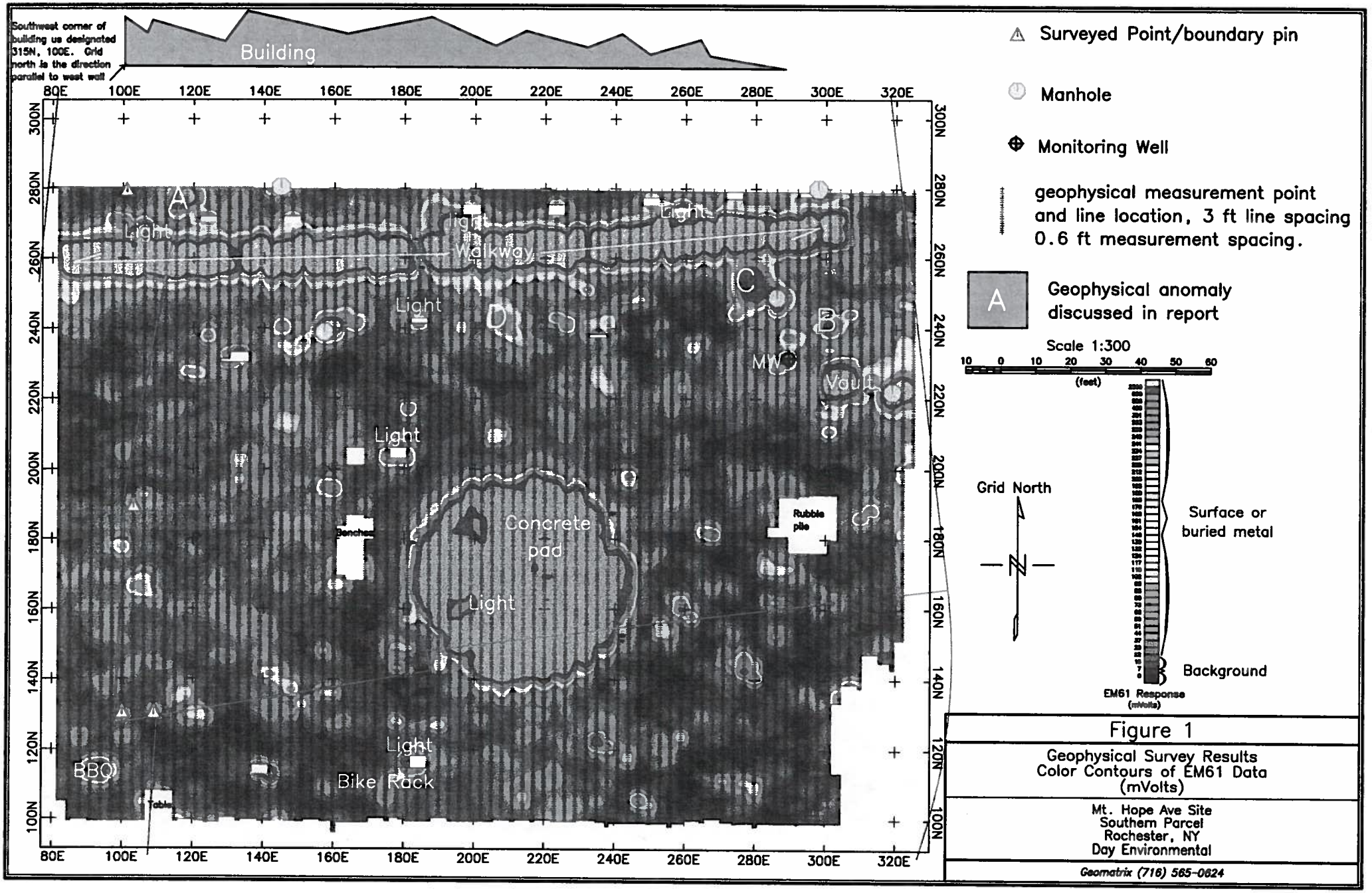


Figure 1

Geophysical Survey Results
Color Contours of EM61 Data
(mVolts)

Mt. Hope Ave Site
Southern Parcel
Rochester, NY
Day Environmental

Geomatrix (716) 565-0624

APPENDIX B

TEST PIT LOGS
TEST BORING LOGS
MONITORING WELL LOGS

TEST PIT LOGS

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

TEST PIT NO.: TP-1 (A)

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave
Date: 04/11/01
Test Pit Depth: 0.5'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1		Black, Sand, Silt and Clay, Damp (TOPSOIL)		Old manhole cover located 4-6" below ground
		Bottom at 0.5'		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp1.log

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

TEST PIT NO.: TP-2

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 6.3'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Sand, Silt, Clay, Wood, Brick, Ash, Concrete and Asphalt, Damp (FILL)		
2	0.4			
3	0.7			
4				
5	0.0			
6	0.0			
7		Bottom at 6.3'		
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 25067.log

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

TEST PIT NO.: TP-3 (D)

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 8.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE

Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Clay, Wood, Brick, Ash, Pipes, pieces of Metal, Damp (FILL)		
2	4.5			
3	39.7			... possible remains of old scrap tank at 3.0'
4	14.3			... numerous tank pipes
5				
6	13.6			
7				
8		Bottom at 8.0'		
9				
10				
11				
12				
13				
14				
15				
16				
17	11.7			
18				
19				
20				

File: 2506tp3.log

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

TEST PIT NO.: TP-4 (C)

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave
Date: 04/11/01
Test Pit Depth: 3.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Sand, Silt, Clay, Rock, Brick and Ash, Damp (FILL)		
2	0.2	TANK		56" x 105" tank encountered at approximately 3 feet. Tank filled with water
3		Bottom at 3.0'		
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

TEST PIT NO.: TP-5 (B)

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 8.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Clay, Rock, Brick, Concrete, Metal, Ash and Asphalt, Dump (FILL)		
2	0.0			
3		Object filled with concrete		
4	4.6			
5				former pump island encountered at 8.0'
6	9.1			
7	490			
8		Bottom at 8.0'		
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp5.log

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

TEST PIT NO.: TP-6

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 7.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE

Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Clay,Rock, Brick, Wood, Glass, Asphalt, Slag, Ash and Metal, Damp (FILL)		
2	0.0			
3	0.0			
4	0.0			
5	0.0			
6	0.0			
7	0.0			
		Bottom at 7.0'		
8				
9				
10				
11				
12				
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19				
20				

File: 2506tp6.log

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

TEST PIT NO.: TP-7

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 7.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Clay, Sand, Silt, Tree Roots, Brick, Wood, Slag and Metal, Damp (FILL)		
2	0.0			
3	5.3			
4	4.9			
5	3.2			
6	0.4			
7	0.0			
8		Bottom at 8.0'		
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp7.log

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

TEST PIT NO.: TP-8

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/11/01
Test Pit Depth: 9.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				Remarks
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	
1	0.0	Sand, Silt, Clay, Tree Roots, Wood, Metal Pipe, Brick and Ash, Damp (FILL)		
2	0.0			
3	0.0			
4	0.0			
5	0.0			
6	0.0			
7	0.0			
8	0.0			
9		Bottom at 9.0'		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp8.log

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

TEST PIT NO.: TP-9

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/12/01
Test Pit Depth: 8.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE

Depth	Peak PID/FID Readings (ppm)	Description	Sample Number	Remarks
1	0.0	Clay, Sand, Silt, Wood, Wire Fencing, Ash, Slag and Brick, Damp (FILL)		
2	0.0			
3	0.0			
4	0.0			
5	25.1			
6	2.3			
7	2.1			
8	1.3	Bottom at 8.0'		
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp9.log

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

TEST PIT NO.: TP-10 (G)

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave
Date: 04/12/01
Test Pit Depth: 10.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE

Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Stone, Brick, Asphalt, Concrete, Slag, Metal Piping, Ash and Wood. Damp (FILL)		
2	0.0			
3	0.0			
4	0.0			
5	0.0			
6	5.0			
7	5.0			... Black Staining
8	483			... strong petroleum odor
9				
10		Bottom at 10.0'		
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

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

TEST PIT NO.: TP-11

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/12/01
Test Pit Depth: 7.0'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Concrete, Clay, Wire, Brick, Ash, Metal, Damp (FILL)		Former pump island encountered
2	0.0			
3	0.0			
4	4.8			... Black staining at 4.0'
5	5.9			
6	6.3			
7		Bottom at 7.0'		
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

TEST PIT NO.: TP-12

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/12/01
Test Pit Depth: 8.5'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Clay, Brick, Metal Rod, Concrete, Ash, Slag, Wood (FILL)		... Large Metal Post
2	0.0			
3	0.0			
4	0.0			
5	0.0			
6	0.0			
7	14.7			... weathered petroleum odor at 7.0'
8	5.3			
9		Bottom at 8.5'		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 2506tp12.log

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

TEST PIT NO.: TP-13

Project No: RoCity 2506S-00
Project: Tank Evaluation
Location: Mt. Hope Ave.
Date: 04/12/01
Test Pit Depth: 8.5'
Depth to Water: Not Encountered

Excavation Contractor: Arrow Contracting
Excavation Equipment: Case 580 Super K
Equipment Reach: 20'
DAY Representative: Aaron Farrell

SUBSURFACE PROFILE				
Depth	Peak PID/FID Reading (ppm)	Description	Sample Number	Remarks
1	0.0	Sand, Silt, Clay, Brick, Asphalt, Wood, Concrete, Slag (FILL)		
2	0.0			
3	0.0			
4	0.0			
5	0.0			
6	7.8			... weathered petroleum odor
7	278			
8	142			
9		Bottom at 8.5'		
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

File: 250613.log

TEST BORING LOGS

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

BORING NUMBER: TB-100

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/07/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 10.5 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		S-1	0-4	75	NA	0.0		Tan Sand, Silt, Gravel, Roots, Cinders, damp (FILL)
2						0.0		
3						0.0		Brown Sand, Silt, Gravel, Cinders, Ash, damp (FILL)
4						0.0		
5		S-2	4-8	90	NA	0.0		Light Brown Sand and Silt, trace Cinders, damp (FILL)
6						0.0		
7						0.0		
8		S-3	8-10.5	60	NA	0.0		
9						0.0		Dark Brown, Sand and Silt, some cinders, moist (FILL)
10						0.0		
11								Refusal @ 10.5'
12								
13								
14								
15								
16								
17								
18								
19								
20								

File: 2506S-1.LOG

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

BORING NUMBER: TB-101

Project: Mt. Hope Project
Project No: 2506S-00
DAY Representative: A. Farrell
Boring Location: See Site Plan
Drilling Contractor: Lyon Drilling
Ground Surface Elevation: NA
Datum: NA
Drilling Rig: CME 55
Start Date: 05/04/01
Completion Date: 05/07/01
Sampling Method: 4' acetate sleeve
Borehole Diameter: 3 inches
Borehole Depth: 16.2 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		Tan Sand, Silt, Gravel, Roots, Cinders, damp (FILL)
						0.0		
2		S-1	0-4	90	NA	0.0		
3						9.7		Brown Sand, Silt, Gravel, Cinders, Brick, damp (FILL)
						22.4		... slight weathered petroleum odor
4						29.3		
5						208		
6		S-2	4-8	90	NA	240		... dark staining with strong petroleum odor
7						110		
						38.8		Reddish brown Silty SAND, some Gravel, damp to moist
8						29.5		
9						33.0		
		S-3	8-11	70	NA	57		
10						402		... seam of Rock fragments
11						186		
						90.7		
12						60.6		... grades to Silty SAND and GRAVEL
		S-4	11-14	60	NA			.. Rock fragments
13						23.8		
14						18.1		... odors decreasing
						7.3		
15		S-5	14-16.2	50	NA			... angular Rock fragments
16						0.6		
								Refusal @ 16.2'
17								
18								
19								
20								

File: 2506S-01.LOG

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

BORING NUMBER: TB-102

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/04/01
Borehole Diameter: 3 inches
Borehole Depth: 18.0 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		S-1	0-4	75	NA	0.0		Tan Sand, Silt, Gravel, Roots, damp (FILL)
2						0.0		
3						0.0		... seam of Gravel
4						0.0		Dark brown Sand, Silt, Gravel, Ash, Brick, Coal, damp (FILL)
5		S-2	4-8	50	NA	0.0		
6						0.0		
7						0.0		
8						0.0		
9		S-3	8-12	70	NA	0.0		
10						7.2		Black Sand, Gravel, Cinders, Silt, Ash, Rock fragments, moist (FILL)
11						29.3		
12						140		... Strong petroleum odor
13		S-4	12-16	60	NA	224		
14						2003		
15						461		Reddish brown to gray Silt, SAND and GRAVEL, trace Clay, moist
16						103		
17		S-5	16-18	50	NA	64.1		
18						27.6		... Rock fragments
19						10.2		
20								Refusal @ 18.0'

File: 2506102.LOG

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

BORING NUMBER: TB-103

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 18.0 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		Tan and Brown Sand, Silt, Gravel, Wood, Organics, damp (FILL)
2		S-1	0-4	75	NA	0.0		
3						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	50	NA	0.0		Tan Sand, Silt, Organics, Clay, moist (FILL)
7						0.0		
8						1.7		... dark staining with slight weathered petroleum odor at 7.5'
9						1.3		
10		S-3	8-11	70	NA	7.9		... Brick fragments, coarse Sand, Cinders, wet
11						3.2		... strong petroleum odor
12						1.4		
13		S-4	11-14	60	NA	0.8		Tan Silty SAND, some Gravel, damp
14						50.7		
15						13.7		Reddish Brown Silty SAND and GRAVEL, trace Clay, moist
16		S-5	14-18	50	NA	3.5		
17						1.7		
18						0.3		... angular Rock fragments
19						0.1		
20						0.1		Refusal @ 18.0'

File: 2506S-03.LOG

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

BORING NUMBER: TB-104

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 16.3 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		Tan Silt, Sand, Gravel, Roots, Glass, Cinders, damp (FILL)
2		S-1	0-4	90	NA	0.0		
3						0.0		Brown Silt, Sand, Gravel, Clay, Organics, Brick, Ash, damp (FILL)
4						12.4		... weathered petroleum odor
5						58.6		
6		S-2	4-8	90	NA	12.8		
7						67.9		... seam of Gravel
8						53.1		
9						57.8		
10		S-3	8-12	80	NA	47.1		... dark staining
11						77.8		... intermixed Ash, Brick, Wood
12						74.1		
13		S-4	12-14	60	NA	217		
14						131		
15		S-5	14-18	50	NA	38.4		
16						19.0		Reddish brown Silty SAND and GRAVEL, moist
						1.3		... petroleum odors decreasing
17								Refusal @ 16.3'
18								
19								
20								

File: 2506S-04.LOG

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

BORING NUMBER: TB-105

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 17.8 feet
Water Level: Approximately 16 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		Light Brown Sand, Silt, Cinders, Asphalt, Brick, Ash, Gravel (FILL), moist
2		S-1	0-4	90	NA	0.0		
3						0.0		... layer of Rock fragments
4						0.0		
5						0.0		
6		S-2	4-8	40	NA	0.0		Light Brown Silty SAND, trace Clay, moist
7						0.0		
8								
9						0.0		
10		S-3	8-12	90	NA	0.0		Dark Brown Silty SAND and GRAVEL, trace Clay, moist
11						0.0		
12								... Black Staining, Weathered Petroleum Odor
13						32.2		
14		S-4	12-16	90	NA	18.4		
15						4.5		
16						0.0		Light Brown SAND, some Gravel, moist
17		S-5	14-17.8	90	NA	0.0		... wet ... Black Staining ... Light Brown Silty Sand, moist
18						4.9		
19						2.7		
20						0.0		Refusal @ 17.8'

File: 2506tb5.LOG

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

BORING NUMBER: TB-106

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/07/01 **Completion Date:** 05/07/01
Borehole Diameter: 3 inches **Borehole Depth:** 9.6 feet
Water Level: 12.5 feet (after completion)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
								CONCRETE
1						0.0		Brown Silty Sand, Brick, Gravel, Ash (FILL), moist
2		S-1	0-4	85	NA	0.0		
3						0.0		
4						1.8		
5						2.9		
6		S-2	4-8	45	NA	2.0		
7						2.4		... Gray coloring, no odor
8						0.9		... gravel content increasing
9		S-3	8-9.6	85	NA	137		see TB-106C
10						334		Refusal @ 9.6'
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

File: 2506S-06.LOG

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

BORING NUMBER: TB-106C

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/07/01 **Completion Date:** 05/07/01
Borehole Diameter: 3 inches **Borehole Depth:** 17.0 feet
Water Level: 12.5 feet (after completion)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt, Gravel, Stone, Brick, Ash, (FILL) moist
2		S-1	0-4	85	NA	0.0		
3						0.0		
4						0.0		
5						20.8		
6		S-2	4-8	45	NA	9.7		... Petroleum odor
7						15.7		
8						72.6		... More gravel
9						77.3		
10		S-3	8-12	85	NA	10.5		... Strong petroleum odor
11						552		
12						274		
13		S-4	12-15	85	NA	114		
14						74.3		Tightly packed light brown Silty SAND, some small stones, Moist
15						35.5		
16		S-5	15-17	100	NA	0.0		
17						0.0		Refusal @ 17.0'
18								
19								
20								

File: 2506S-6C.LOG

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

BORING NUMBER: TB-107

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/07/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0 feet
Water Level: Approximately 17.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-4		S-1	0-4	0	NA	N/A		No Recovery
4-8		S-2	4-8	0	NA	N/A		No Recovery flat stone in end of cutting shoe
8-12		S-3	8-12	50	NA	0.0 0.0 0.0 0.0		Brown Silt, Sand, Brick, Cobble, Ash, Asphalt, Moist (FILL)
12-16		S-4	12-16	70	NA	0.0 0.0 0.0 0.0		Light Brown Silty SAND, Some Gravel, Brick, Moist (FILL) ... Grayish Staining, weathered petroleum odor
16-20		S-5	16-20		NA	2.1 1.5 0.0 0.0		... wet ... layer of black staining at 18.0'
20								BOH @ 20.0'

File: 2506S-07.LOG

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

BORING NUMBER: TB-108

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/07/01
Borehole Diameter: 3 inches
Water Level: Not Encountered

Datum: NA
Completion Date: 05/07/01
Borehole Depth: 15.0 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		BRICK AND CONCRETE
2		S-1	0-4	50	NA	0.0		Brown Silt, Sand, Gravel, Brick, Ash, moist (FILL)
3						0.0		
4						0.0		... black staining, slight weathered petroleum odor
5						0.0		
6		S-2	4-8	70	NA	1.3		... layer of broken concrete
7						2.7		
8						1.3		
9						0.0		
10		S-3	8-12	70	NA	31.2		... strong petroleum odor
11						142		
12						362		
12						8.8		Light Brown, Silty SAND, moist
13		S-4	12-15	70	NA	0.0		
14						0.0		
15						0.0		
16								Refusal @ 15.0'
17								
18								
19								
20								

File: 2506S-08.LOG

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

BORING NUMBER: TB-109

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/08/01 **Completion Date:** 05/08/01
Borehole Diameter: 3 inches **Borehole Depth:** 18.2 feet
Water Level: Approximately 15.5 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		S-1	0-4	85	NA	0.0		Brown Sand, Silt, Gravel, Roots, damp (TOPSOIL)
2						0.0		Dark brown Sand, Silt, Gravel, Clay, Brick, Cinders, Ash, damp (FILL)
3						0.0		
4						2.1		
5		S-2	4-8	35	NA	1.3		Brown Silt, Sand, Gravel, Ash, Rock fragments, moist (FILL)
6						0.1		
7						0.0		
8						0.0		... Glass, Porcelain, Coal
9		S-3	8-12	80	NA	0.0		
10						0.8		
11						23.9		... strong petroleum odor, black staining
12						631		... seam of Gravel
13		S-4	12-15	60	NA	1378		
14						80.1		Reddish brown Silty SAND, some Gravel, damp
15						29.6		
16						26.8		
17		S-5	15-18.2	50	NA	37.2		
18						38.5		Dark brown SAND, some Silt, wet
19						8.9		
20						2.3		Reddish brown Silty SAND and GRAVEL, moist
						1.7		... angular Rock fragments
						1.8		
								Refusal @ 18.2'

File: 2506S-09.LOG

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

BORING NUMBER: TB-110

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/07/01
Borehole Diameter: 3 inches
Water Level: Approximately 8.5 feet

Datum: NA
Completion Date: 05/07/01
Borehole Depth: 14.0 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		Dark brown Sand, Silt, Concrete, Brick, Ash, Gravel (FILL), moist
2		S-1	0-4	30	NA	0.0		
3						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	30	NA	0.0		
7						0.0		
8						0.0		... seam of rock fragments
9						1.4		... gray discoloration
10		S-3	8-12	60	NA	1.2		... wet
11						0.0		Dark Brown Silt, Sand, Gravel, Brick (FILL), wet
12						1.1		
13		S-4	12-14		NA	1.3		... seam of fractured rock
14								Refusal @ 14.0'
15								
16								
17								
18								
19								
20								

File: 2506S-10.LOG

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

BORING NUMBER: TB-110B

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/07/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0 feet
Water Level: Approximately 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
1-14								offset from TB-110 See Test Boring for TB-110
14		S-1	14-16	100	NA	3.4 0.0		Dark Brown Silty SAND, some Gravel, moist
16		S-2	16-18	0	NA	0.0 0.0		... wet @ 16'
18		S-3	18-20	100	NA	0.0 0.0		
20								BOH @ 20.0'
21								

File: 250610B.LOG

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

BORING NUMBER: TB-111

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 17.2 feet
Water Level: Approximately 13 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		S-1	0-4	75	NA	0.0		Brown Sand, Silt, Gravel, Roots, damp (FILL)
2						0.0		
3						0.5		... Rock fragments
4						1.7		
5		S-2	4-8	70	NA	0.9		... moist
6						0.3		
7						0.0		
8						0.0		
9		S-3	8-12	80	NA	0.0		Tan Silty SAND, some Gravel, trace Clay, moist
10						0.0		
11						0.0		
12						0.0		Reddish brown Silty SAND and GRAVEL, moist
13		S-4	12-15	70	NA	0.0		
14						0.0		... wet
15						1.8		
16		S-5	15-17.2	80	NA	5.4		... black staining with slight petroleum odor
17						2.1		
18						0.3		... angular Rock fragments
19						0.2		... moist
20								Refusal @ 17.2'

File: 2506S-11.LOG

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

BORING NUMBER: TB-112

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 16.8 feet
Water Level: Approximately 12.5 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		S-1	0-4	65	NA	0.0		Tan Sand, Silt, Gravel, Roots, damp (TOPSOIL)
2						0.0		Brown Sand, Silt, Gravel, Organics, Ash, Wood, damp (FILL)
3						0.0		
4						0.0		
5		S-2	4-8	60	NA	0.0		... moist
6						1.1		
7						21.6		
8						582		Reddish brown Silty SAND and GRAVEL, trace Clay, moist
9		S-3	8-12	80	NA	405		... Strong Petroleum Odor
10						197		
11						648		... black staining
12		S-4	12-15	75	NA	978		
13						771		... wet
14						377		
15		S-5	15-16.8		NA	140		... staining decreasing
16						24.1		
17						44.7		... Rock fragments
18						21.1		
19						7.3		
20						4.0		... damp
								Refusal @ 16.8'

File: 2506S-12.LOG

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

BORING NUMBER: TB-113

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 16.7 feet
Water Level: Approximately 12.5 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		S-1	0-4	50	NA	0.0		Tan Sand, Silt, Gravel, Roots, damp (TOPSOIL)
2						0.0		Brown/Tan Sand, Gravel, Silt, Ash, Brick, Coal, Cinders, damp (FILL)
3						0.0		
4						0.0		
5		S-2	4-8	70	NA	0.0		Tan/Olive Silty fine to medium SAND and some CLAY, dark Organics, moist
6						0.0		
7						0.0		
8						0.0		
9		S-3	8-12	85	NA	0.0		
10						0.0		
11						0.0		Reddish brown Silty SAND and GRAVEL, moist
12						0.0		
13		S-4	12-15	80	NA	0.0		... wet
14						0.0		
15						0.0		
16		S-5	15-16.7	75	NA	0.0		... Rock fragments, damp
17								Refusal @ 16.7'
18								
19								
20								

File: 2506S-13.LOG

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

BORING NUMBER: TB-114

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 20 feet
Water Level: 14.0 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		Tan and brown Sand, Silt, Gravel, Roots, Brick, Asphalt, damp (FILL)
						0.0		
2		S-1	0-4	95	NA	0.0		
3						0.0		
						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	70	NA	0.0		... moist at 6.0'
7						0.0		
						0.0		
8						0.0		
9						0.0		
10		S-3	8-12	45	NA	0.0		Brown Silty SAND and GRAVEL, some Clay, moist
11						0.0		
12						0.0		
13						0.0		
14		S-4	12-16	60	NA	0.0		... wet at 14'
15						0.0		
						0.3		... dark staining with very slight petroleum odor
16						0.0		
17						0.0		
18		S-5	16-20	70	NA	0.0		Reddish brown SAND, some fine Gravel, little Silt, wet
19						0.0		
						0.0		
20								Bottom @ 20.0'

File: 2506S-14.LOG

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

BORING NUMBER: TB-115

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/08/01
Borehole Diameter: 3 inches
Water Level: Not Encountered

Datum: NA
Completion Date: 05/08/01
Borehole Depth: 15.2 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		Tan Sand, Silt, Gravel, Roots, Asphalt, Ash, damp (FILL)
						0.0		
2		S-1	0-4	95	NA	0.0		
3						0.0		... intermixed Organic Matter
						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	70	NA	0.0		... Coal fragments, Cinders, moist
7						0.0		
						5.3		
8								... Sandstone Rock fragments
9						2.1		
						0.3		
10		S-3	8-12	40	NA			Brown Silty SAND and GRAVEL, trace Clay, moist
11						0.0		
						0.0		
12						53.1		... seam of weathered Rock (Dolomite)
13						13.6		
						9.7		
14		S-4	12-15.2	50	NA	3.6		
15						3.1		... Rock fragments
16								Refusal @ 15.2'
17								
18								
19								
20								

File: 2506S-15.LOG

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

BORING NUMBER: TB-116

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 18.5 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		Tan Sand, Silt, Gravel, Roots, damp (TOPSOIL)
						0.0		
2		S-1	0-4	85	NA	0.0		Brown Sand, Silt, Gravel, Clay, Brick, Ash, Coal, Cinders, Ceramics, Paint, damp (FILL)
3						0.0		
4						0.0		
5						0.0		
						0.0		
6		S-2	4-8	70	NA	0.0		... seam of Organics, moist
7						0.0		
						110		... dark staining with strong weathered petroleum odor
8						599		
9						1543		Black Silty SAND and GRAVEL, trace Clay, moist
10		S-3	8-12	70	NA			
						896		... very strong petroleum odor
11						1540		
12						1579		
13		S-4	12-15	80	NA	953		... staining decreasing, becoming reddish brown
14						274		
						160		
15								... petroleum odors decreasing
16						152		
		S-5	15-18.5	60	NA	110		
17						44.3		
18						17.6		
19								Refusal @ 18.5'
20								

File: 2506S-16.LOG

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

BORING NUMBER: TB-117

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 19.2 feet
Water Level: Approximately 11 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		Tan Sand, Silt, Gravel, Roots, Cinders, damp (TOPSOIL)
						0.0		
2		S-1	0-4	90	NA	0.0		Brown Sand, Silt, Gravel, Clay, Brick, Cinders, Ash, Wood, damp (FILL)
3						0.0		
4						0.0		
5						0.0		
						0.0		
6		S-2	4-8	60	NA	0.0		
7						0.0		... moist
						0.0		
8								
9						0.0		
						0.0		
10		S-3	8-12	65	NA	0.0		
11						0.0		
								... wet
12						0.0		
13						0.0		
						0.0		Reddish brown Silty SAND and GRAVEL, trace Clay, wet
14		S-4	12-16	50	NA	0.0		
15						0.0		
						0.0		
16								
17						0.0		Dark brown SAND and GRAVEL, some Silt, weathered Rock and Rock fragments, wet
						0.0		
18		S-5	16-19.2	60	NA	0.0		
19						0.0		
20								Refusal @ 19.2'

File: 2506S-A.LOG

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

BORING NUMBER: TB-118

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 20 feet
Water Level: Approximately 12.5 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		S-1	0-4	70	NA	0.0		Brown/dark Brown Sand, Silt, Gravel, Brick, Ash, Cinders, Wood, damp (FILL)
2						0.0		
3						0.0		Brown Silt, Clay, Sand, Gravel, Ash, Cinders, damp (FILL)
4						0.0		
5		S-2	4-8	75	NA	0.0		Dark Brown to Black Cinders, Ash, Gravel, Brick, Sand, Silt, Coal, Paper, moist (FILL)
6						0.0		
7						0.0		
8						0.0		
9		S-3	8-12	70	NA	0.0		
10						0.0		Olive SILT, some fine Sand, little Clay, little Gravel, wet
11						0.0		
12						0.0		
13		S-4	12-16	60	NA	0.0		
14						0.0		
15						0.0		Reddish Gray Silty SAND and GRAVEL, trace Clay, wet
16						0.0		
17		S-5	16-20	70	NA	0.0		
18						0.0		
19						0.0		... damp at 18.5'
20						0.0		Bottom @ 20.0'

File: 2506S-C.LOG

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

BORING NUMBER: TB-119

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 18.1 feet
Water Level: Approximately 10 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		Tan Sand, Silt, Gravel, Roots, damp (TOPSOIL)
2		S-1	0-4	70	NA	0.0		Brown Sand, Silt, Gravel, Cinders, Clay, damp (FILL)
3						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	70	NA	0.0		Dark Brown to Black Sand, Gravel, Ash, Coal, Cinders, Brick (FILL)
7						0.0		... moist at 7.0'
8						0.0		
9						0.0		
10		S-3	8-12	60	NA	0.0		Olive SILT, some Clay, little Gravel, wet
11						0.0		
12						0.0		
13						0.0		Reddish Gray Silty SAND and GRAVEL, trace Clay, moist
14		S-4	12-16	85	NA	0.0		
15						0.0		
16						0.0		
17		S-5	16-18.1	50	NA	0.0		... damp
18						0.0		
19								Refusal @ 18.1'
20								

File: 2506S-D.LOG

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

BORING NUMBER: TB-120

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/08/01
Completion Date: 05/08/01
Borehole Diameter: 3 inches
Borehole Depth: 18.2 feet
Water Level: Approximately 15 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		S-1	0-4	75	NA	0.0		Tan and brown Sand, Silt, Gravel, Cinders, Ash, damp (FILL)
2						0.0		
3						0.0		
4						0.0		Reddish brown Silt, Sand, Gravel, Brick, Coal, damp (FILL)
5		S-2	4-8	70	NA	0.0		Black, Brown and Gray Sand, Cinders, Ash, Plaster, Wood, Silt, Glass, Brick, moist (FILL)
6						0.0		
7						0.0		
8						0.0		... wet at 7.5'
9		S-3	8-12	60	NA	0.0		
10						0.0		Olive Silty SAND and GRAVEL, little Clay, wet
11						0.0		
12		S-4	12-16	75	NA	0.0		... Rock fragments
13						0.0		
14						0.0		
15						0.0		
16						0.0		
17		S-5	16-18.2	40	NA	0.0		... damp, Rock fragments
18						0.0		
19								Refusal @ 18.2'
20								

File: 2506S-E.LOG

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

BORING NUMBER: TB-121

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/08/01
Borehole Diameter: 3 inches
Water Level: Not Encountered

Datum: NA
Completion Date: 05/08/01
Borehole Depth: 17.7 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		S-1	0-4	75	NA	0.0		Tan Sand, Silt, Gravel, Roots, Cinders, damp (TOPSOIL)
2						0.0		Brown Silt, Sand, Gravel, Cinders, Ash, Coal, damp (FILL)
3						0.0		
4						0.0		
5		S-2	4-8	50	NA	0.0		Dark brown Sand, Silt, Gravel, Ash, Wood, Brick, damp (FILL)
6						0.0		Black and Gray Cinders, Gravel, Slag, Ash, Brick, Plaster, Brick, Coal, moist (FILL)
7						0.0		
8								
9		S-3	8-12	50	NA	0.0		
10						0.0		
11						0.0		
12						0.0		... 3" seam of black Sand and Cinders
13		S-4	12-16	70	NA	0.0		
14						0.0		Reddish Brown Silty SAND and GRAVEL, trace Clay, moist
15						0.0		
16						0.0		
17		S-5	16-17.7	60	NA	0.0		... Rock fragments
18						0.0		
19								Refusal @ 17.7'
20								

File: 2506S-F.LOG

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

BORING NUMBER: TB-122

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/04/01
Completion Date: 05/07/01
Borehole Diameter: 3 inches
Borehole Depth: 18.1 feet
Water Level: Approximately 14 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		S-1	0-4	80	NA	0.0		Tan Sand, Silt, Gravel, Roots, Cinders, damp (FILL)
2						0.0		Brown Sand, Silt, Gravel, Cinders, Ash, Asphalt, damp (FILL)
3						0.0		
4						0.0		Tan and brown Silt, Sand, Gravel, Clay, Cinders, Ash, moist (FILL)
5		S-2	4-8	40	NA	0.0		
6						0.0		
7						0.0		
8						0.0		Reddish Brown Sand, Ash, Slag, Coal, Cinders, Brick, damp (FILL)
9		S-3	8-12	70	NA	0.0		
10						0.0		Dark Brown Silt, Organics, fine Sand, Clay, moist (FILL)
11						0.0		Olive Gray Silty CLAY, little fine Sand, moist
12		S-4	12-16	50	NA	0.0		
13						0.0		
14						0.0		... wet
15						0.0		
16		S-5	16-18.1	40	NA	0.0		
17						0.0		Reddish gray Silty SAND and GRAVEL, trace Clay, damp
18						0.0		
19								Refusal @ 18.1'
20								

File: 2506S-G.LOG

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

BORING NUMBER: TB-123

Project: Mt. Hope Project
DAY Representative: J. Blanchard
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 18.0 feet
Water Level: Approximately 13.4 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		Brown Sand and Cobbles, little Slag, damp (FILL)
2		S-1	0-4	80	NA	0.0		
3						0.0		
4								Brown to tan Silt and Clay, little Slag and Wood, damp (FILL)
5						0.0		
6		S-2	4-8	70	NA	0.0		
7						0.0		
8								
9						0.0		
10		S-3	8-12	85	NA	0.0		... layer of Slag
11						0.0		... layer of Peat
12								Gray, CLAY, little Silt, moist
13						0.0		
14		S-4	12-16	100	NA	0.0		... wet
15						0.0		...little Cobbles
16								
17		S-5	16-18	100	NA	0.0 0.0 0.0		
18								Refusal @ 18.0'
19								
20								

File: 2506S-H.LOG

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

BORING NUMBER: TB-124

Project: Mt. Hope Project
DAY Representative: J. Blanchard
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 19.0 feet
Water Level: Approximately 15.6 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt and Gravel, little Cobbles and Brick, trace Slag, damp (FILL)
2		S-1	0-4	100	NA	0.0		
3						0.0		
4								
5						0.0		
6		S-2	4-8	70	NA	0.0		Brown Sand, little Silt, little Clay, little Slag, trace glass, damp (FILL)
7						0.0		
8								
9						0.0		... little Clay
10		S-3	8-12	85	NA	0.0		Brown SAND and GRAVEL, little Clay, trace Cobbles, moist
11						0.0		
12								
13						0.0		
14		S-4	12-16	100	NA	0.0		
15						0.0		Brown to gray SAND, moist to wet
16						0.0		
17		S-5	16-19	100	NA	0.0		
18						0.0		... little Gravel
19								Refusal @ 19.0'
20								

File: 2506S-I.LOG

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

BORING NUMBER: TB-125

Project: Mt. Hope Project
DAY Representative: J. Blanchard
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0 feet
Water Level: Approximately 17.4 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		Brown Sand and Gravel, little Cobbles, damp (FILL)
2		S-1	0-4	100	NA	0.0		
3						0.0		... little Clay
4								
5						0.0		
6		S-2	4-8	70	NA	0.0		
7						0.0		
8								
9						0.0		... trace Slag
10		S-3	8-12	100	NA	0.0		.. trace Brick
11						0.0		
12								Brown SAND and SILT, little Clay, trace Cobbles, damp
13						0.0		Brown CLAY, little Gravel, trace Cobbles, damp
14		S-4	12-16	100	NA	0.0		
15						0.0		
16								Brown SAND and GRAVEL, some Cobbles, moist
17		S-5	16-18	90	NA	0.0		... wet
18						0.0		
19		S-6	18-20	70	NA	0.0		
20								BOH @ 20.0'

File: 2506S-J.LOG

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

BORING NUMBER: TB-127

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 17.0 feet
Water Level: 7.2 feet (perched water)

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt, Gravel, Brick, Asphalt, Ash, moist (FILL)
2		S-1	0-4	90	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Light Brown Silty SAND, trace Gravel, moist
6		S-2	4-8	90	NA	0.0		
7						0.0		Light Brown Silty SAND, some Clay, wet
8						0.0		
9						0.0		
10		S-3	8-12	100	NA	0.0		
11						0.0		
12						0.0		
13		S-4	12-15	100	NA	0.0		... mottling
14						0.0		
15						0.0		
16		S-5	15-17	100	NA	0.0		... moist
17								Refusal @ 17.0'
18								
19								
20								

File: 2506S-27.LOG

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

BORING NUMBER: TB-128

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 14.0 feet
Water Level: Approximately 12.5 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		Light Brown Silt, Sand, Gravel, Brick, Ash, Asphalt, Wood, moist (FILL)
2		S-1	0-4	100	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Dark Brown Silty SAND, trace Gravel, moist
6		S-2	4-8	100	NA	0.0		
7						0.0		... mottled
8						0.0		
9						0.0		
10		S-3	8-12	25	NA	0.0		
11						0.0		
12						0.0		... broken rock fragments
13		S-4	12-14	100	NA	0.0		... wet
14						0.0		Dark Brown Silty SAND, some Clay, moist ... angular rock fragments
15								Refusal @ 14.0'
16								
17								
18								
19								
20								

File: 2506S-28.LOG

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

BORING NUMBER: TB-129

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/10/01 **Completion Date:** 05/10/01
Borehole Diameter: 3 inches **Borehole Depth:** 17.2 feet
Water Level: Approximately 9.0 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Dark Brown Silt, Sand, Gravel, Brick, Ash, Asphalt, Coal, moist (FILL)
2		S-1	0-4	90	NA	0.0		
3						0.0		Brown Silty SAND, some Gravel, trace Clay, moist
4						0.0		
5						0.0		
6		S-2	4-8	90	NA			... rock fragments
7						0.0		
8						0.0		
9						0.0		... wet
10		S-3	8-12	70	NA	0.0		
11						0.0		Brown Silty SAND and GRAVEL, trace Clay, wet
12						0.0		
13						0.0		... rock fragments
14		S-4	12-15	90	NA	0.0		
15						0.0		... moist
16		S-5	15-16.5	80	NA	0.0		Dark Brown, Silty SAND, trace Gravel, wet
17		S-6	16.5-17.2	20	NA	0.0		
18								Refusal @ 17.2'
19								
20								

File: 2506S-29.LOG

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

BORING NUMBER: TB-131

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 17.2 feet
Water Level: Approximately 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		Brown Sand, Silt, Gravel, Ash, moist (FILL)
2		S-1	0-4	100	NA	0.0		
3						41.8		... strong petroleum odor
4						129		
5						37.8		
6		S-2	4-8	80	NA	188		
7						152		... fractured rock fragments Dark Brown to Gray Silty SAND, some Gravel, wet
8								
9						636		... little Gravel
10		S-3	8-12	90	NA	273		
11						22.3		Brown Silty SAND, some Clay, moist
12								
13						63.9		
14		S-4	12-15	80	NA	12.3		
15						0.1		
16						12.7		
17		S-5	15-17.2	100	NA	4.2		
18								BOH @ 17.2'
19								
20								

File: 2506S-31.LOG

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

BORING NUMBER: TB-132

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 16.5 feet
Water Level: Approximately 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		S-1	0-4	100	NA	0.0		Light Brown Sand, Silt, Gravel, Ash, Brick, Asphalt, moist (FILL)
2						0.0		
3						0.0		... Dark Brown to Black
4						0.0		
5		S-2	4-8	90	NA	0.7		Dark Brown Silty SAND, trace Gravel, moist
6						2.6		
7						8.9		
8						12.7		
9		S-3	8-12	50	NA	18.6		... Black staining
10						22.4		
11						33.7		... wet
12		S-4	12-15	90	NA	373		
13						26.7		
14						4.2		Light Brown Silty SAND, trace pea Gravel, moist
15		S-5	15-16.5	60	NA	0.0		
16								Refusal @ 16.5'
17								
18								
19								
20								

File: 2506S-32.LOG

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

BORING NUMBER: TB-133

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 17.7 feet
Water Level: Approximately 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		Dark Brown Silt, Sand, Gravel, Ash, moist (FILL)
2		S-1	0-4	90	NA	0.0		
3						0.0		.. seam of fractured rock
4						0.0		
5						0.0		
6		S-2	4-8	90	NA	0.0		Dark Brown Silty SAND, trace Gravel, wet
7						0.0		
8						0.0		
9						0.0		
10		S-3	8-12	70	NA	0.0		
11						0.0		.. petroleum odor
12						1.9		
13		S-4	12-15	80	NA	8.5		
14						0.0		Reddish Brown Silty SAND, trace Gravel, wet
15						0.0		
16		S-5	15-17.7	65	NA	0.0		
17								
18								Refusal @ 17.7'
19								
20								

File: 2506S-33.LOG

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

BORING NUMBER: TB-134

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 15.2 feet
Water Level: 13.4' 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		S-1	0-4	80	NA	0.0		Dark Brown Sand, Silt, Ash, Gravel, moist (FILL)
2						0.0		
3						0.0		Dark Brown Silty SAND, moist
4						1.7		... petroleum odor
5		S-2	4-8	90	NA	7.2		... Black staining
6						8.3		
7						5.7		... rock fragments
8						0.0		Dark Brown Silty SAND, some Gravel, moist
9		S-3	8-12	70	NA	27.3		
10						77.9		
11						112		... seam of fractured rock
12						164		
13		S-4	12-15.2	85	NA	227		... Black staining
14						385		... wet
15						6.3		Reddish brown Silty CLAY, some pea Gravel, moist
16								Refusal @ 15.2'
17								
18								
19								
20								

File: 2506S-34.LOG

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

BORING NUMBER: TB-135

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 17.2 feet
Water Level: Approximately 16 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		Tan and Brown Silt, Sand, Gravel, Roots, Brick, Coal, Cinders, Ash, damp (FILL)
2		S-1	0-4	70	NA	0.0		
3						0.0		
4						268		Dark Brown Sand, Silt, Gravel, Cinders, damp (FILL)
5						2811		... Strong petroleum odor
6		S-2	4-8	80	NA	2816		Olive Silty SAND, some Gravel, little Clay, moist
7						2359		
8						3141		Olive Silty SAND, some Clay, little Gravel, moist
9						3865		
10		S-3	8-12	70	NA	9999+		Reddish brown Silty SAND and GRAVEL, trace Clay, moist Very strong petoleum odor
11						9999+		
12						9999+		
13						9999+		
14		S-4	12-16	60	NA	9999+		... intermixed seams of CLAY, damp
15						9999+		
16						9999+		
17		S-5	15-17.2	30	NA	9999+		... wet, no visible sheen ... Rock fragments
18								Refusal @ 17.2'
19								
20								

File: 2506S-35.LOG

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

BORING NUMBER: TB-136

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 17.1 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		Dark Brown Silt, Sand, Gravel, Brick, Cinders, Ash, damp (FILL)
2		S-1	0-4	90	NA	0.0		
3						21.6		
4						1583		
5						6884		Dark Brown to Black Sand, Silt, Clay, Gravel, Organics, Coal, damp (FILL)
6		S-2	4-8	75	NA	6788		
7						8013		
8						8212		
9						8222		Olive Gray Silty SAND, trace fine Gravel, damp
10		S-3	8-12	90	NA	9539		
11						4495		Reddish brown Silty SAND and GRAVEL, moist
12						852		
13		S-4	12-15	70	NA	126		
14						43.3		... intermixed seams of CLAY
15						80.4		
16		S-5	15-17.1	50	NA	9.6		... Rock fragments
17						0.8		
18						0.0		Refusal @ 17.1'
19								
20								

File: 2506S-36.LOG

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

BORING NUMBER: TB-137

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 14.3 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		Dark Brown Silt, Sand, Gravel, Roots, Moist (TOPSOIL)
						0.0		Brown Silt, Sand, Gravel, Cinders, Brick, Asphalt, damp (FILL)
2		S-1	0-4	95	NA	3.8		
3						277		... strong weathered petroleum odor
						274		
4								Dark Brown to Black Silt, Gravel, Ash, Plaster, Coal, Wood, moist (FILL)
5						1010		
						1491		
6		S-2	4-8	50	NA			Olive Silty SAND, trace fine Gravel, moist, strong petroleum odor
7						1523		
						2052		
8								
9						1304		
						1750		Reddish brown Silty SAND and GRAVEL, little Clay, moist
10		S-3	8-12	50	NA			
11						1728		
						1705		
12								... intermixed seams of CLAY
						1643		
13		S-4	12-14.3	30	NA	1205		
14						1771		... Rock fragment (DOLOMITE)
15								Refusal @ 14.3'
16								
17								
18								
19								
20								

File: 2506S-37.LOG

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

BORING NUMBER: TB-137A

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 19.0 feet
Water Level: Approximately 16 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-13		S-1	0-14		NA			Samples not collected
14		S-2	14-16	70	NA	9999+ 9668 9440		Reddish brown Silty SAND and GRAVEL, trace Clay, moist
15-16								... wet, no evidence of product or sheen
16-17		S-3	16-18	75	NA	831 1635 210		... Rock fragments
18		S-4	18-19	40	NA	285 297		... weathered Rock and Rock fragments
19								Refusal @ 19.0'
20								

File: 2506-37A.LOG

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

BORING NUMBER: TB-138

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/09/01
Completion Date: 05/09/01
Borehole Diameter: 3 inches
Borehole Depth: 18.2 feet
Water Level: Approximately 11.5 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		Dark Brown Sand, Silt, Gravel, Brick, Cinders, Plastic, damp (FILL)
2		S-1	0-4	85	NA	0.0		
3						0.0		
4						0.0		
5						0.0		Brown Silty SAND, some Gravel, trace Clay, moist
6		S-2	4-8	80	NA	0.0		
7						7.8		... weathered petroleum odor
8						0.0		... Olive
9						11.1		
10		S-3	8-12	60	NA	29.7		
11						31.8		
12						30.6		Reddish brown Silty SAND and GRAVEL, trace Clay, wet
13						3.6		
14		S-4	12-16	60	NA	5.9		... Rock fragments
15						1.6		
16						0.9		Reddish brown Silty CLAY, little Sand, damp
17		S-5	15-18.2	40	NA	0.9		Reddish brown SAND, some Silt, wet, slight petroleum odor
18						5.8		Reddish brown Silty SAND and GRAVEL, little Clay, moist
19						0.8		Refusal @ 18.2'
20								

File: 2506S-38.LOG

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

BORING NUMBER: TB-140

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 14.7 feet
Water Level: Approximately 12 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		S-1	0-4	90	NA	0.0		Brown Silt, Sand, Gravel, Ash, Asphalt, Brick, Slag, moist (FILL)
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	90	NA	0.0		Brown Silty SAND, some Gravel, moist
6						0.0		
7						0.0		
8						0.0		
9		S-3	8-12	50	NA	0.0		... seam of fractured rock
10						0.0		
11						0.0		... seam of fractured rock
12						0.0		... wet
13		S-4	12-14.7	70	NA	0.0		Brown Silty SAND, some Clay, moist
14						0.0		
15								Refusal @ 14.7'
16								
17								
18								
19								
20								

File: 2506S-Q.LOG

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

BORING NUMBER: TB-141

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 22.8 feet
Water Level: Approximately 17.0 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		S-1	0-4	80	NA	0.0		Brown Silt, Sand, Ash, Asphalt, Brick, Gravel, Moist (FILL)
2						0.0		
3						0.0		
4						3.4		
5		S-2	4-8	90	NA	99.2		
6						16.9		
7								Dark Brown Silty SAND, Moist
8						1.5		
9		S-3	8-12	90	NA	41.2		Light Brown Silty SAND, some Clay, wet Petroleum odor
10								
11						48.0		
12						5.1		... seam of fractured rock @ 11.5'
13		S-4	12-15	30	NA	231		Light Brown Silty SAND and GRAVEL, moist Petroleum odor
14								
15								
16		S-5	15-19	50	NA	463		
17								... wet @ 17.0'
18						1333		... sheen on water
19								
20		S-6	19-22.8		NA	956		
21						107		
22								
23								Refusal @ 22.8'
24								

File: 2506141.LOG

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

BORING NUMBER: TB-142

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/10/01
Completion Date: 05/10/01
Borehole Diameter: 3 inches
Borehole Depth: 17.6 feet
Water Level: Approximately 14 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		S-1	0-4	90	NA	0.0		Brown Sand, Silt, Gravel, Brick, Ash, Asphalt, moist (FILL)
2						0.0		
3						0.0		
4						0.0		Black, Sand, Silt, Slag, Ash, moist (FILL)
5		S-2	4-8	90	NA	0.0		
6						0.0		Light Tan to Brown silty SAND, some Gravel, moist
7						0.0		
8		S-3	8-12	80	NA	0.0		
9						0.0		
10						0.0		Light Brown Silty SAND, some Clay, moist
11						0.0		
12		S-4	12-16	70	NA	22.6		... Black staining, petroleum odor
13						3.7		Red Silty CLAY, moist
14						1.2		... wet @ 14.0'
15						0.0		... transition to brown
16		S-5	15-17.6	50	NA	0.0		
17						0.0		Brown Silty SAND, wet
18								BOH @ 17.6'
19								
20								
21								
22								
23								

File: 2506S-42.LOG

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

BORING NUMBER: TB-143

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 22.8 feet
Water Level: Approximately 15.5 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		S-1	0-4	100	NA	0.0		Silt, Sand, Gravel, Ash, Slag, moist (FILL)
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	90	NA	10.6		... seam of brick
6						39.7		
7						44.3		
8						65.1		
9		S-3	8-12	10	NA	55.5		Light Brown Silty SAND, trace Clay, moist
10						42.1		
11						19.0		
12								
13		S-4	12-16	80	NA	2034		Light Brown Silty SAND and GRAVEL, moist Petroleum odor
14								
15								
16								... wet @ 15.5'
17		S-5	16-20	70	NA	1894		Light Tan Silty SAND and GRAVEL, moist
18								
19								
20								
21		S-6	20-22.8	80	NA	350		... very wet
22								
23								Refusal @ 22.8'
24								

File: 2506S-43.LOG

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

BORING NUMBER: TB-144

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 8.8 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		Sand, Silt, Gravel, Ash, Asphalt, Brick, moist (FILL)
2		S-1	0-4	100	NA	28.9		... seam of asphalt fill
3						0.0		... seam of fractured rock
4								
5		S-2	4-7	100	NA	0.0		
6						0.0		
7								
8		S-3	7-8.8	90	NA	3.5		
						17.3		... seam of asphalt fill
9								Refusal @ 8.8'
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

File: 2506S-44.LOG

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

BORING NUMBER: TB-144A

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/11/01
Borehole Diameter: 3 inches
Water Level: Not encountered

Datum: NA
Completion Date: 05/11/01
Borehole Depth: 9.8 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1–8								See Test Boring TB-144
8–9		S-1	8-9.8	100	NA	0.0 0.0		Sand, Ash, Silt, Asphalt, moist (FILL)
10–20								Refusal @ 9.8'

File: 2506-44A.LOG

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

BORING NUMBER: TB-145

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 11.0' 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		S-1	0-4	100	NA	0.0		Brown Sand, Silty Gravel, Brick, moist (FILL)
2						0.0		... seam of fractured rock
3						0.0		
4						0.0		... seam of fractured rock
5		S-2	4-8	90	NA	0.0		
6						0.0		
7						0.0		... seam of fractured rock
8						0.4		Brown Silty SAND, some Gravel, trace Clay, moist
9		S-3	8-11	90	NA	8.9		
10						40.3		
11						8.7		Refusal @ 11.0'
12								
13								
14								
15								
16								
17								
18								
19								
20								

File: 2506S-45.LOG

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

BORING NUMBER: TB-145A

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 22.0 feet
Water Level: Approximately 14 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-11		NA			NA			SEE TB-145
11-14		S-1	11-14	100	NA	0.0 4.3 12.9		Dark Brown to Red Silty CLAY, trace Sand, some Gravel, moist
14-18		S-2	14-18	60	NA	533 276 30.2		... wet Red Silty CLAY, some Gravel, moist
18-22		S-3	18-22	40	NA	0.0 0.0		Brown Silty fine SAND, trace Gravel, moist
22-24								BOH @ 22.0'

File: 2506-45A.LOG

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

BORING NUMBER: TB-146

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 25.5' feet
Water Level: Approximately 16 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-2		NA		0	NA			No recovery
3-5		S-1	3-6	50	NA	0.0 0.0 0.0 333		Sand, Silt, Ash, Brick, moist (FILL) ... Dark staining, petoleum odor
6-9		S-2	6-10	90	NA	63.2 73.5 74.4 1352		Dark Brown Silty SAND, trace Gravel, moist Dark Gray Sandy SILT, trace Clay, moist
10-13		S-3	10-14	90	NA	1197 1013 1472 2398		... seam of fractured rock
14-17		S-4	14-18	90	NA	2685 2670		Dark Brown Silty SAND, some Clay, wet
18-19		S-5	18-20	90	NA	743		Red Sandy SILT, trace Clay, trace Gravel, moist
20-22		S-6	20-23	90	NA	2568 285		Brown Silty SAND, trace Clay, wet
23-24		S-7	23-25	85	NA	0.0		... angular rock fragment
25		S-8	25-25.5	90	NA	0.0		
26-27								Refusal @ 25.5'

File: 2506S-46.LOG

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

BORING NUMBER: TB-147

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/11/01
Borehole Diameter: 3 inches
Water Level: Not encountered

Datum: NA
Completion Date: 05/11/01
Borehole Depth: 14.7' 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, Sand, Gravel, Brick, Ash, moist (FILL)
2		S-1	0-4	100	NA	0.0		
3						0.0		
4						0.0		
5						0.0		
6		S-2	4-8	100	NA	0.0		
7						0.0		... broken rock fragments
8						0.0		... black staining
9						0.0		
10		S-3	8-12	85	NA	0.0		
11						0.0		Brown to Black silty SAND, moist
12						0.0		
13		S-4	12-14.7	50	NA	24.7		... black staining, petroleum odor
14						0.0		Light Tan, Silty SAND and GRAVEL, moist
15						0.0		Red Silty SAND, some Clay, moist Refusal @ 14.7'

File: 2506-47.LOG

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

BORING NUMBER: TB-147A

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' acetate sleeve
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 22.0 feet
Water Level: 16.5 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-13								See TB-147
14		S-1	14-16	60	NA	0.0 0.0 0.0		Reddish brown Clayey SAND, moist
16		S-2	16-19	60	NA	14.6 2457 1803 203		Brown Silty SAND and GRAVEL, trace Clay, wet
19		S-3	19-22	70	NA	47.2 18.4 1.5 63.8		Reddish brown Silty SAND, some Gravel, wet ... angular Rock fragments
22								Refusal @ 22.0'
23								

File: 2506S-06.LOG

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

BORING NUMBER: TB-148

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0' feet
Water Level: Approximately 19 feet

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1						0.0		Brown Sand, Silt, Gravel, Roots, Coal, damp (FILL)
2		S-1	0-4	95	NA	0.0		Dark brown Sand, Silt, Gravel, Ash, Cinders, Glass, Coal, Brick, moist (FILL)
3						0.0		
4								
5						0.0		... moist
6		S-2	4-8	80	NA	0.0		
7						0.0		
8								
9						0.0		Olive and brown Silt, some fine SAND, little angular Gravel, organics, damp (FILL)
10		S-3	8-12	80	NA	0.0		
11						0.0		
12								Tan Silty fine Sand, little Clay, moist
13						0.0		
14		S-4	12-16	60	NA	0.0		
15						0.0		... seam of Rock fragments
16						0.0		Reddish Brown Silty SAND, some Gravel, moist
17						0.0		
18		S-5	16-20	65	NA	0.0		
19								Reddish Brown Silty SAND and GRAVEL, trace Clay, wet
20								... Rock fragments
21								BOH @ 20.0'

File: 2506-48.LOG

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

BORING NUMBER: TB-149

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/11/01
Completion Date: 05/11/01
Borehole Diameter: 3 inches
Borehole Depth: 21.5' feet
Water Level: Approximately 15.5 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		S-1	0-4	95	NA	0.0		Brown Sand, Clay, Silt, Gravel, Roots, Wood, moist (FILL)
2						0.0		Dark brown and black Sand, Silt, Gravel, Cinders, Ash, Brick, Coal, moist (FILL)
3						0.0		
4								
5		S-2	4-8	80	NA	0.0		Brown Silt, Sand, Gravel, Organics, moist (FILL)
6						120		
7						149 190 379		Olive Silty SAND, some Clay, little Gravel, moist
8								
9		S-3	8-12	35	NA	44.7		... strong weathered petroleum odor
10						31.9		Olive Silty SAND and GRAVEL, trace Clay, moist
11						1.9		
12						0.3		
13		S-4	12-15	40	NA	0.1		Reddish brown Silty SAND and GRAVEL, some Clay, damp
14						0.0		
15						0.0		
16		S-5	15-18	35	NA	25.7		... wet
17						1.2		
18						0.0		
19		S-6	18-21.5	60	NA	0.0		... seam of red CLAY, wet
20						0.0		
21						0.0		
22						0.0		BOH @ 21.5'

File: 2506S-49.LOG

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

BORING NUMBER: TB-150

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Start Date: 05/11/01
Borehole Diameter: 3 inches
Water Level: Approximately 16.0 feet

Datum: NA
Completion Date: 05/11/01
Borehole Depth: 21.0' 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, Sand, Gravel, Brick, Coal, Cinders, Ash, damp (FILL)
2		S-1	0-4	95	NA	0.0		
3						0.0		... seam of Gravel at 2.0'
4								Brown and Olive Silt, Sand, Gravel, Clay, Brick, Ash, Coal, damp (FILL)
5						0.0		
6		S-2	4-8	60	NA	0.0		
7						0.0		
8								Brown SILT, some Sand, little Organics, moist
9						0.0		
10		S-3	8-12	60	NA	0.0		
11						0.0		
12								Reddish brown Silty SAND and GRAVEL, trace Clay, moist
13						0.0		
14		S-4	12-15	30	NA	0.0		
15						0.0		... Rock fragments
16						0.0		
17		S-5	15-18	50	NA	0.0		... wet
18						0.0		
19						0.0		
20		S-6	18-21	40	NA	0.0		... angular Rock fragments (DOLOMITE), damp
21								
22								Refusal @ 21.0'

File: 2506S-50.LOG

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

BORING NUMBER: TB-151

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/11/01 **Completion Date:** 05/11/01
Borehole Diameter: 3 inches **Borehole Depth:** 21.0' feet
Water Level: Approximately 17.0 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		S-1	0-4	95	NA	0.0		Brown Silt, Sand, Gravel, Roots, Cinders, Ash, damp (FILL)
2						0.0		
3						0.0		
4		S-2	4-8	75	NA	0.0		
5						0.0		
6						0.0		... intermixed Organics, Brick, moist
7						0.0		
8		S-3	8-12	5	NA	0.0		
9								
10						0.0		
11								
12		S-4	12-15	60	NA	0.0		
13						0.0		
14						0.0		Reddish brown Silty SAND and GRAVEL, little Clay, moist
15						0.0		
16		S-5	15-18	50	NA	0.0		
17						426		
18						5611		... black staining, strong weathered petroleum odor, angular Rock fragments, wet
19		S-6	18-21	30	NA	4921		
20						146		
21						12.0		
22						6.7		Refusal @ 21.0'

File: 2506S-51.LOG

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

BORING NUMBER: TB-152

Project: Mt. Hope Project
Project No: 2506S-00
DAY Representative: J. Dorety
Boring Location: See Site Plan
Drilling Contractor: Lyon Drilling
Ground Surface Elevation: NA
Datum: NA
Drilling Rig: CME 55
Start Date: 05/14/01
Completion Date: 05/14/01
Sampling Method: 4' Geoprobe Sampler
Borehole Diameter: 3 inches
Borehole Depth: 20.0' feet
Completion Method: Backfilled with cuttings
Water Level: Approximately 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		S-1	0-4	80	NA	0.0		Dark brown Sand, Silt, Clay, Gravel, Roots, Coal, damp (FILL)
2						0.0		
3						0.0		... seam of Cinders and Coal
4						0.0		... Brick
5		S-2	4-8	70	NA	0.0		... wet
6						0.0		
7						0.0		Brown Silt, Sand, some Gravel, little Clay, wet (FILL)
8						0.0		
9		S-3	8-12	50	NA	0.0		
10						0.0		
11						0.0		... Plaster, Wood
12		S-4	12-16	90	NA	0.0		
13						0.0		
14						0.0		... Coal, Ash
15						0.0		
16		S-5	16-20	85	NA	0.0		
17						0.0		
18						0.0		Reddish Brown Silty SAND, some Gravel, intermixed clay lenses, wet
19						0.0		
20								BOH @ 20.0'
21								

File: 2506S-52.LOG

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

BORING NUMBER: TB-153

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/14/01
Completion Date: 05/14/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0' feet
Water Level: Approximately 9.6 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		S-1	0-4	85	NA	0.0		Brown to dark brown Sand, Silt, Gravel, Roots, Wood, Cinders, damp
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	70	NA	0.0		... seam of Rock fragments
6						0.9		Dark brown to black Silt, Sand, Gravel, Organics, moist (FILL) Slightly weathered petroleum odor
7						21.1		
8						3.7		
9		S-3	8-12	50	NA	7.8		
10						11.4		Olive Silty SAND, little Gravel, wet
11						11.2		Reddish brown Silty SAND and GRAVEL, moist
12		S-4	12-15	70	NA	2.2		
13						0.5		
14						0.0		
15						0.0		
16		S-5	16-18	60	NA	0.0		... severely weathered Rock, damp
17						0.0		
18						0.0		... intermixed seams of Clay, wet
19		S-6	18-20	50	NA	0.0		
20						0.0		... Rock fragments
21								BOH @ 20.0'

File: 2506S-53.LOG

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

BORING NUMBER: TB-154

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/14/01
Completion Date: 05/14/01
Borehole Diameter: 3 inches
Borehole Depth: 20.0' feet
Water Level: Approximately 15.6 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		S-1	0-4	75	NA	0.0		Dark brown Sand, Silt, Gravel, Clay, Roots, Ash, Coal, damp (FILL)
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	60	NA	0.0		
6						0.0		... Wood
7						0.0		... moist
8						0.0		... Brick
9		S-3	8-12	65	NA	0.0		
10						0.0		Reddish brown Sand, Silt, Clay, Gravel, Organics, moist (FILL)
11						0.0		
12						0.0		
13		S-4	12-16	85	NA	0.0		
14						0.0		Reddish Brown SILT, some Clay, little Sand, trace Gravel, moist
15						0.0		
16						0.0		Reddish Brown Silty SAND and GRAVEL, trace Clay, wet No visible sheen
17		S-5	16-18	60	NA	0.0		
18						0.0		... angular Rock fragments
19		S-6	18-20	30	NA	0.0		
20						0.0		
21								BOH @ 20.0'

File: 2506S-54.LOG

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

BORING NUMBER: TB-155

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/14/01
Completion Date: 05/14/01
Borehole Diameter: 3 inches
Borehole Depth: 21.2' feet
Water Level: Approximately 18 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		S-1	0-4	90	NA	0.0		Dark brown Sand, Silt, Gravel, Clay, Roots, moist (FILL)
2						0.0		
3						0.0		... Cinders, Coal, Ash, Wood, damp
4						0.0		
5		S-2	4-8	80	NA	0.0		
6						0.0		
7						0.0		... Brick, Wood, Organics, moist, Organic odor
8						0.0		
9		S-3	8-12	65	NA	0.0		
10						0.0		
11						0.0		... Metal
12						0.0		
13		S-4	12-16	50	NA	0.0		
14						0.0		... Brick, Cinders, Coal, moist
15						0.0		
16						0.0		
17		S-5	16-20	40	NA	0.0		
18						0.0		... wet
19						0.0		
20								... Brick
21		S-6	20-21.2	50	NA	0.0		Reddish Brown Silty SAND and GRAVEL, trace Clay, Rock fragments, wet
22								Refusal @ 21.2'

File: 2506S-55.LOG

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

BORING NUMBER: TB-156

Project: Mt. Hope Project
DAY Representative: J. Dorety
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 4' Geoprobe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/14/01
Completion Date: 05/14/01
Borehole Diameter: 3 inches
Borehole Depth: 18.5' feet
Water Level: Approximately 17.6 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		S-1	0-4	85	NA	0.0		Brown Sand, Silt, Gravel, Roots, Clay, Ash, Cinders, damp (FILL)
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	60	NA	0.0		Dark brown to black Sand, Cinders, Brick, Ash, Gravel, Glass, damp (FILL)
6						0.0		
7						0.0		Brown and Tan Silty SAND, some Gravel, moist
8						0.0		
9		S-3	8-12	80	NA	0.0		
10						0.0		... mottled
11						0.0		
12						0.0		... seam of Clay
13		S-4	12-13.4	30	NA	0.0		... Rock fragments
14		S-5	13.4-14.0	NC	NA			
15		S-6	14-17	60	NA	0.0		Reddish brown fine SAND and SILT, some Clay, trace Gravel, moist
16						0.0		
17						0.0		
18		S-7	17-18.5	40	NA	0.0		... Rock fragments, wet
19						0.0		
20								Refusal @ 18.5'

File: 2506S-56.LOG

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

BORING NUMBER: TB-157

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: GeoProbe
Completion Method: Backfill with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/25/01 **Completion Date:** 05/25/01
Borehole Diameter: 3 inches **Borehole Depth:** 17.2'
Water Level: Approximately 16 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		S-1	0-4	100	NA	0.0		Black Silt and Clay, trace Sand and Gravel, Moist (TOPSOIL)
2						0.0		Brown, Sand, Silt, Cinders, Wood, Slag, moist (FILL)
3						0.0		... Black Staining
4						2.9		... petroleum odor
5		S-2	4-8	0	NA			No Recovery
6								
7								
8								Light Gray Silty SAND, trace Gravel, moist
9		S-3	8-12	40	NA	24.0		
10								
11						18.0		
12						2089		Light Brown Sandy SILT, some Clay, trace Gravel, moist
13								
14		S-4	12-16	60	NA	47.8		
15						96.0		
16						3.6		... wet
17		S-5	16-17.2	100	NA	133		Brown Silty SAND, some Gravel, wet
18						169		Refusal @ 17.2'
19								
20								

File: 2506S-57.LOG

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

BORING NUMBER: TB-A

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: NA
Sampling Method: GeoProbe
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/24/01
Completion Date: 05/24/01
Borehole Diameter: 3 inches
Borehole Depth: 16.3 feet
Water Level: Approximately 10.6 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		S-1	0-4	95	NA	0.0		Brown, Sand, Silt, Brick, Asphalt, Ash, Slag, moist
2						0.0		
3						0.0		
4						0.0		
5		S-2	4-8	70	NA	0.0		Light Tan Brick, Ash, Slag, Coal, Clay, Sand, moist (FILL)
6						0.0		
7						0.0		
8						0.0		
9		S-3	8-12	60	NA	0.0		... seam of rust coloring
10						0.0		... wet
11						0.0		Dark Brown Silty SAND, some Clay, some Gravel, wet
12						0.0		
13		S-4	12-16.3	60	NA	0.0		
14						0.0		
15						0.0		
16						0.0		
17								Refusal @ 16.3'
18								
19								
20								

File: 2506A2.LOG

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

BORING NUMBER: TB-B

Project: Mt. Hope Project
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: GeoProbe Sampler
Completion Method: Backfilled with cuttings

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/24/01 **Completion Date:** 05/24/01
Borehole Diameter: 3 inches **Borehole Depth:** 20.0 feet
Water Level: Approximately 12 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		S-1	0-4	90	NA	0.0		Brown, Silt, Sand, Asphalt, Brick, Ash, Moist (FILL)
2						0.0		
3						0.0		Dark Brown to Red coarse Sand, some Gravel, Moist (FILL)
4						0.0		
5		S-2	4-8	60	NA	0.0		
6						0.0		Dark Brown Silty coarse SAND, some Gravel, moist
7						0.0		
8		S-3	8-12	20	NA	0.0		
9						0.0		
10						0.0		
11						0.0		
12		S-4	12-16	50	NA	0.0		... wet
13						0.0		
14						0.0		
15						0.0		... seam of fractured rock
16		S-5	16-20	30	NA	0.0		
17						0.0		
18						0.0		
19						0.0		
20								BOH @ 20.0'
21								

File: 2506S-B.LOG

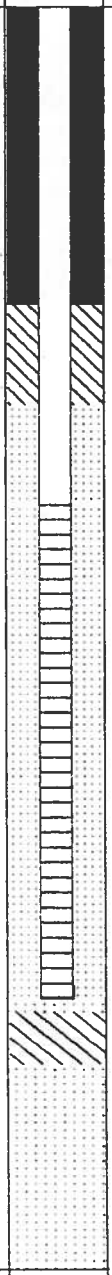
MONITORING WELL LOGS

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

BORING NUMBER: MW-101

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: Not Sampled
Completion Method: 2" PVC Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/24/01 **Completion Date:** 05/24/01
Borehole Diameter: 4.25 inches **Borehole Depth:** 25.0'
Water Level: See Monitoring Well Sampling Logs

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1–25		NA			NA			No Samples Collected See Test Boring TB-116
25								Angered at 25.0
26								

File: 2506101.LOG

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

BORING NUMBER: MW-102

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: Split Spoon
Completion Method: 2" PVC Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA
Datum: NA
Start Date: 05/25/01
Completion Date: 05/25/01
Borehole Diameter: 4.25 inches
Borehole Depth: 20 feet
Water Level: Approximately 14.6 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	6 13 24 28	S-1	0-2	100	37	0.0 0.0 0.0		Dark Brown Silty Sand, moist, (TOPSOIL)
2								Silty Sand, Brick, Gravel, Fractured Rock, moist (FILL)
3	10 24 18 15	S-2	2-4	60	42	0.0 2.8		
4								... seam of fractured rock
5	7 7 10 7	S-3	4-6	60	17	0.0 0.0		
6								Light Brown Silt, Sand, Brick, Ash, Rock, moist (FILL)
7	7 4 3 6	S-4	6-8	10	7	0.0 0.0		
8								
9	6 5 7 5	S-5	8-10	30	12	0.0 0.0		Dark Brown Silty SAND, trace Clay, some Gravel, moist
10								
11	1 2 3 2	S-6	10-12	30	5	0.0 0.0		
12								
13	1 5 8 5	S-7	12-14	25	13	0.0 0.0		... staining, no odor
14								
15	1 1 1 1	S-8	14-16	30	2	0.0 0.0		Dark Brown Silty SAND, some Gravel, wet
16								
17	1 1 2 4	S-9	16-18	10	3	0.0 0.0		
18								
19	6 8 16 16	S-10	18-20	25	24	0.0 0.0		Light Brown Silty SAND and GRAVEL, moist
20								BOH @ 20.0'

File: 2506S-02.LOG

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

BORING NUMBER: MW-103

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: Not Sampled
Completion Method: 2" Prc Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/25/01 **Completion Date:** 05/25/01
Borehole Diameter: 4.25 inches **Borehole Depth:** 21.0'
Water Level: See Monitoring Well Sampling Log

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1								
2								
3								
4								
5								
6								
7								
8								
9								
10		NA			NA			
11								
12								
13								No Samples Collected See Test boring TB-145
14								
15								
16								
17								
18								
19								
20								Angered to 21.0
21								BOH @ 21.0'
22								

File: 2506103.LOG

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

BORING NUMBER: MW-104

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: Not Sampled
Completion Method: 2" PVC Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/29/01 **Completion Date:** 05/29/01
Borehole Diameter: 4.25 inches **Borehole Depth:** 21.0'
Water Level: See Monitoring Well Sampling Log

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1–21		NA			NA			No Samples Collected See Test Boring TB-148
21								Augered at 21.0
22								BOH @ 21.0'

File: 2506104.LOG

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

BORING NUMBER: MW-105

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: 2" Split Spoon
Completion Method: 2" PVC Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/29/01 **Completion Date:** 05/29/01
Borehole Diameter: 4.25 inches **Borehole Depth:** 20.0'
Water Level: Approximately 14.0 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	1 4 3 8	S-1	0-2	30	7	0.0 0.0		Dark Brown Silt, Sand, Organics, fractured rock, moist (TOPSOIL)
3	5 22 31 25	S-2	2-4	70	53	0.0 8.2		Sand, Silt, Brick, Asphalt, Ash, moist (FILL) ... Black Staining, slight weathered petroleum odor
5	9 8 6 5	S-3	4-6	50	14	1287 110		... strong petroleum odor
7	3 4 3 3	S-4	6-8	50	7	227 213		Brown Silty SAND, trace Gravel, moist
9	6 4 7 6	S-5	8-10	40	11	147 73.7		... seam of Black staining
11	1 3 3 3	S-6	10-12	90	6	1976 1930		seam of fractured rock
13	5 11 40 31	S-7	12-14	70	51	59.4 143		Reddish Brown Silty CLAY, moist ... some Gravel, wet
15	- 16 20 29	S-8	14-16	50	36	149 296		Auger through Rock fragments Brown Silty SAND, wet ... fractured rock
17	33 40 60 -	S-9	16-18	40	40	111		Auger through Rock fragments
19	15 32 37 28	S10	18-20	40	69	25.0 48.4		Brown Silty SAND, some Gravel, wet
20								BOH @ 20.0'

File: 2506S-05.LOG

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

BORING NUMBER: MW-106

Project: Mt. Hope Avenue
DAY Representative: A. Farrell
Drilling Contractor: Lyon Drilling
Drilling Rig: CME 55
Sampling Method: Not Sampled
Completion Method: 2" PVC Well

Project No: 2506S-00
Boring Location: See Site Plan
Ground Surface Elevation: NA **Datum:** NA
Start Date: 05/30/01 **Completion Date:** 05/30/01
Borehole Diameter: 4 1/4 inches **Borehole Depth:** 35.5'
Water Level: See Monitoring Well Sampling Log

Depth (feet)	Blows per 0.5'	Number	Depth (feet)	% Recovery	N-Value or RQD %	Peak PID Reading (ppm)	Well Installation Log	Sample Description
1-25		NA			NA			NO SAMPLES COLLECTED 0-24.8 feet
25								Top of bedrock encountered at 22.4'
25-29		NA	24.8-29.8	100	90			Note: Angered to 24.8 Gray Dolomite
30-34		NA	29.8-34.8	96	92.6			... little vugs and pits
35		NA			NA			
36								BOH @ 35.5'

File: 2506106.LOG

APPENDIX C

LABORATORY TESTING REPORTS

SOIL ANALYTICAL LABORATORY TEST RESULTS

SOUTH SITE

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Lab Project No.: 01-1132

Sample Type: Soil
Analytical Method: EPA 9060
Date Sampled: 5/9-5/10/01
Date Received: 05/15/2001
Date Analyzed: 05/23/2001

Lab Sample ID.	Client Sample ID.	Field Location	Total Organic Carbon (mg/kg)
4384	N/A	TB-134 (13.5')	87,000
4385	N/A	TB-136 (15')	22,400

ELAP ID. No.:10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: VARLOCT0C01-1132

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.: 01-1132

Client Job Site: RoCity

Client Job No.: 2506S-00

Sample Type: TCLP Extract
Analytical Method: EPA 6010
Date Sampled: 5/10/01-5/11/01
Date Received: 5/15/01
Date Analyzed: 5/18/01-5/21/01

TCLP LEAD ANALYSIS

Lab ID No.	Field ID No.	Field Location	Result (mg/L)	Regulatory Limit (mg/L)
4388	N/A	TB-143 (21.0')	<0.100	5.0
4389	N/A	TB-145A (15.0')	0.175	5.0
4392	N/A	TB-151 (17.5')	<0.100	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011132

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-131(10.0')
Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4382A
Sample Type: Soil
Date Sampled: 05/10/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	27,800
Acenaphthene	ND< 3,400
Fluorene	ND< 3,400
Fluoranthene	ND< 3,400
Anthracene	ND< 3,400
Phenanthrene	ND< 3,400
Benzo (a) anthracene	ND< 3,400
Chrysene	ND< 3,400
Pyrene	ND< 3,400
Benzo (b) fluoranthene	ND< 3,400
Benzo (k) fluoranthene	ND< 3,400
Benzo (g,h,i) perylene	ND< 3,400
Benzo (a) pyrene	ND< 3,400
Dibenz (a,h) anthracene	ND< 3,400
Indeno (1,2,3-cd) pyrene	ND< 3,400

Analytical Method: EPA 8270
NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S1.XLS

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-133(11')
Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4383
Sample Type: Soil
Date Sampled: 05/10/01
Date Received: 05/15/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 335
Acenaphthene	ND< 335
Fluorene	ND< 335
Fluoranthene	ND< 335
Anthracene	ND< 335
Phenanthrene	ND< 335
Benzo (a) anthracene	ND< 335
Chrysene	ND< 335
Pyrene	ND< 335
Benzo (b) fluoranthene	ND< 335
Benzo (k) fluoranthene	ND< 335
Benzo (g,h,i) perylene	ND< 335
Benzo (a) pyrene	ND< 335
Dibenz (a,h) anthracene	ND< 335
Indeno (1,2,3-cd) pyrene	ND< 335

Analytical Method: EPA 8270

NYS ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S2 XLS

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-136(15')

Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4385

Sample Type: Soil

Date Sampled: 05/09/01
Date Received: 05/15/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 312
Acenaphthene	ND< 312
Fluorene	ND< 312
Fluoranthene	ND< 312
Anthracene	ND< 312
Phenanthrene	ND< 312
Benzo (a) anthracene	ND< 312
Chrysene	ND< 312
Pyrene	ND< 312
Benzo (b) fluoranthene	ND< 312
Benzo (k) fluoranthene	ND< 312
Benzo (g,h,i) perylene	ND< 312
Benzo (a) pyrene	ND< 312
Dibenz (a,h) anthracene	ND< 312
Indeno (1,2,3-cd) pyrene	ND< 312

Analytical Method: EPA 8270

NYS ELAP ID No. 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

01113253.XLS

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-138(11.5')
Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4386
Sample Type: Soil
Date Sampled: 05/09/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 320
Acenaphthene	ND< 320
Fluorene	ND< 320
Fluoranthene	ND< 320
Anthracene	ND< 320
Phenanthrene	ND< 320
Benzo (a) anthracene	ND< 320
Chrysene	ND< 320
Pyrene	ND< 320
Benzo (b) fluoranthene	ND< 320
Benzo (k) fluoranthene	ND< 320
Benzo (g,h,i) perylene	ND< 320
Benzo (a) pyrene	ND< 320
Dibenz (a,h) anthracene	ND< 320
Indeno (1,2,3-cd) pyrene	ND< 320

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S4.XLS

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-142(12.5')

Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4387

Sample Type: Soil

Date Sampled: 05/10/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 324
Acenaphthene	ND< 324
Fluorene	ND< 324
Fluoranthene	ND< 324
Anthracene	ND< 324
Phenanthrene	ND< 324
Benzo (a) anthracene	ND< 324
Chrysene	ND< 324
Pyrene	ND< 324
Benzo (b) fluoranthene	ND< 324
Benzo (k) fluoranthene	ND< 324
Benzo (g,h,i) perylene	ND< 324
Benzo (a) pyrene	ND< 324
Dibenz (a,h) anthracene	ND< 324
Indeno (1,2,3-cd) pyrene	ND< 324

Analytical Method EPA 8270

NYS ELAP ID No. 10958

Comments ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S5.XLS

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-149(7.5')
Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4391
Sample Type: Soil
Date Sampled: 05/11/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 335
Acenaphthene	ND< 335
Fluorene	ND< 335
Fluoranthene	ND< 335
Anthracene	ND< 335
Phenanthrene	ND< 335
Benzo (a) anthracene	ND< 335
Chrysene	ND< 335
Pyrene	ND< 335
Benzo (b) fluoranthene	ND< 335
Benzo (k) fluoranthene	ND< 335
Benzo (g,h,i) perylene	ND< 335
Benzo (a) pyrene	ND< 335
Dibenz (a,h) anthracene	ND< 335
Indeno (1,2,3-cd) pyrene	ND< 335

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S6.XLS

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-153(5.5')

Field ID No.: N/A

Lab Project No. 01-1132
Lab Sample No. 4394

Sample Type: Soil

Date Sampled: 05/14/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 338
Acenaphthene	ND< 338
Fluorene	ND< 338
Fluoranthene	ND< 338
Anthracene	ND< 338
Phenanthrene	ND< 338
Benzo (a) anthracene	ND< 338
Chrysene	ND< 338
Pyrene	ND< 338
Benzo (b) fluoranthene	ND< 338
Benzo (k) fluoranthene	ND< 338
Benzo (g,h,i) perylene	ND< 338
Benzo (a) pyrene	ND< 338
Dibenz (a,h) anthracene	ND< 338
Indeno (1,2,3-cd) pyrene	ND< 338

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011132S7 XLS

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 (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1132
		Lab Sample No.:	4382A
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No.:	2506S-00		
		Date Sampled:	05/10/01
Field Location:	TB-131(10.0')	**Date Received:**	05/15/01
Field ID No.:	N/A	**Date Analyzed:**	05/17/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 1,810
Benzene	ND< 1,810
Toluene	ND< 1,810
Ethylbenzene	78,900
m,p-Xylene	371 000
o-Xylene	47,500
Isopropylbenzene	17,600
n-Propylbenzene	64,600
1,3,5-Trimethylbenzene	127,000
tert-Butylbenzene	ND< 1,810
1,2,4-Trimethylbenzene	E 368,000
sec-Butylbenzene	ND< 1,810
p-Isopropyltoluene	4,680
n-Butylbenzene	ND< 1,810
Naphthalene	60,100

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected
E denotes Estimated value. Sample concentration exceeds calibration range.

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 Solids (STARS List)

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-134(13.5')
Field ID No.: N/A

Lab Project No.: 01-1132
Lab Sample No.: 4384

Sample Type: Soil

Date Sampled: 05/10/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 20.8
Benzene	1,130
Toluene	92.4
Ethylbenzene	136
m,p-Xylene	1,280
o-Xylene	123
Isopropylbenzene	1,530
n-Propylbenzene	2,530
1,3,5-Trimethylbenzene	159
tert-Butylbenzene	26.4
1,2,4-Trimethylbenzene	91.4
sec-Butylbenzene	217
p-Isopropyltoluene	36.0
n-Butylbenzene	207
Naphthalene	174

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-136(15')
Field ID No.: N/A

Lab Project No.: 01-1132
Lab Sample No.: 4385
Sample Type: Soil
Date Sampled: 05/09/01
Date Received: 05/15/01
Date Analyzed: 05/17/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 7.65
Benzene	ND< 7.65
Toluene	ND< 7.65
Ethylbenzene	23.7
m,p-Xylene	8.38
o-Xylene	ND< 7.65
Isopropylbenzene	22.7
n-Propylbenzene	30.2
1,3,5-Trimethylbenzene	15.8
tert-Butylbenzene	ND< 7.65
1,2,4-Trimethylbenzene	ND< 7.65
sec-Butylbenzene	ND< 7.65
p-Isopropyltoluene	ND< 7.65
n-Butylbenzene	ND< 7.65
Naphthalene	43.6

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1132
Client Job Site:	RoCity	**Lab Sample No.:**	4386
Client Job No.:	2506S-00	**Sample Type:**	Soil
Field Location:	TB-138(11.5')	**Date Sampled:**	05/09/01
Field ID No.:	N/A	**Date Received:**	05/15/01
		Date Analyzed:	05/17/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 9.30
Benzene	ND< 9.30
Toluene	ND< 9.30
Ethylbenzene	ND< 9.30
m,p-Xylene	ND< 9.30
o-Xylene	ND< 9.30
Isopropylbenzene	ND< 9.30
n-Propylbenzene	ND< 9.30
1,3,5-Trimethylbenzene	ND< 9.30
tert-Butylbenzene	ND< 9.30
1,2,4-Trimethylbenzene	ND< 9.30
sec-Butylbenzene	ND< 9.30
p-Isopropyltoluene	ND< 9.30
n-Butylbenzene	ND< 9.30
Naphthalene	ND< 46.5

Analytical Method: EPA 8021 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:**	01-1132
Client Job Site:	RoCity	**Lab Sample No:**	4388
Client Job No:	2506S-00	**Sample Type:**	Soil
Field Location:	TB-143(21.0')	**Date Sampled:**	05/10/2001
Field ID No:	N/A	**Date Received:**	05/15/2001
		Date Analyzed:	05/21/2001

VOLATILE HALOCARBONS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 119
Bromomethane	ND< 119
Bromoform	ND< 119
Carbon tetrachloride	ND< 119
Chloroethane	ND< 119
Chloromethane	ND< 119
2-Chloroethyl vinyl ether	ND< 119
Chloroform	ND< 119
Dibromochloromethane	ND< 119
1,1-Dichloroethane	ND< 119
1,2-Dichloroethane	ND< 119
1,1-Dichloroethene	ND< 119
cis-1,2-Dichloroethene	ND< 119
trans-1,2-Dichloroethene	ND< 119
1,2-Dichloropropane	ND< 119
cis-1,3-Dichloropropene	ND< 119
trans-1,3-Dichloropropene	ND< 119
Methylene chloride	ND< 297
1,1,2,2-Tetrachloroethane	ND< 119
Tetrachloroethene	ND< 119
1,1,1-Trichloroethane	ND< 119
1,1,2-Trichloroethane	ND< 119
Trichloroethene	ND< 119
Vinyl Chloride	ND< 119

VOLATILE AROMATICS	RESULTS (ug/Kg)
Benzene	ND< 119
Chlorobenzene	ND< 119
Ethylbenzene	367
Toluene	ND< 119
m,p - Xylene	1,450
o - Xylene	558
Styrene	ND< 119
Ketones & Misc.	
Acetone	ND< 594
Vinyl acetate	ND< 297
2-Butanone	ND< 297
4-Methyl-2-pentanone	ND< 297
2-Hexanone	ND< 297
Carbon disulfide	ND< 297

Analytical Method EPA 8260

ELAP ID No. 10958

Comments: ND denotes Not Detected

Approved By _____
Laboratory Director

011132V8.XLS

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.:**	01-1132
		Lab Sample No.:	4388
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/10/01
Field Location:	TB-143(21.0')	**Date Received:**	05/15/01
Field ID No.:	N/A	**Date Analyzed:**	05/21/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 119
Isopropylbenzene	ND< 119
n-Propylbenzene	298
1,3,5-Trimethylbenzene	874
tert-Butylbenzene	ND< 119
1,2,4-Trimethylbenzene	3,340
sec-Butylbenzene	ND< 119
p-Isopropyltoluene	208
n-Butylbenzene	ND< 119
Naphthalene	547

Analytical Method: EPA 8260 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1132
		Lab Sample No.:	4389
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No.:	2506S-00		
		Date Sampled:	05/11/01
Field Location:	TB-145A(15.0')	**Date Received:**	05/15/01
Field ID No.:	N/A	**Date Analyzed:**	05/17/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 89.2
Benzene	ND< 89.2
Toluene	ND< 89.2
Ethylbenzene	2,810
m,p-Xylene	167
o-Xylene	ND< 89.2
Isopropylbenzene	2,030
n-Propylbenzene	7,400
1,3,5-Trimethylbenzene	1,280
tert-Butylbenzene	ND< 89.2
1,2,4-Trimethylbenzene	ND< 89.2
sec-Butylbenzene	797
p-Isopropyltoluene	510
n-Butylbenzene	2,640
Naphthalene	6,090

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1132
Client Job Site:	RoCity	**Lab Sample No.:**	4390
Client Job No.:	2506S-00	**Sample Type:**	Soil
Field Location:	TB-147(18')	**Date Sampled:**	05/11/01
Field ID No.:	N/A	**Date Received:**	05/15/01
		Date Analyzed:	05/18/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 79.3
Benzene	ND< 79.3
Toluene	ND< 79.3
Ethylbenzene	244
m,p-Xylene	212
o-Xylene	ND< 79.3
Isopropylbenzene	240
n-Propylbenzene	1,270
1,3,5-Trimethylbenzene	1,140
tert-Butylbenzene	ND< 79.3
1,2,4-Trimethylbenzene	5,920
sec-Butylbenzene	ND< 79.3
p-Isopropyltoluene	251
n-Butylbenzene	ND< 79.3
Naphthalene	1,880

Analytical Method: EPA 8021 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.
Client Job Site: RoCity
Client Job No: 2506S-00
Field Location: TB-151(17.5')
Field ID No: N/A

Lab Project No: 01-1132
Lab Sample No: 4392
Sample Type: Soil
Date Sampled: 05/11/2001
Date Received: 05/15/2001
Date Analyzed: 05/21/2001

VOLATILE HALOCARBONS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 34.5
Bromomethane	ND< 34.5
Bromoform	ND< 34.5
Carbon tetrachloride	ND< 34.5
Chloroethane	ND< 34.5
Chloromethane	ND< 34.5
2-Chloroethyl vinyl ether	ND< 34.5
Chloroform	ND< 34.5
Dibromochloromethane	ND< 34.5
1,1-Dichloroethane	ND< 34.5
1,2-Dichloroethane	ND< 34.5
1,1-Dichloroethene	ND< 34.5
cis-1,2-Dichloroethene	ND< 34.5
trans-1,2-Dichloroethene	ND< 34.5
1,2-Dichloropropane	ND< 34.5
cis-1,3-Dichloropropene	ND< 34.5
trans-1,3-Dichloropropene	ND< 34.5
Methylene chloride	ND< 86.2
1,1,2,2-Tetrachloroethane	ND< 34.5
Tetrachloroethene	ND< 34.5
1,1,1-Trichloroethane	ND< 34.5
1,1,2-Trichloroethane	ND< 34.5
Trichloroethene	ND< 34.5
Vinyl Chloride	ND< 34.5

VOLATILE AROMATICS	RESULTS (ug/Kg)
Benzene	ND< 34.5
Chlorobenzene	ND< 34.5
Ethylbenzene	1,060
Toluene	ND< 34.5
m,p - Xylene	3,180
o - Xylene	58.9
Styrene	ND< 34.5
Ketones & Misc.	
Acetone	ND< 172
Vinyl acetate	ND< 86.2
2-Butanone	ND< 86.2
4-Methyl-2-pentanone	ND< 86.2
2-Hexanone	ND< 86.2
Carbon disulfide	ND< 86.2

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.:**	01-1132
		Lab Sample No.:	4392
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/11/01
		Date Received:	05/15/01
Field Location:	TB-151(17.5')	**Date Analyzed:**	05/22/01
Field ID No.:	N/A		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 272
Isopropylbenzene	ND< 272
n-Propylbenzene	ND< 272
1,3,5-Trimethylbenzene	274
tert-Butylbenzene	ND< 272
1,2,4-Trimethylbenzene	1,070
sec-Butylbenzene	ND< 272
p-Isopropyltoluene	ND< 272
n-Butylbenzene	ND< 272
Naphthalene	ND< 680

Analytical Method: EPA 8260 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1132
		Lab Sample No.:	4393
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No.:	2506S-00		
		Date Sampled:	05/09/01
Field Location:	TB-137A(18.5')	**Date Received:**	05/15/01
Field ID No.:	N/A	**Date Analyzed:**	05/18/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 9.20
Benzene	185
Toluene	51.3
Ethylbenzene	351
m,p-Xylene	516
o-Xylene	84.3
Isopropylbenzene	27.1
n-Propylbenzene	89.3
1,3,5-Trimethylbenzene	78.4
tert-Butylbenzene	ND< 9.20
1,2,4-Trimethylbenzene	645
sec-Butylbenzene	ND< 9.20
p-Isopropyltoluene	ND< 9.20
n-Butylbenzene	ND< 9.20
Naphthalene	204

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

REPORT TO		INVOICE TO	
COMPANY:	DAy Environmental, Inc.	COMPANY:	SAME
ADDRESS:	2144 Townline Rd	ADDRESS:	
CITY:	Rochester	CITY:	
STATE:	NY	STATE:	
ZIP:	14623	ZIP:	
PHONE:	292-1090 x113	PHONE:	
FAX:	292-0425	FAX:	
ATTN:	J. Blanchard	ATTN:	

LAB PROJECT #: 01-1131-2
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS) — STD: ☒ 5 | ☐ 1 | ☐ 2 | ☐ 3 | OTHER: ☐

PROJECT NAME/SITE NAME: RoCity 25065-00

COMMENTS: Mt. Hope Project Quote PS2002

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	827D STARS	8021 STARS	8260TCL + STARS	TCLP LEAD	REMARKS	PARADIGM LAB SAMPLE NUMBER
1 5/11/01	1530		X	TB-149(7.5')	Soil	1	X					4394 1
2 5/11/01	1750		X	TB-151(17.5')					X	X		4394 2
3 5/9/01	1445		X	TB-137A(18.5')				X				4394 3
4 5/14/01	0925		X	TB-153(5.5')			X					4394 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: ☐ 16°C Wet

Sampled By: [signature] Date/Time: 5/15/01 1:30

Relinquished By: [signature] Date/Time:

Received By: Date/Time:

Relinquished By: Date/Time:

Received By: L. Bethel 5/15/01 Date/Time: 13:30

Received @ Lab By: [signature] Date/Time: 5/15/01 1532

Total Cost:

P.I.F.

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY

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

REPORT TO / INVOICE TO

REPORT TO	INVOICE TO	
COMPANY: DAY Environmental, Inc	COMPANY: SAME	LAB PROJECT #: 01-1137
ADDRESS: 2144 Town line Rd	ADDRESS:	CLIENT PROJECT #:
CITY: Rochester STATE: NY ZIP: 14623	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS) ☐1 ☐2 ☐3 ☒5 STD ☐ OTHER
PHONE: 292-1090 x113 FAX: 292-0425	PHONE: FAX:	
ATTN: J. Blanchard	ATTN:	

PROJECT NAME/SITE NAME: RoCity 25065-00

COMMENTS: Mt. Hope Project quote PS1002

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	~~8260~~	8021 STARS	8270 STARS	TOC	8260 TCL + STARS	TCLP LEAD	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/10/01	0815		X	TB-131 (10.0')	Soil	1		X	X					4382
2	5/10/01	1035		X	TB-133 (11')		1			X					4383
3	5/10/01	1215		X	TB-134 (13.5')		1		X		X				4384
4	5/9/01	1645		X	TB-136 (15')		1		X	X	X				4385
5	~~5/9/01~~	~~1345~~		~~X~~	~~TB-137 (14')~~ JB		~~1~~								
6	5/9/01	1235		X	TB-133 (11.5')		1		X	X					4386
7	5/10/01	1605		X	TB-142 (12.5')		1			X					4387
8	5/10/01	1710		X	TB-143 (21.0')		1					X	X		4388
9	5/11/01	1000		X	TB-145A (15.0')		1		X				X		4389
10	5/11/01	1400		X	TB-147A (18')		1		X						4390

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:

CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 10°C iced

Sampled By: [signature]	Date/Time: 5/15/01 1:30	Relinquished By:	Date/Time:	Total Cost:
Relinquished By:	Date/Time:	Received By: L. Bellue	Date/Time: 5/15/01 13:30	
Received By:	Date/Time:	Received @ Lab By: [signature]	Date/Time: 5/15/01 1550	P.I.F.

SOIL ANALYTICAL LABORATORY TEST RESULTS

NORTH SITE

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-102(17.5')

Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4263

Sample Type: Soil

Date Sampled: 05/04/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 309
Acenaphthene	ND< 309
Fluorene	ND< 309
Fluoranthene	ND< 309
Anthracene	ND< 309
Phenanthrene	ND< 309
Benzo (a) anthracene	ND< 309
Chrysene	ND< 309
Pyrene	ND< 309
Benzo (b) fluoranthene	ND< 309
Benzo (k) fluoranthene	ND< 309
Benzo (g,h,i) perylene	ND< 309
Benzo (a) pyrene	ND< 309
Dibenz (a,h) anthracene	ND< 309
Indeno (1,2,3-cd) pyrene	ND< 309

Analytical Method: EPA 8270

NYS ELAP ID No. 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094SI XLS

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-103(10 5')

Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4265

Sample Type: Soil

Date Sampled: 05/04/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 318
Acenaphthene	ND< 318
Fluorene	ND< 318
Fluoranthene	ND< 318
Anthracene	ND< 318
Phenanthrene	ND< 318
Benzo (a) anthracene	ND< 318
Chrysene	ND< 318
Pyrene	ND< 318
Benzo (b) fluoranthene	ND< 318
Benzo (k) fluoranthene	ND< 318
Benzo (g,h,i) perylene	ND< 318
Benzo (a) pyrene	ND< 318
Dibenz (a,h) anthracene	ND< 318
Indeno (1,2,3-cd) pyrene	ND< 318

Analytical Method: EPA 8270

NYS ELAP ID No. 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094S2 XLS

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-105(11')
Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4267
Sample Type: Soil
Date Sampled: 05/07/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 329
Acenaphthene	ND< 329
Fluorene	ND< 329
Fluoranthene	ND< 329
Anthracene	ND< 329
Phenanthrene	ND< 329
Benzo (a) anthracene	ND< 329
Chrysene	ND< 329
Pyrene	ND< 329
Benzo (b) fluoranthene	ND< 329
Benzo (k) fluoranthene	ND< 329
Benzo (g,h,i) perylene	ND< 329
Benzo (a) pyrene	ND< 329
Dibenz (a,h) anthracene	ND< 329
Indeno (1,2,3-cd) pyrene	ND< 329

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094S3.XLS

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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-105(12'-13')

Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4268

Sample Type: Soil

Date Sampled: 05/07/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 316
Acenaphthene	ND< 316
Fluorene	ND< 316
Fluoranthene	ND< 316
Anthracene	ND< 316
Phenanthrene	ND< 316
Benzo (a) anthracene	ND< 316
Chrysene	ND< 316
Pyrene	ND< 316
Benzo (b) fluoranthene	ND< 316
Benzo (k) fluoranthene	ND< 316
Benzo (g,h,i) perylene	ND< 316
Benzo (a) pyrene	ND< 316
Dibenz (a,h) anthracene	ND< 316
Indeno (1,2,3-cd) pyrene	ND< 316

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094S4.XLS

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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-107(15.0')
Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4270
Sample Type: Soil
Date Sampled: 05/07/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 315
Acenaphthene	ND< 315
Fluorene	ND< 315
Fluoranthene	983
Anthracene	ND< 315
Phenanthrene	ND< 315
Benzo (a) anthracene	370
Chrysene	382
Pyrene	1,220
Benzo (b) fluoranthene	380
Benzo (k) fluoranthene	369
Benzo (g,h,i) perylene	ND< 315
Benzo (a) pyrene	423
Dibenz (a,h) anthracene	ND< 315
Indeno (1,2,3-cd) pyrene	ND< 315

Analytical Method: EPA 8270

NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094S5.XLS

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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.

Client Job Site: RoCity

Client Job No.: 2506S-00
Field Location: TB-111(16')

Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4271

Sample Type: Soil

Date Sampled: 05/08/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 308
Acenaphthene	ND< 308
Fluorene	ND< 308
Fluoranthene	ND< 308
Anthracene	ND< 308
Phenanthrene	ND< 308
Benzo (a) anthracene	ND< 308
Chrysene	ND< 308
Pyrene	ND< 308
Benzo (b) fluoranthene	ND< 308
Benzo (k) fluoranthene	ND< 308
Benzo (g,h,i) perylene	ND< 308
Benzo (a) pyrene	ND< 308
Dibenz (a,h) anthracene	ND< 308
Indeno (1,2,3-cd) pyrene	ND< 308

Analytical Method: EPA 8270

NYS ELAP ID No. 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

011094S6.XLS

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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.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-115(11.5')
Field ID No.: N/A

Lab Project No. 01-1094
Lab Sample No. 4272
Sample Type: Soil
Date Sampled: 05/08/01
Date Received: 05/10/01
Date Analyzed: 05/16/01

COMPOUND	RESULT (ug/Kg)
Naphthalene	ND< 306
Acenaphthene	ND< 306
Fluorene	ND< 306
Fluoranthene	826
Anthracene	ND< 306
Phenanthrene	615
Benzo (a) anthracene	393
Chrysene	382
Pyrene	909
Benzo (b) fluoranthene	365
Benzo (k) fluoranthene	353
Benzo (g,h,i) perylene	ND< 306
Benzo (a) pyrene	394
Dibenz (a,h) anthracene	ND< 306
Indeno (1,2,3-cd) pyrene	ND< 306

Analytical Method: EPA 8270
NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1094
		Lab Sample No.:	4260
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/04/01
		Date Received:	05/10/01
Field Location:	TB-101 (9.5')	**Date Analyzed:**	05/14/01
Field ID No.:	N/A		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 54.5
Benzene	ND< 54.5
Toluene	ND< 54.5
Ethylbenzene	329
m,p-Xylene	559
o-Xylene	ND< 54.5
Isopropylbenzene	83.3
n-Propylbenzene	495
1,3,5-Trimethylbenzene	1,140
tert-Butylbenzene	ND< 54.5
1,2,4-Trimethylbenzene	3,720
sec-Butylbenzene	86.1
p-Isopropyltoluene	84.8
n-Butylbenzene	ND< 54.5
Naphthalene	546

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1094
		Lab Sample No.:	4264
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No.:	2506S-00		
		Date Sampled:	05/04/01
Field Location:	TB-103 (13.5')	**Date Received:**	05/10/01
Field ID No.:	N/A	**Date Analyzed:**	05/11/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 8.67
Benzene	ND< 8.67
Toluene	ND< 8.67
Ethylbenzene	ND< 8.67
m,p-Xylene	ND< 8.67
o-Xylene	ND< 8.67
Isopropylbenzene	ND< 8.67
n-Propylbenzene	27.7
1,3,5-Trimethylbenzene	ND< 8.67
tert-Butylbenzene	ND< 8.67
1,2,4-Trimethylbenzene	79.3
sec-Butylbenzene	ND< 8.67
p-Isopropyltoluene	ND< 8.67
n-Butylbenzene	11.5
Naphthalene	ND< 43.3

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-104 (13')
Field ID No.: N/A

Lab Project No.: 01-1094
Lab Sample No.: 4266

Sample Type: Soil

Date Sampled: 05/04/01
Date Received: 05/10/01
Date Analyzed: 05/11/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 10.5
Benzene	ND< 10.5
Toluene	ND< 10.5
Ethylbenzene	ND< 10.5
m,p-Xylene	ND< 10.5
o-Xylene	ND< 10.5
Isopropylbenzene	ND< 10.5
n-Propylbenzene	ND< 10.5
1,3,5-Trimethylbenzene	ND< 10.5
tert-Butylbenzene	ND< 10.5
1,2,4-Trimethylbenzene	ND< 10.5
sec-Butylbenzene	ND< 10.5
p-Isopropyltoluene	ND< 10.5
n-Butylbenzene	ND< 10.5
Naphthalene	ND< 52.4

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

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SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc.
Client Job Site: RoCity
Client Job No.: 2506S-00
Field Location: TB-105 (12'-13')
Field ID No.: N/A

Lab Project No.: 01-1094
Lab Sample No.: 4268
Sample Type: Soil
Date Sampled: 05/07/01
Date Received: 05/10/01
Date Analyzed: 05/11/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 11.7
Benzene	ND< 11.7
Toluene	ND< 11.7
Ethylbenzene	ND< 11.7
m,p-Xylene	ND< 11.7
o-Xylene	ND< 11.7
Isopropylbenzene	ND< 11.7
n-Propylbenzene	ND< 11.7
1,3,5-Trimethylbenzene	ND< 11.7
tert-Butylbenzene	ND< 11.7
1,2,4-Trimethylbenzene	12.3
sec-Butylbenzene	ND< 11.7
p-Isopropyltoluene	ND< 11.7
n-Butylbenzene	ND< 11.7
Naphthalene	ND< 58.3

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1094
		Lab Sample No.:	4272
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/08/01
		Date Received:	05/10/01
Field Location:	TB-115 (11.5')	**Date Analyzed:**	05/11/01
Field ID No.:	N/A		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 17.8
Benzene	ND< 17.8
Toluene	ND< 17.8
Ethylbenzene	ND< 17.8
m,p-Xylene	ND< 17.8
o-Xylene	ND< 17.8
Isopropylbenzene	ND< 17.8
n-Propylbenzene	ND< 17.8
1,3,5-Trimethylbenzene	ND< 17.8
tert-Butylbenzene	ND< 17.8
1,2,4-Trimethylbenzene	ND< 17.8
sec-Butylbenzene	45.5
p-Isopropyltoluene	ND< 17.8
n-Butylbenzene	ND< 17.8
Naphthalene	ND< 89.2

Analytical Method: EPA 8021

NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client:	Day Environmental, Inc.	**Lab Project No.:**	01-1094
		Lab Sample No.:	4274
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No.:	2506S-00		
		Date Sampled:	05/08/01
Field Location:	TB-116 (15')	**Date Received:**	05/10/01
Field ID No.:	N/A	**Date Analyzed:**	05/11/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 11.6
Benzene	ND< 11.6
Toluene	ND< 11.6
Ethylbenzene	153
m,p-Xylene	274
o-Xylene	20.3
Isopropylbenzene	23.4
n-Propylbenzene	42.3
1,3,5-Trimethylbenzene	128
tert-Butylbenzene	ND< 11.6
1,2,4-Trimethylbenzene	349
sec-Butylbenzene	ND< 11.6
p-Isopropyltoluene	13.2
n-Butylbenzene	ND< 11.6
Naphthalene	132

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Solids (STARS List)

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-116 (18.5')
Field ID No.: N/A

Lab Project No.: 01-1094
Lab Sample No.: 4275

Sample Type: Soil

Date Sampled: 05/08/01
Date Received: 05/10/01
Date Analyzed: 05/11/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-butyl Ether	ND< 7.94
Benzene	ND< 7.94
Toluene	34.5
Ethylbenzene	96.5
m,p-Xylene	195
o-Xylene	37.5
Isopropylbenzene	11.7
n-Propylbenzene	20.5
1,3,5-Trimethylbenzene	42.9
tert-Butylbenzene	ND< 7.94
1,2,4-Trimethylbenzene	124
sec-Butylbenzene	ND< 7.94
p-Isopropyltoluene	ND< 7.94
n-Butylbenzene	ND< 7.94
Naphthalene	71.2

Analytical Method: EPA 8021

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:**	01-1094
		Lab Sample No:	4261
Client Job Site:	RoCity		
		Sample Type:	Soil
Client Job No:	2506S-00		
		Date Sampled:	05/04/2001
Field Location:	TB-102 (11')	**Date Received:**	05/10/2001
Field ID No:	N/A	**Date Analyzed:**	05/17/2001

VOLATILE HALOCARBONS	RESULTS (ug/Kg)	VOLATILE AROMATICS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 80.6	Benzene	ND< 80.6
Bromomethane	ND< 80.6	Chlorobenzene	ND< 80.6
Bromoform	ND< 80.6	Ethylbenzene	ND< 80.6
Carbon tetrachloride	ND< 80.6	Toluene	ND< 80.6
Chloroethane	ND< 80.6	m,p - Xylene	ND< 80.6
Chloromethane	ND< 80.6	o - Xylene	ND< 80.6
2-Chloroethyl vinyl ether	ND< 80.6	Styrene	ND< 80.6
Chloroform	ND< 80.6		
Dibromochloromethane	ND< 80.6		
1,1-Dichloroethane	ND< 80.6		
1,2-Dichloroethane	ND< 80.6		
1,1-Dichloroethene	ND< 80.6		
cis-1,2-Dichloroethene	ND< 80.6		
trans-1,2-Dichloroethene	ND< 80.6	**Ketones & Misc.**	
1,2-Dichloropropane	ND< 80.6	Acetone	ND< 403
cis-1,3-Dichloropropene	ND< 80.6	Vinyl acetate	ND< 202
trans-1,3-Dichloropropene	ND< 80.6	2-Butanone	ND< 202
Methylene chloride	ND< 202	4-Methyl-2-pentanone	ND< 202
1,1,2,2-Tetrachloroethane	ND< 80.6	2-Hexanone	ND< 202
Tetrachloroethene	ND< 80.6	Carbon disulfide	ND< 202
1,1,1-Trichloroethane	ND< 80.6		
1,1,2-Trichloroethane	ND< 80.6		
Trichloroethene	ND< 80.6		
Vinyl Chloride	ND< 80.6		

Analytical Method: EPA 8260 ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By _____
Laboratory Director

011094w1

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.:**	01-1094
		Lab Sample No.:	4261
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/04/01
		Date Received:	05/10/01
Field Location:	TB-102(11')	**Date Analyzed:**	05/17/01
Field ID No.:	N/A		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 80.6
Isopropylbenzene	578
n-Propylbenzene	1,990
1,3,5-Trimethylbenzene	ND< 80.6
tert-Butylbenzene	ND< 80.6
1,2,4-Trimethylbenzene	1,330
sec-Butylbenzene	1,240
p-Isopropyltoluene	1,230
n-Butylbenzene	2,070
Naphthalene	ND< 202

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.
Client Job Site: RoCity
Client Job No: 2506S-00
Field Location: TB-106C (12.0')
Field ID No: N/A

Lab Project No: 01-1094
Lab Sample No: 4269
Sample Type: Soil
Date Sampled: 05/04/2001
Date Received: 05/10/2001
Date Analyzed: 05/18/2001

VOLATILE HALOCARBONS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 10.1
Bromomethane	ND< 10.1
Bromoform	ND< 10.1
Carbon tetrachloride	ND< 10.1
Chloroethane	ND< 10.1
Chloromethane	ND< 10.1
2-Chloroethyl vinyl ether	ND< 10.1
Chloroform	ND< 10.1
Dibromochloromethane	ND< 10.1
1,1-Dichloroethane	ND< 10.1
1,2-Dichloroethane	ND< 10.1
1,1-Dichloroethene	ND< 10.1
cis-1,2-Dichloroethene	ND< 10.1
trans-1,2-Dichloroethene	ND< 10.1
1,2-Dichloropropane	ND< 10.1
cis-1,3-Dichloropropene	ND< 10.1
trans-1,3-Dichloropropene	ND< 10.1
Methylene chloride	ND< 25.3
1,1,2,2-Tetrachloroethane	ND< 10.1
Tetrachloroethene	ND< 10.1
1,1,1-Trichloroethane	ND< 10.1
1,1,2-Trichloroethane	ND< 10.1
Trichloroethene	ND< 10.1
Vinyl Chloride	ND< 10.1

VOLATILE AROMATICS	RESULTS (ug/Kg)
Benzene	ND< 10.1
Chlorobenzene	ND< 10.1
Ethylbenzene	12.1
Toluene	ND< 10.1
m,p - Xylene	ND< 10.1
o - Xylene	ND< 10.1
Styrene	ND< 10.1
Ketones & Misc.	
Acetone	ND< 50.6
Vinyl acetate	ND< 25.3
2-Butanone	ND< 25.3
4-Methyl-2-pentanone	ND< 25.3
2-Hexanone	ND< 25.3
Carbon disulfide	ND< 25.3

Analytical Method: EPA 8260 ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By _____
Laboratory Director

011094w2

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.:**	01-1094
		Lab Sample No.:	4269
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/07/01
Field Location:	TB-106C(12.0')	**Date Received:**	05/10/01
Field ID No.:	N/A	**Date Analyzed:**	05/18/01

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 10.1
Isopropylbenzene	ND< 10.1
n-Propylbenzene	14.4
1,3,5-Trimethylbenzene	ND< 10.1
tert-Butylbenzene	ND< 10.1
1,2,4-Trimethylbenzene	72.8
sec-Butylbenzene	ND< 10.1
p-Isopropyltoluene	11.1
n-Butylbenzene	23.5
Naphthalene	ND< 25.3

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.
Client Job Site: RoCity
Client Job No: 2506S-00
Field Location: TB-108 (11')
Field ID No: N/A

Lab Project No: 01-1094
Lab Sample No: 4276
Sample Type: Soil
Date Sampled: 05/04/2001
Date Received: 05/10/2001
Date Analyzed: 05/18/2001

VOLATILE HALOCARBONS	RESULTS (ug/Kg)
Bromodichloromethane	ND< 14.6
Bromomethane	ND< 14.6
Bromoform	ND< 14.6
Carbon tetrachloride	ND< 14.6
Chloroethane	ND< 14.6
Chloromethane	ND< 14.6
2-Chloroethyl vinyl ether	ND< 14.6
Chloroform	ND< 14.6
Dibromochloromethane	ND< 14.6
1,1-Dichloroethane	ND< 14.6
1,2-Dichloroethane	ND< 14.6
1,1-Dichloroethene	ND< 14.6
cis-1,2-Dichloroethene	ND< 14.6
trans-1,2-Dichloroethene	ND< 14.6
1,2-Dichloropropane	ND< 14.6
cis-1,3-Dichloropropene	ND< 14.6
trans-1,3-Dichloropropene	ND< 14.6
Methylene chloride	ND< 36.6
1,1,2,2-Tetrachloroethane	ND< 14.6
Tetrachloroethene	ND< 14.6
1,1,1-Trichloroethane	ND< 14.6
1,1,2-Trichloroethane	ND< 14.6
Trichloroethene	ND< 14.6
Vinyl Chloride	ND< 14.6

VOLATILE AROMATICS	RESULTS (ug/Kg)
Benzene	ND< 14.6
Chlorobenzene	ND< 14.6
Ethylbenzene	752
Toluene	ND< 14.6
m,p - Xylene	2,490
o - Xylene	15.7
Styrene	ND< 14.6
Ketones & Misc.	
Acetone	ND< 73.2
Vinyl acetate	ND< 36.6
2-Butanone	ND< 36.6
4-Methyl-2-pentanone	ND< 36.6
2-Hexanone	ND< 36.6
Carbon disulfide	ND< 36.6

Analytical Method EPA 8260

ELAP ID No: 10958

Comments: ND denotes Not Detected

Approved By _____
Laboratory Director

011094w3

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.:**	01-1094
		Lab Sample No.:	4276
Client Job Site:	RoCity	**Sample Type:**	Soil
Client Job No.:	2506S-00	**Date Sampled:**	05/07/01
		Date Received:	05/10/01
Field Location:	TB-108(11')	**Date Analyzed:**	05/18/01
Field ID No.:	N/A		

VOLATILE AROMATICS	RESULTS (ug/Kg)
Methyl tert-Butyl Ether	ND< 159
Isopropylbenzene	974
n-Propylbenzene	2,530
1,3,5-Trimethylbenzene	6,420
tert-Butylbenzene	ND< 159
1,2,4-Trimethylbenzene	E 24,100
sec-Butylbenzene	1,950
p-Isopropyltoluene	4,250
n-Butylbenzene	ND< 159
Naphthalene	1,510

Analytical Method: EPA 8260 NYS ELAP ID No.: 10958

Comments: ND denotes not detected
E denotes Estimated value. Sample concentration exceeds calibration range.

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.
Client Job Site: RoCity
Client Job No.: 2506S-00

Lab Project No.: 01-1094
Sample Type: TCLP Extract
Analytical Method: EPA 6010
Date Sampled: 5/4/01,5/8/01
Date Received: 05/10/2001
Date Analyzed: 05/14/2001

TCLP LEAD ANALYSIS

Lab ID No.	Field ID No.	Field Location	Result (mg/L)	Regulatory Limit (mg/L)
4262	N/A	TB-102, (11')	<0.100	5.0
4273	N/A	TB-116 (11.5')	<0.100	5.0

ELAP ID No.: 10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011094

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Lab Project No.: 01-1094

Sample Type: Soil
Analytical Method: EPA 9060
Date Sampled: 05/04/2001
Date Received: 05/10/2001
Date Analyzed: 05/19/2001

Lab Sample ID.	Client Sample ID.	Field Location	Total Organic Carbon (mg/kg)
4259	N/A	TB-101 (7')	18,800
4260	N/A	TB-101 (9.5')	16,600
4263	N/A	TB-102 (17.5)	19,600

ELAP ID. No.:10709

Comments: ND denotes Non Detected.

Approved By: _____
for Laboratory Director

File ID: VARLOC01-1094

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

CHAIN OF CUSTODY

REPORT TO:	INVOICE TO:	
COMPANY: Day Environmental, Inc.	COMPANY: SAME	LAB PROJECT #: 04091
ADDRESS: 2144 Townline Road	ADDRESS:	CLIENT PROJECT #:
CITY: Rochester STATE: NY ZIP: 14623	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 292-1090 x 113 FAX: 292-0425	PHONE: FAX:	STD: ☒ 5 OTHER: ☐ 1 ☐ 2 ☐ 3
ATTN: J. Blanchard	ATTN:	
PROJECT NAME/SITE NAME: Rocky 25065-00	COMMENTS: Mt. Hope Project	

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8021 STARS	8270 STARS	8260TCL+STARS	TCLP Lead	TOC	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/4/01	1030		X	TB-101(7')	Soil	1					X		04259
5/4/01	1040		X	TB-101 (9.5')		1	X				X		04260
5/4/01	1410		X	TB-102(11')		1			X				04261
5/4/01	1610		X	TB-102(14')		1				X			04262
5/4/01	1640		X	TB-102(17.5')		1		X			X		04263
5/4/01	1320		X	TB-103(13.5')		1	X						04264
5/4/01	1250		X	TB-103(10.5')		1		X					04265
5/4/01	1210		X	TB-104 (13')		1	X						04266
5/5/01	0930		X	TB-105(11')		1		X					04267
5/7/01	0940		X	TB-105(15-15')		1	X	X					04268

LAB USE ONLY**

SAMPLE CONDITION: Check box if acceptable or note deviation: CONTAINER TYPE: ✓ PRESERVATIONS: ✓ HOLDING TIME: ✓ TEMPERATURE: ✓ iced 18°C

Sampled By:	Date/Time:	Received By:	Date/Time:	Total Cost:
L. Blanchard	5/10/01 2:20			
Relinquished By:	Date/Time:	Received By: L. Bethel	Date/Time: 5/10/01 14:28	
Relinquished By:	Date/Time:	Received @ Lab By: Anne Dalton	Date/Time: 5/10/01 1430	P.I.F.

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lake Avenue
chester, NY 14608
6) 647-2530 * (800) 724-1997

REPORT TO:	INVOICE TO:	
COMPANY: Day Environmental, Inc.	COMPANY:	LAB PROJECT #: 01-1094 / CLIENT PROJECT #:
ADDRESS: 2144 Townline Rd	ADDRESS: SAME	
CITY: Rochester STATE: NY ZIP: 14623	CITY: STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)
PHONE: 292-1090 x113 FAX: 292-0025	PHONE: FAX:	STD / OTHER
ATTN: J. Blanchard	ATTN:	1 2 3 X 5
PROJECT NAME/SITE NAME: Mt. Hope 25065-02	COMMENTS: Mt. Hope Project	

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	SOIL STARS	BTEX STARS	8260 TCL + STARS	TCLP Lead	TOC	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/1/01	1325		X	TB-106C (12.0')	Soil	1			X				4269
5/7/01	1430		X	TB-107 (15.0')				X					4270
5/8/01	1120		X	TB-111 (16')				X					4271
5/8/01	1245		X	TB-115 (11.5')			X	X					4272
5/8/01	1340		X	TB-116 (11.5')						X			4273
5/8/01	1355		X	TB-116 (15')			X						4274
5/8/01	1450		X	TB-116 (18.5')			X						4275
5/7/01	1100		X	TB-108 (11')					X				4276

LAB USE ONLY**

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

Sampled By: [signature] Date/Time: 5/10/01 2:20

Relinquished By: Date/Time:

Relinquished By: Date/Time:

Received By: Date/Time:

Received By: L. Bethel 5/10/01 14:20

Received @ Lab By: [signature] Date/Time: 5/10/01 1630

Total Cost:

P.I.F.

PARADIGM
Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-A (9.0')
Field ID No.: N/A

Lab Project No.: 01-1381
Lab Sample No.: 5210

Sample Type: Soil

Date Sampled: 05/24/2001
Date Received: 06/11/2001

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
T-Cyanide	06/18/2001	EPA 9012	ND<1

ELAP ID.No.: 10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: CN01-1381

PARADIGM
Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-A (9.0')
Field ID No.: N/A

Lab Project No. 01-1381
Lab Sample No. 5210

Sample Type: Soil

Date Sampled: 05/24/2001
Date Received: 06/11/2001

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	06/13/01	SW846 6010	5850.00
Antimony	06/13/01	SW846 6010	<5.94
Arsenic	06/13/01	SW846 6010	2.27
Barium	06/13/01	SW846 6010	56.4
Beryllium	06/13/01	SW846 6010	<0.494
Cadmium	06/13/01	SW846 6010	<0.494
Calcium	06/13/01	SW846 6010	53400
Chromium	06/13/01	SW846 6010	7.25
Cobalt	06/13/01	SW846 6010	4.55
Copper	06/13/01	SW846 6010	22.8
Iron	06/13/01	SW846 6010	11900
Lead	06/13/01	SW846 6010	22.1
Magnesium	06/13/01	SW846 6010	18100
Manganese	06/13/01	SW846 6010	502
Mercury	06/13/01	SW846 7471	<0.0871
Nickel	06/13/01	SW846 6010	9.77
Potassium	06/13/01	SW846 6010	1620
Selenium	06/13/01	SW846 6010	1.59
Silver	06/13/01	SW846 6010	1.03
Sodium	06/13/01	SW846 6010	237
Thallium	06/13/01	SW846 6010	<0.594
Vanadium	06/13/01	SW846 6010	14.2
Zinc	06/13/01	SW846 6010	50.3

ELAP ID No.:10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011381

PARADIGM
Environmental Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity

Client Job No.: 2506S-00

Field Location: TB-B (15.0')
Field ID No.: N/A

Lab Project No. 01-1381
Lab Sample No. 5211

Sample Type: Soil

Date Sampled: 05/24/2001
Date Received: 06/11/2001

Parameter	Date Analyzed	Analytical Method	Result (mg/kg)
Aluminum	06/13/01	SW846 6010	6550
Antimony	06/13/01	SW846 6010	<7.21
Arsenic	06/13/01	SW846 6010	29.9
Barium	06/13/01	SW846 6010	76.6
Beryllium	06/13/01	SW846 6010	<0.601
Cadmium	06/13/01	SW846 6010	6.55
Calcium	06/13/01	SW846 6010	7310
Chromium	06/13/01	SW846 6010	9.92
Cobalt	06/13/01	SW846 6010	10.7
Copper	06/13/01	SW846 6010	3170
Iron	06/13/01	SW846 6010	26300
Lead	06/13/01	SW846 6010	165
Magnesium	06/13/01	SW846 6010	479
Manganese	06/13/01	SW846 6010	175
Mercury	06/13/01	SW846 7471	<0.110
Nickel	06/13/01	SW846 6010	20.9
Potassium	06/13/01	SW846 6010	888
Selenium	06/13/01	SW846 6010	4.38
Silver	06/13/01	SW846 6010	<1.20
Sodium	06/13/01	SW846 6010	204
Thallium	06/13/01	SW846 6010	<0.721
Vanadium	06/13/01	SW846 6010	27.1
Zinc	06/13/01	SW846 6010	2490

ELAP ID No.:10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011381

CHAIN OF CUSTODY

PARADIGM
ENVIRONMENTAL SERVICES, INC.

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

REPORT TO:

COMPANY: Day Environmental Inc
ADDRESS: 2144 Townline Road
CITY: Rochester STATE: NY ZIP: 14623
PHONE: 292-1090 x113 FAX: 292-0425
ATTN: J Blanchard
COMMENTS:

INVOICE TO:

COMPANY:
ADDRESS: SAME
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 01-1381
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS)
STD ☐ 1 ☐ 2 ☐ 3 ☐ 5 OTHER ☐ 10

ECT NAME/SITE NAME:
Rocky 2-06S-05

REQUESTED ANALYSIS

DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	TAL Metals	Total CN	REMARKS	PARADIGM LAB SAMPLE NUMBER
6/24/01	1115		X	TB-A (9.0')	Soil	1	X	X		52106
6/24/01	1220		X	TB-B (15.0')	Soil	1	X			52111

LAB USE ONLY**

MPLE CONDITION: Check box cceptable or note deviation:

CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ iced 4°C

npled By: JSB Date/Time:

Relinquished By: Date/Time: 15:40 6/11/01

inquished By: Date/Time: 13:56 6/7/01

Received By: Laura Bethel Date/Time: 6/11/01 14:00

ceived By: Date/Time:

Received @ Lab By: Date/Time: 6/11/01 1530

Total Cost:

P.I.F.

GROUNDWATER ANALYTICAL LABORATORY TEST RESULTS

NORTH SITE

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-1
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5158
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/11/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 20.0
Benzene	11
Toluene	ND< 20.0
Ethylbenzene	160
m,p-Xylene	520
o-Xylene	ND< 20.0
Isopropylbenzene	42.0
n-Propylbenzene	85.6
1,3,5-Trimethylbenzene	264
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	886
sec-Butylbenzene	ND< 20.0
p-Isopropyltoluene	ND< 20.0
n-Butylbenzene	ND< 20.0
Naphthalene	271

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-2
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5159
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/11/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 20.0
Benzene	250
Toluene	ND< 20.0
Ethylbenzene	141
m,p-Xylene	200
o-Xylene	ND< 20.0
Isopropylbenzene	60.7
n-Propylbenzene	88.4
1,3,5-Trimethylbenzene	312
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	1,430
sec-Butylbenzene	ND< 20.0
p-Isopropyltoluene	ND< 20.0
n-Butylbenzene	ND< 20.0
Naphthalene	201

Analytical Method: EPA 8021 NYS ELAP ID No. 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-2
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5159

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

COMPOUND	RESULT (ug/L)
Naphthalene	154
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Laboratory Analysis Report For Non-Potable Water

Client:	Day Environmental	**Lab Project No.:**	01-1365
Client Job Site:	RoCity - Mt. Hope	**Lab Sample No.:**	5160
Client Job No.:	2506S-00	**Sample Type:**	Water
Field Location:	MW-101	**Date Sampled:**	06/07/01
		Date Received:	06/08/01
Field ID No.:	N/A	**Date Analyzed:**	06/12/01

VOLATILE HALOCARBONS	RESULTS (ug/L)
Bromodichloromethane	ND< 20.0
Bromomethane	ND< 20.0
Bromoform	ND< 20.0
Carbon tetrachloride	ND< 20.0
Chloroethane	ND< 20.0
Chloromethane	ND< 20.0
2-Chloroethyl vinyl ether	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

VOLATILE AROMATICS	RESULTS (ug/L)
Benzene	57.2
Chlorobenzene	ND< 20.0
Ethylbenzene	208
Toluene	426
m,p - Xylene	873
o - Xylene	231
Styrene	ND< 20.0
Ketones	
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
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-101
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5160
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/12/01

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	97.0
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	118
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

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-101
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5160

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

COMPOUND	RESULT (ug/L)
Naphthalene	28.5
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-102
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5161

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

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

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client:	Day Environmental	**Lab Project No.:**	01-1365
		Lab Sample No.:	5161
Client Job Site:	RoCity - Mt. Hope		
		Sample Type:	Water
Client Job No.:	2506S-00		
		Date Sampled:	06/07/01
Field Location:	MW-102	**Date Received:**	06/08/01
Field ID No.:	N/A	**Date Analyzed:**	06/11/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 2.00
Benzene	1.6
Toluene	ND< 2.00
Ethylbenzene	83.0
m,p-Xylene	13.7
o-Xylene	ND< 2.00
Isopropylbenzene	44.0
n-Propylbenzene	50.2
1,3,5-Trimethylbenzene	ND< 2.00
tert-Butylbenzene	ND< 2.00
1,2,4-Trimethylbenzene	15.1
sec-Butylbenzene	2.02
p-Isopropyltoluene	ND< 2.00
n-Butylbenzene	ND< 2.00
Naphthalene	ND< 5.00

Analytical Method. EPA 8021 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: RoCity - Mt. Hope

Client Job No.: N/A

Lab Project No.: 01-1365

Sample Type: Water
Analytical Method: EPA 410.4
Date Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/08/2001

Lab Sample ID.	Client Sample ID.	Field Location	Chemical Oxygen Demand (mg/l)
5158	N/A	MW-1	35
5159	N/A	MW-2	44
5160	N/A	MW-101	44
5162	N/A	MW-103	22
5165	N/A	MW-106	11
5166	N/A	MW-4	100

ELAP ID. No. 10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: VARLOC01-1365-1

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental

Client Job Site: RoCity - Mt. Hope

Client Job No.: N/A

Lab Project No.: 01-1365

Sample Type: Water
Analytical Method: EPA 405.1
Date Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/08/2001

Lab Sample ID.	Client Sample ID.	Field Location	Biological Oxygen Demand (mg/l)
5158	N/A	MW-1	2.94
5159	N/A	MW-2	4.83
5160	N/A	MW-101	8.37
5162	N/A	MW-103	11.3
5165	N/A	MW-106	6.24
5166	N/A	MW-4	48.1

ELAP ID. No.:10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: VARLOC01-1365

PARADIGM
Environmental Services, Inc.

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

Client: Day Environmental, Inc.

Client Job Site: RoCity - Mt. Hope

Client Job No.: 2506S-00

Lab Project No.: 01-1365

Sample Type: Water
Method: SW846 3005,6010

Date(s) Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/12/2001

Lab Sample No.	Field ID No.	Field Location	Manganese Results (mg/L)
5158	N/A	MW-1	0.256
5159	N/A	MW-2	0.054
5160	N/A	MW-101	0.099
5162	N/A	MW-103	0.126
5165	N/A	MW-106	0.039
5166	N/A	MW-4	0.085

ELAP ID No.: 10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011365

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:
COMPANY: DAY Env.
ADDRESS: 2144 Brighton Henrietta TL Rd
CITY: Rochester STATE: NY ZIP: 14623
PHONE: 716 292-1090 x113 FAX: 292-0425
ATTN: John Blanchard
COMMENTS:

INVOICE TO:
COMPANY: SAME
ADDRESS:
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 01-1365
CLIENT PROJECT #:
TURNAROUND TIME: (WORKING DAYS) 1 ☐ 2 ☐ 3 ☐ STD ☒ 5 OTHER ☒ — 10 Day TAT

PROJECT NAME/SITE NAME: Rochester 2506-00 Mt. Read [illegible]

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	SVOCs 8270 STARS	VOCs 8021 STARS	TCL/STARS VOCs 8260	BOD	COD	Manganese	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/7/01				MW-1	H_2O	6	X	X	X	X	X	X	Mistake cancel MW-2 No TCL/VOCs 8260 (#113 OK per [illegible] 6/7/01 [illegible])	5158
2					MW-2		6	X	X	X	X	X	X		5159
3					MW-101		6	X		X	X	X	X		5160
4					MW-102		3	X	X						5161
5					MW-103		3	X		X		X	X	No TCL STARS 8260 Mail [illegible] 6/8/01 [illegible]	5162
6					MW-104		3	X	X						5163
7					MW-105		3	X	X						5164
8					MW-106		6	X	X		X	X	X		5165
9					MW-4		6	X	X		X	X	X		5166
10															

LAB USE ONLY

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 11°C iced

Sampled By: [signature]	Date/Time: 6/7/01 16:54	Relinquished By:	Date/Time:
Relinquished By:	Date/Time:	Received By: C. Bethel	Date/Time: 6/7/01 16:55
Received By:	Date/Time:	Received @ Lab By: [signature]	Date/Time: 6/8/[illegible]

Total Cost:

P.I.F.

GROUNDWATER ANALYTICAL LABORATORY TEST RESULTS

SOUTH SITE

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-4
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5166
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/12/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 200
Benzene	8,300
Toluene	12,100
Ethylbenzene	2,480
m,p-Xylene	9,290
o-Xylene	3,490
Isopropylbenzene	ND< 200
n-Propylbenzene	265
1,3,5-Trimethylbenzene	660
tert-Butylbenzene	ND< 200
1,2,4-Trimethylbenzene	2,230
sec-Butylbenzene	ND< 200
p-Isopropyltoluene	ND< 200
n-Butylbenzene	ND< 200
Naphthalene	688 ppb.

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-4
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5166

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/15/01

COMPOUND	RESULT (ug/L)
Naphthalene	141
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Laboratory Analysis Report For Non-Potable Water

Client:	Day Environmental	**Lab Project No.:**	01-1365
Client Job Site:	N/A	**Lab Sample No.:**	5162
Client Job No.:	RoCity - Mt Hope	**Sample Type:**	Water
Field Location:	MW-103	**Date Sampled:**	06/07/01
		Date Received:	06/08/01
Field ID No.:	N/A	**Date Analyzed:**	06/13/01

VOLATILE HALOCARBONS	RESULTS (ug/L)
Bromodichloromethane	ND< 2.00
Bromomethane	ND< 2.00
Bromoform	ND< 2.00
Carbon tetrachloride	ND< 2.00
Chloroethane	ND< 2.00
Chloromethane	ND< 2.00
2-Chloroethyl vinyl ether	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	17.2
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

VOLATILE AROMATICS	RESULTS (ug/L)
Benzene	71.7
Chlorobenzene	ND< 2.00
Ethylbenzene	10.7
Toluene	11.5
m,p - Xylene	27.2
o - Xylene	11.9
Styrene	ND< 2.00
Ketones	
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.:**	01-1365
		Lab Sample No.:	5162
Client Job Site:	RoCity - Mt. Hope	**Sample Type:**	Water
Client Job No.:	2506S-00	**Date Sampled:**	06/07/01
Field Location:	MW-103	**Date Received:**	06/08/01
Field ID No.:	N/A	**Date Analyzed:**	06/13/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-Butyl Ether	ND< 2.00
Isopropylbenzene	42.4
n-Propylbenzene	64.3
1,3,5-Trimethylbenzene	9.00
tert-Butylbenzene	ND< 2.00
1,2,4-Trimethylbenzene	7.22
sec-Butylbenzene	2.88
p-Isopropyltoluene	ND< 2.00
n-Butylbenzene	ND< 2.00
Naphthalene	26.3

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

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-103

Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5162

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

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

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-104
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5163
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/11/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 20.0
Benzene	1,400
Toluene	29.7
Ethylbenzene	297
m,p-Xylene	45.9
o-Xylene	ND< 20.0
Isopropylbenzene	51.8
n-Propylbenzene	92.2
1,3,5-Trimethylbenzene	ND< 20.0
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	89.5
sec-Butylbenzene	ND< 20.0
p-Isopropyltoluene	ND< 20.0
n-Butylbenzene	ND< 20.0
Naphthalene	120

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-104
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5163

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

COMPOUND	RESULT (ug/L)
Naphthalene	49.8
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-105
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5164
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/11/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 20.0
Benzene	740
Toluene	131
Ethylbenzene	165
m,p-Xylene	588
o-Xylene	203
Isopropylbenzene	ND< 20.0
n-Propylbenzene	21.5
1,3,5-Trimethylbenzene	41.3
tert-Butylbenzene	ND< 20.0
1,2,4-Trimethylbenzene	133
sec-Butylbenzene	ND< 20.0
p-Isopropyltoluene	ND< 20.0
n-Butylbenzene	ND< 20.0
Naphthalene	ND< 50.0

Analytical Method: EPA 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-105
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5164

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/14/01

COMPOUND	RESULT (ug/L)
Naphthalene	11.6
Acenaphthene	ND< 10.0
Fluorene	ND< 10.0
Fluoranthene	ND< 10.0
Anthracene	ND< 10.0
Phenanthrene	ND< 10.0
Benzo (a) anthracene	ND< 10.0
Chrysene	ND< 10.0
Pyrene	ND< 10.0
Benzo (b) fluoranthene	ND< 10.0
Benzo (k) fluoranthene	ND< 10.0
Benzo (g,h,i) perylene	ND< 10.0
Benzo (a) pyrene	ND< 10.0
Dibenz (a,h) anthracene	ND< 10.0
Indeno (1,2,3-cd) pyrene	ND< 10.0

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL
SERVICES, INC.

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

Volatile Aromatic Analysis Report For Non-Potable Water (STARS List)

Client: Day Environmental
Client Job Site: RoCity - Mt. Hope
Client Job No.: 2506S-00
Field Location: MW-106
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5165
Sample Type: Water
Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/12/01

VOLATILE AROMATICS	RESULTS (ug/L)
Methyl tert-butyl Ether	ND< 2.00
Benzene	ND< 0.70
Toluene	ND< 2.00
Ethylbenzene	ND< 2.00
m,p-Xylene	ND< 2.00
o-Xylene	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 8021 NYS ELAP ID No.: 10958

Comments: ND denotes not detected

Approved By: _____
Laboratory Director

PARADIGM
ENVIRONMENTAL SERVICES, INC.
179 Lake Avenue, Rochester, New York 14608 (716) 647-2530 FAX (716) 647-3311

Semi-Volatile Analysis Report For Water (STARS List)

Client: Day Environmental

Client Job Site: RoCity - Mt Hope

Client Job No.: 2506S-00

Field Location: MW-106
Field ID No.: N/A

Lab Project No.: 01-1365
Lab Sample No.: 5165

Sample Type: Water

Date Sampled: 06/07/01
Date Received: 06/08/01
Date Analyzed: 06/15/01

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

EPA Analytical Method: 8270 NYS ELAP ID No.: 10958

Comments: ND denotes Not Detected

Approved By: _____
Laboratory Director

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

CHAIN OF CUSTODY

PROJECT NAME/SITE NAME: Rocity 2500-00 mt Hope

REPORT TO:
COMPANY: DAY Env.
ADDRESS: 2144 Brighton Henrietta TL Rd
CITY: Rochester STATE: NY ZIP: 14623
PHONE: 716 292-1090 x113 FAX: 292-0425
ATTN: John Blanchard
COMMENTS:

INVOICE TO:
COMPANY:
ADDRESS: SAME
CITY: STATE: ZIP:
PHONE: FAX:
ATTN:

LAB PROJECT #: 01-1365
CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS) 1 ☐ 2 ☐ 3 ☐ STD ☒ OTHER ☒ 10 Day TAT

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	SVOCs 8270 STARS	VOCs 8021 STARS	TCL/STARS VOCs 8260	BOD	COD	Manganese					REMARKS	PARADIGM LAB SAMPLE NUMBER
1	6/7/01				mw-1	H2O	6	X	X	[struck]	[struck] X	X	X					Mistake cancel mw-1? 8270 STARS ok	5158
2					mw-2		6	X	X	[struck]	X	X	X					Mistake mw-2	5159
3					mw-101		6	X		X	X	X	X					No TCL/VOCs 8260	5160
4					mw-102		3	X	X										5161
5					mw-103		3	X		X	X	X	X					No TCL Stars 8260 mw!	5162
6					mw-104		3	X	X									per JB @ 6/8/01	5163
7					mw-105		3	X	X										5164
8					mw-106		6	X	X		X	X	X						5165
9					mw-4		6	X	X		X	X	X						5166
10																			

****LAB USE ONLY****

SAMPLE CONDITION: Check box if acceptable or note deviation:
CONTAINER TYPE: ☑ PRESERVATIONS: ☑ HOLDING TIME: ☑ TEMPERATURE: ☐ 11°C iced

Sampled By: [signature]	Date/Time: 6/7/01 16:54	Relinquished By:	Date/Time:
Relinquished By:	Date/Time:	Received By: C. Bethel	Date/Time: 6/7/01 16.55
Received By:	Date/Time:	Received @ Lab By: [signature]	Date/Time: 6/8/01 14:30

Total Cost:

P.I.F.

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental

Client Job Site: RoCity - Mt. Hope

Client Job No.: N/A

Lab Project No.: 01-1365

Sample Type: Water
Analytical Method: EPA 410.4
Date Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/08/2001

Lab Sample ID.	Client Sample ID.	Field Location	Chemical Oxygen Demand (mg/l)
5158	N/A	MW-1	35
5159	N/A	MW-2	44
5160	N/A	MW-101	44
5162	N/A	MW-103	22
5165	N/A	MW-106	11
5166	N/A	MW-4	100

ELAP ID. No.:10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: VARLOC01-1365-1

PARADIGM
Environmental
Services, Inc. 179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental

Client Job Site: RoCity - Mt. Hope

Client Job No.: N/A

Lab Project No.: 01-1365

Sample Type: Water
Analytical Method: EPA 405.1
Date Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/08/2001

Lab Sample ID.	Client Sample ID.	Field Location	Biological Oxygen Demand (mg/l)
5158	N/A	MW-1	2.94
5159	N/A	MW-2	4.83
5160	N/A	MW-101	8.37
5162	N/A	MW-103	11.3
5165	N/A	MW-106	6.24
5166	N/A	MW-4	48.1

ELAP ID. No.:10709

Comments: ND denotes Non Detected.

Approved By: _____
Laboratory Director

File ID: VARLOC01-1365

PARADIGM
Environmental Services, Inc.
179 Lake Avenue Rochester, New York 14608 716-647-2530 FAX 716- 647-3311

Client: Day Environmental, Inc.

Client Job Site: RoCity - Mt. Hope

Client Job No.: 2506S-00

Lab Project No.: 01-1365

Sample Type: Water
Method: SW846 3005,6010

Date(s) Sampled: 06/07/2001
Date Received: 06/08/2001
Date Analyzed: 06/12/2001

Lab Sample No.	Field ID No.	Field Location	Manganese Results (mg/L)
5158	N/A	MW-1	0.256
5159	N/A	MW-2	0.054
5160	N/A	MW-101	0.099
5162	N/A	MW-103	0.126
5165	N/A	MW-106	0.039
5166	N/A	MW-4	0.085

ELAP ID No : 10958

Comments:

Approved By: _____
Laboratory Director

File ID: 011365

PERMEABILITY TEST RESULTS

VAN DER HORST

RCH-01-325
9-24-01

Day Environmental
Materials Testing

TEST PERFORMED	South (13') Lab I.D. #01-1402	North (13'-14') Lab I.D. #01-1403
Undisturbed Permeability		
Density (pcf)	98.9	92.2
Moisture Content (%)	16.0	30.6
Permeability(cm/sec)	1.5×10^{-5}	2.5×10^{-6}

APPENDIX D

MONITORING WELL SAMPLING LOGS

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-1

SECTION 1 - SITE INFORMATION

SITE LOCATION: 151-191 Mount Hope Avenue **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.55 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 16.45 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 3.10 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.50 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 1.5 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.0

PURGE METHOD: 3' Bailer **PURGE START:** 9:27 **END:** 9:31

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-1	6/7/01 13:50	3' Bailer	8270, 8021.BOC, COD, Mang.

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/l)	VISUAL
16.48	14.6	5.71	130	--*	5.4	Cloudy

*=Sample not measurable

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-2

SECTION 1 - SITE INFORMATION

SITE LOCATION: 151-191 Mount Hope Avenue **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.54 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 13.71 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 5.83 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.95 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 2.8 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.5 -Dry

PURGE METHOD: 3' Bailer **PURGE START:** 9:38 **END:** 9:44

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-2	6/7/01 14:10	3' Bailer	8270, 8021, BOC, COD, Mang

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
14.33	14.3	6.29	110	270	5.2	Slightly Cloudy

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-4

SECTION 1 - SITE INFORMATION

SITE LOCATION: 425-435 Mount Hope Avenue and 562 Ford Street **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.45 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 12.59 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 6.86 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 1.19 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 3.4 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.2 -Dry .

PURGE METHOD: Centrifugal Pump **PURGE START:** 11:49 **END:** 11:22

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-4	6/7/01 15:30	3' Bailer	8270, 8021, BOC, COD, Mang

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
12.55	13.5	6.72	140	-- *	5.0	Cloudy

*=Sample not measurable

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-101

SECTION 1 - SITE INFORMATION

SITE LOCATION: 151-191 Mount Hope Avenue **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 20.07 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 14.71 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 5.36 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.87 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 2.6 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.3 -Dry

PURGE METHOD: 3' Bailer **PURGE START:** 10:00 **END:** 10:07

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-101	6/7/01 / 14:35	3' Bailer	8270,8260, BOD,COD,Mang.

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
16.23	12.3	6.40	140	330	0.0	Slightly Cloudy

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-102

SECTION 1 - SITE INFORMATION

SITE LOCATION: 151-191 Mount Hope Avenue **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.60 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 15.58 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 4.02 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.65 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 1.9 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 1.3

PURGE METHOD: 3' Bailer **PURGE START:** 9:50 **END:** 9:55

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW- 102	6/7/01 / 14:23	3' Bailer	8270, 8021

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
16.14	14.3	6.40	460	-- *	3.3	Cloudy

*=Sample not measurable

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-103

SECTION 1 - SITE INFORMATION

SITE LOCATION: 425and 435 Mount Hope Avenue and 562 Ford Street **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.40 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 15.64 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 4.26 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.69 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 2.0 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 2.0

PURGE METHOD: 3' Bailer **PURGE START:** 10:27 **END:** 10:34

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW –103	6/7/01 / 14:55	3' Bailer	8270,8260, BOD, COD, Mang.

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
16.02	16.8	6.48	100	340	5.4	Slightly Cloudy

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-104

SECTION 1 - SITE INFORMATION

SITE LOCATION: 425 and 435 Mount Hope Avenue and 562 Ford Street **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 20.10 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 18.0 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 2.10 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.34 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 1.02 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 0.50 -Dry

PURGE METHOD: 3'Bailer **PURGE START:** 10:40 **END:** 10:45

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW 104	6/7/01 / 15:09	3' Bailer	8270, 8021

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
18.0	13.9	6.35	360	720	4.4	Slightly Cloudy

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-105

SECTION 1 - SITE INFORMATION

SITE LOCATION: 425 and 435 Mount Hope Avenue and 562 Ford Street **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 19.83 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 14.24 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 5.59 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 0.91 **CASING DIA.:** 2"

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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 2.7 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 3.0

PURGE METHOD: 3' Bailer **PURGE START:** 10:47 **END:** 10:56

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-105	6/7/01 / 15:20	3' Bailer	8270, 8021

SECTION 4 - WATER QUALITY DATA

SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
14.25	12.8	6.75	140	-- *	1.6	Cloudy

*=Sample not measurable

jkh3047

DAY ENVIRONMENTAL, INC.
MONITORING WELL SAMPLING LOG

WELL MW-106

SECTION 1 - SITE INFORMATION

SITE LOCATION: 425 and 435 Mount Hope Avenue and 562 Ford Street **JOB #:** 2506S-00

PROJECT NAME: Mt. Hope Project **DATE :** 6/7/01

SAMPLE COLLECTOR(S): Jeffrey Kirk Hampton

WEATHER CONDITIONS: Sunny 75°C **PID IN WELL (PPM):** NC

SECTION 2 - PURGE INFORMATION

DEPTH OF WELL [FT]: 34.96 (MEASURED FROM TOP OF CASING - T.O.C.)

STATIC WATER LEVEL (SWL) [FT]: 13.13 (MEASURED FROM T.O.C.)

DEPTH OF WATER COLUMN [FT]: 21.83 (DEPTH OF WELL - SWL)

CALCULATED VOL. OF H_2O PER WELL CASING [GAL]: 3.5 **CASING DIA.:** 2"

CALCULATIONS:

CASING DIA. (FT)	WELL CONSTANT(GAL/FT)
¼" (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_2O IN CASING = DEPTH OF WATER COLUMN X WELL CONSTANT

CALCULATED PURGE VOLUME [GAL]: 10.6 (3 TIMES CASING VOLUME)

ACTUAL VOLUME PURGED [GAL]: 11.0

PURGE METHOD: Centrifugal Pump **PURGE START:** 11:07 **END:** 11:17

SECTION 3 - SAMPLE IDENTIFICATION AND TEST PARAMETERS

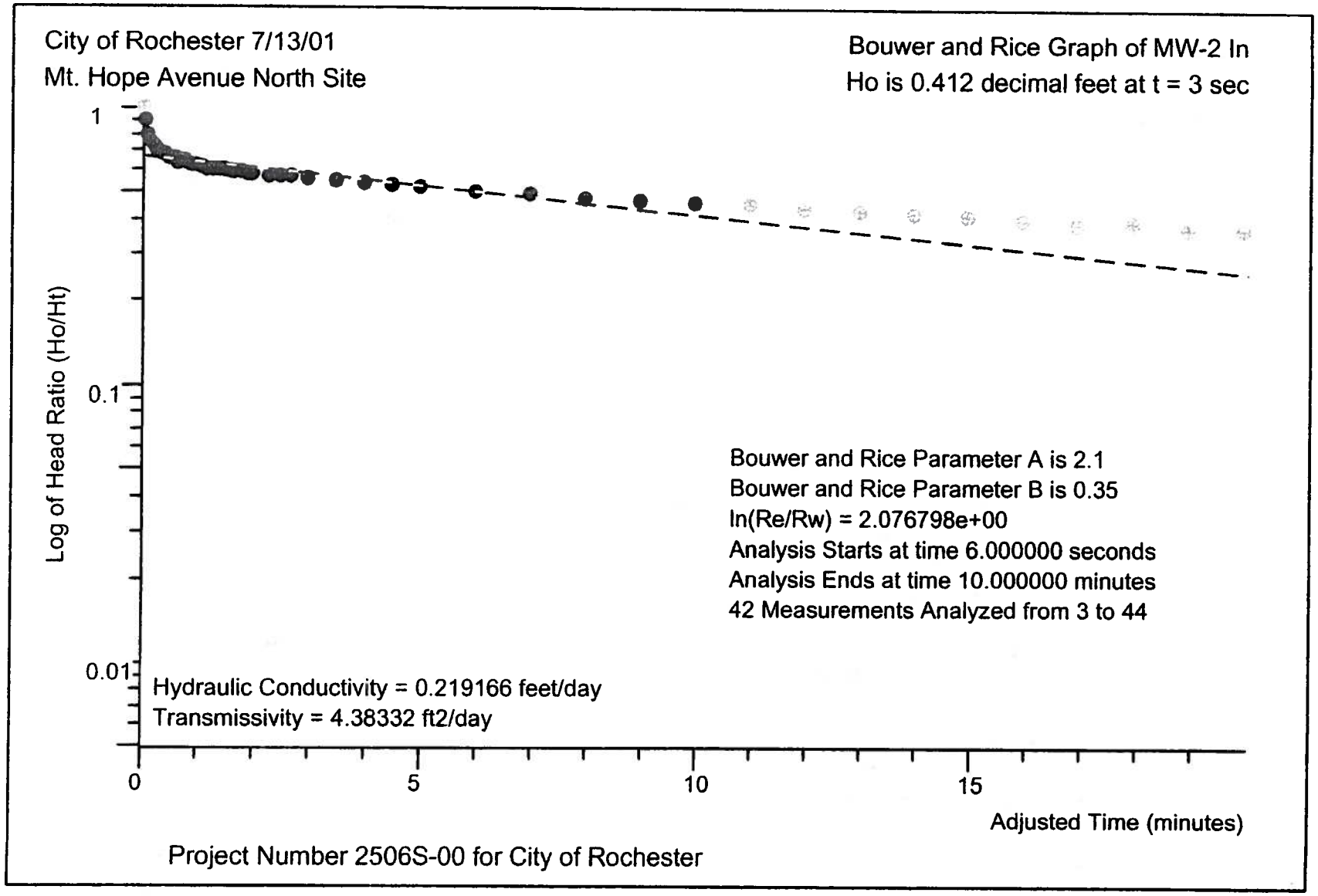
SAMPLE ID #	DATE / TIME	SAMPLING METHOD	ANALYTICAL SCAN(S)
MW-106	6/7/01 / 15:42	3' Bailer	8270, 8021, BOC ,COD ,Mang

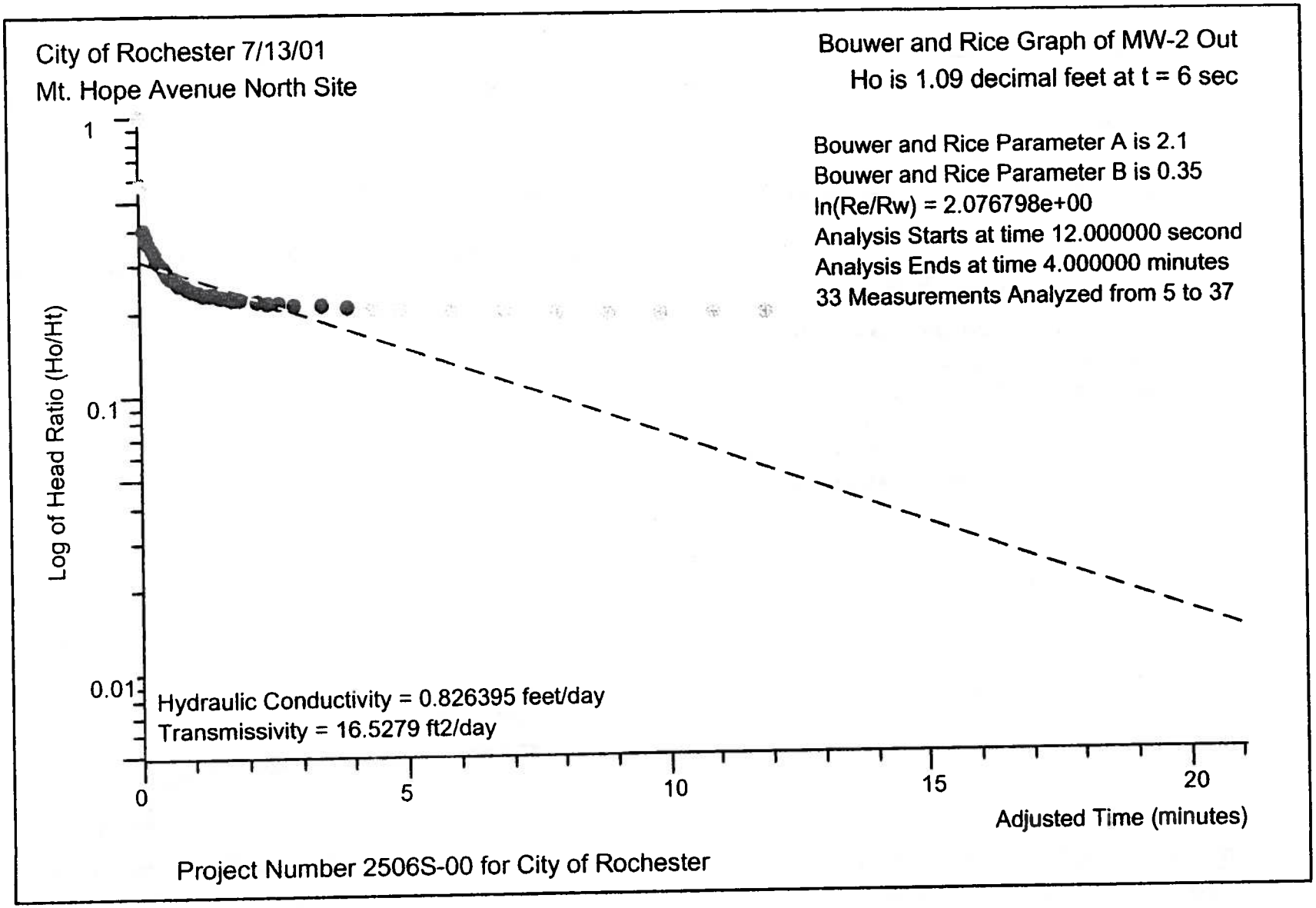
SECTION 4 - WATER QUALITY DATA

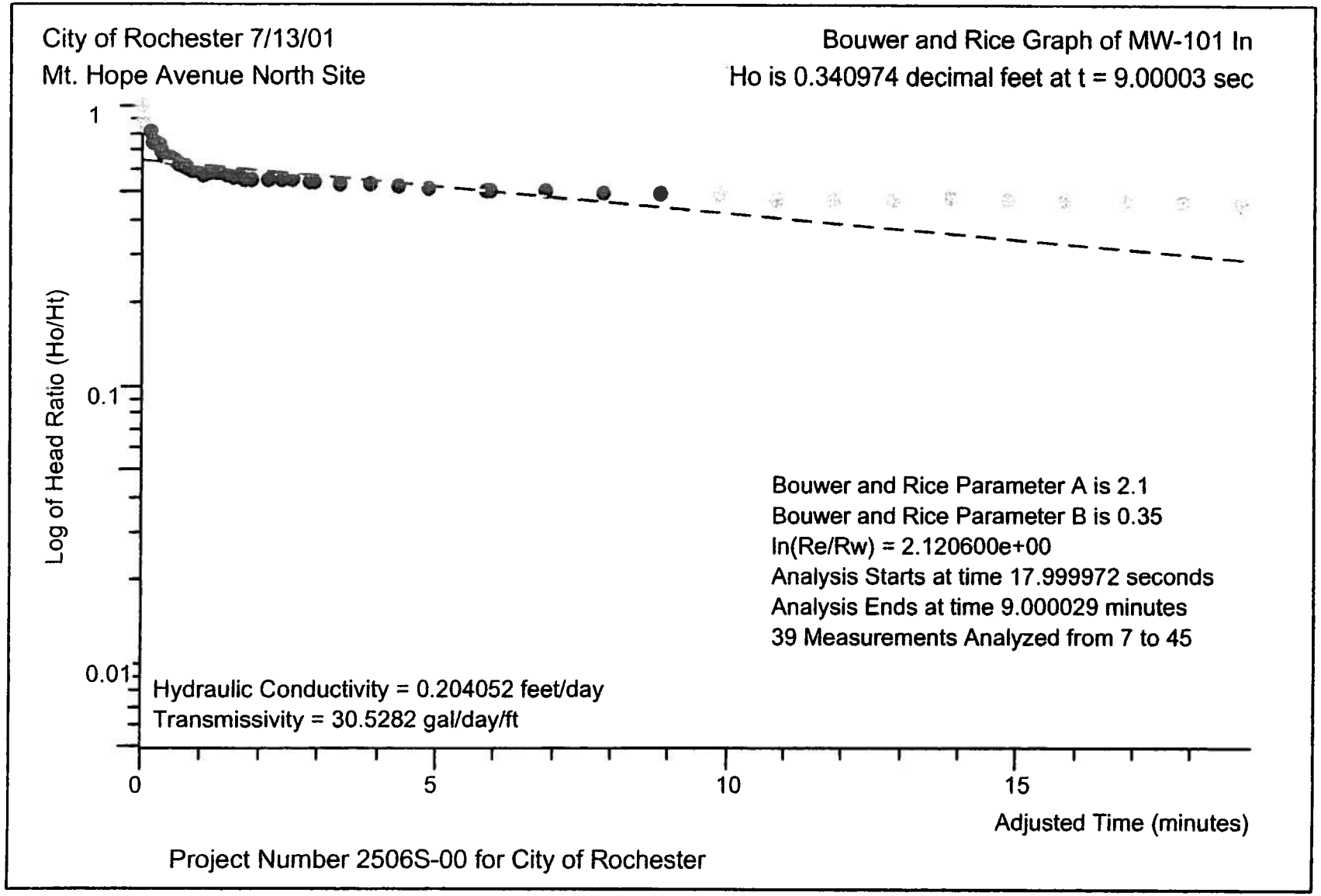
SWL (FT)	TEMP (°C)	pH	CONDUCTIVITY µS/cm	TURBIDITY (NTU)	IRON (mg/L)	VISUAL
12.98	14.6	6.96	350	140	0.0	Clear

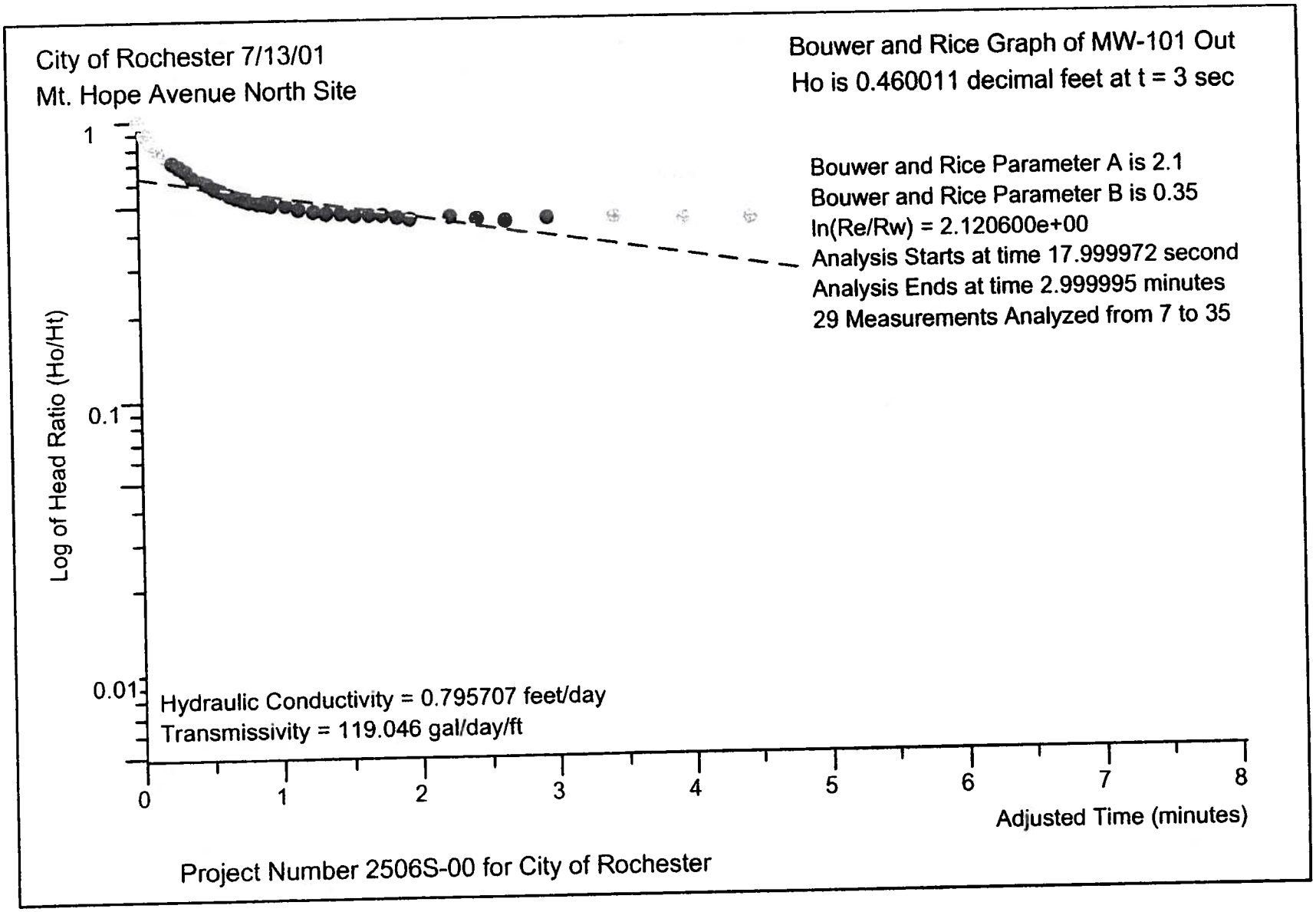
APPENDIX E

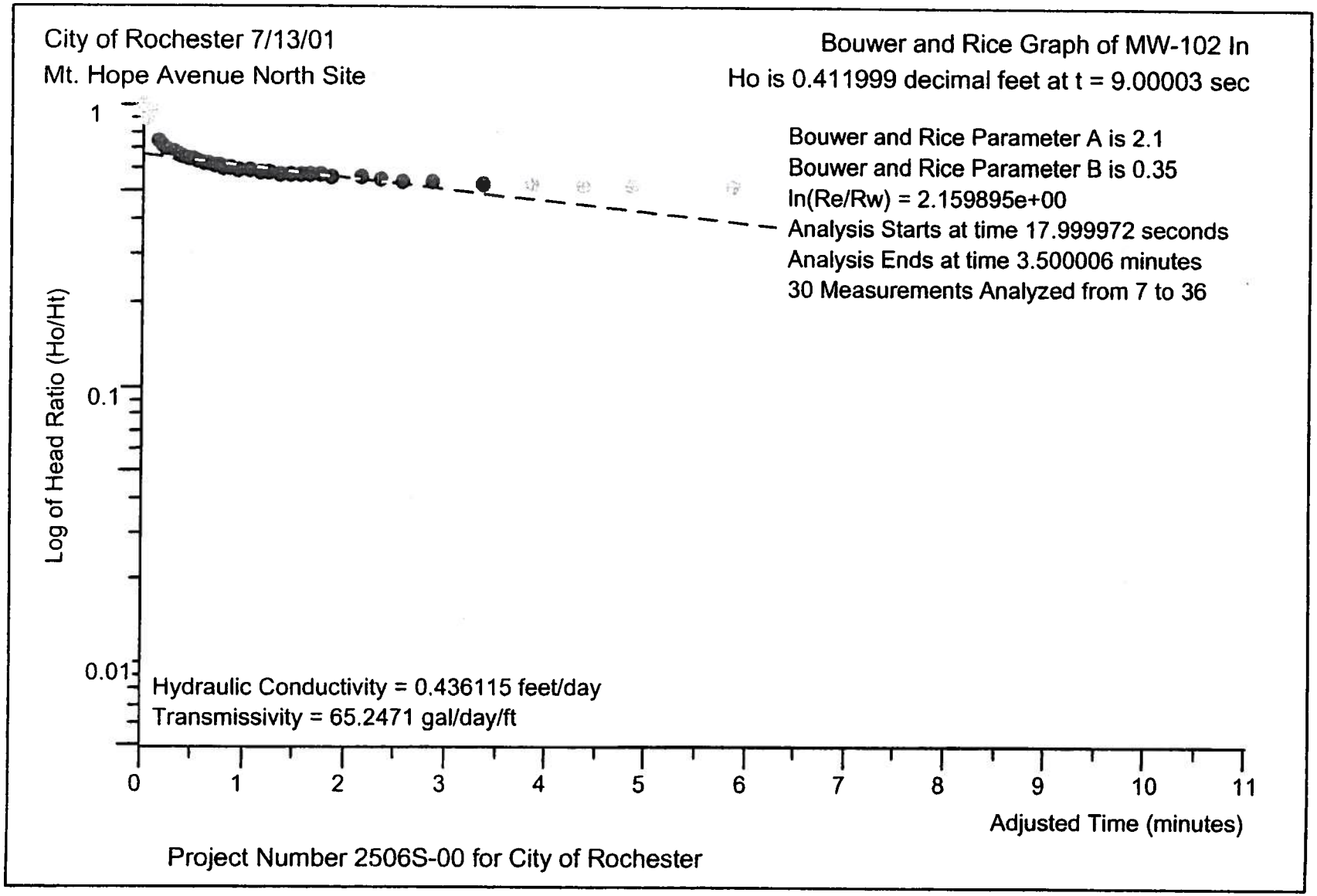
SLUG TEST EVALUATION

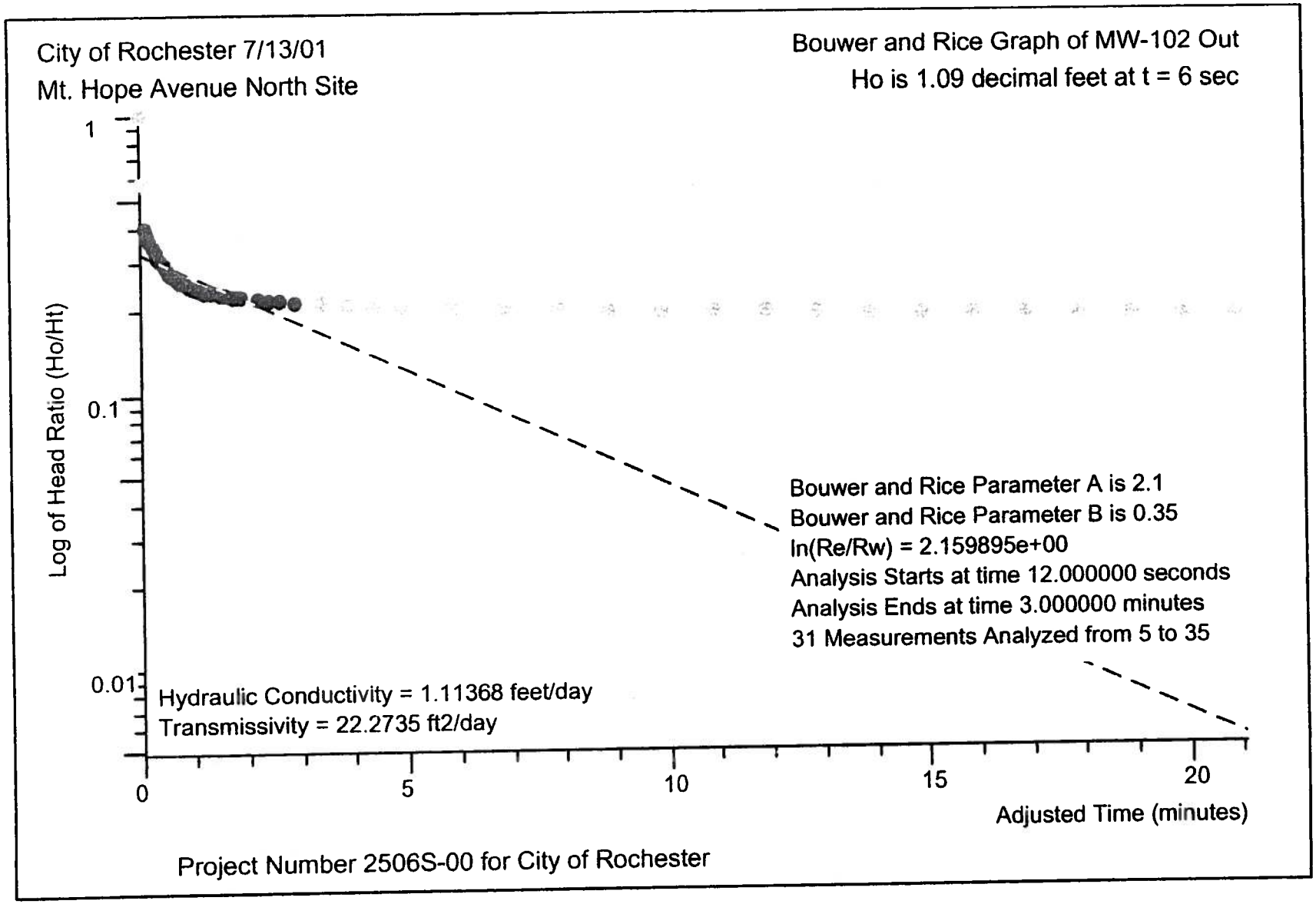

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-2 In
Ho is 0.412 decimal feet at t = 3 sec
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.076798e+00
Analysis Starts at time 6.000000 seconds
Analysis Ends at time 10.000000 minutes
42 Measurements Analyzed from 3 to 44
Hydraulic Conductivity = 0.219166 feet/day
Transmissivity = 4.38332 ft2/day
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

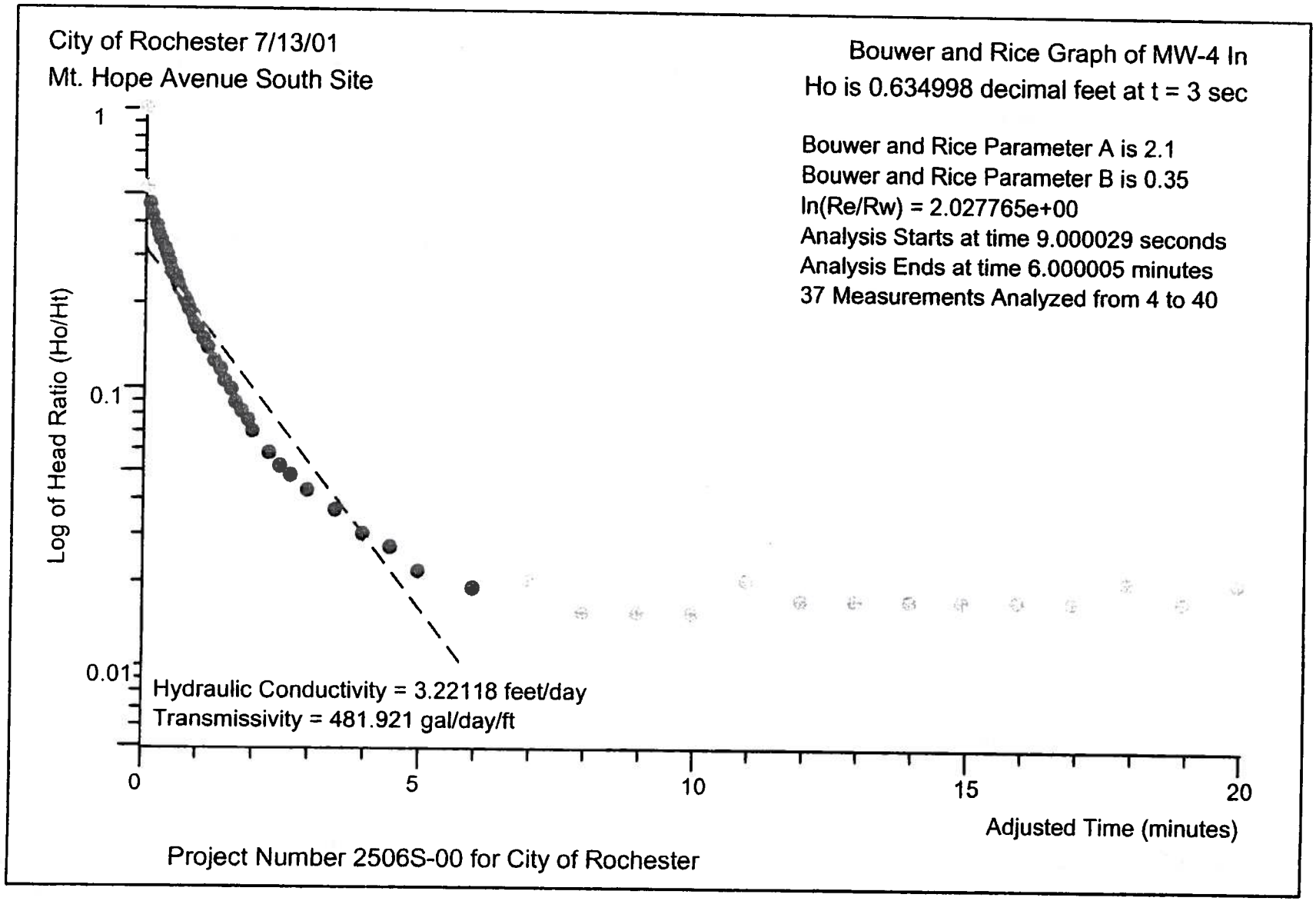

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-2 Out
Ho is 1.09 decimal feet at t = 6 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.076798e+00
Analysis Starts at time 12.000000 second
Analysis Ends at time 4.000000 minutes
33 Measurements Analyzed from 5 to 37
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 0.826395 feet/day
Transmissivity = 16.5279 ft2/day
0
5
10
15
20
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

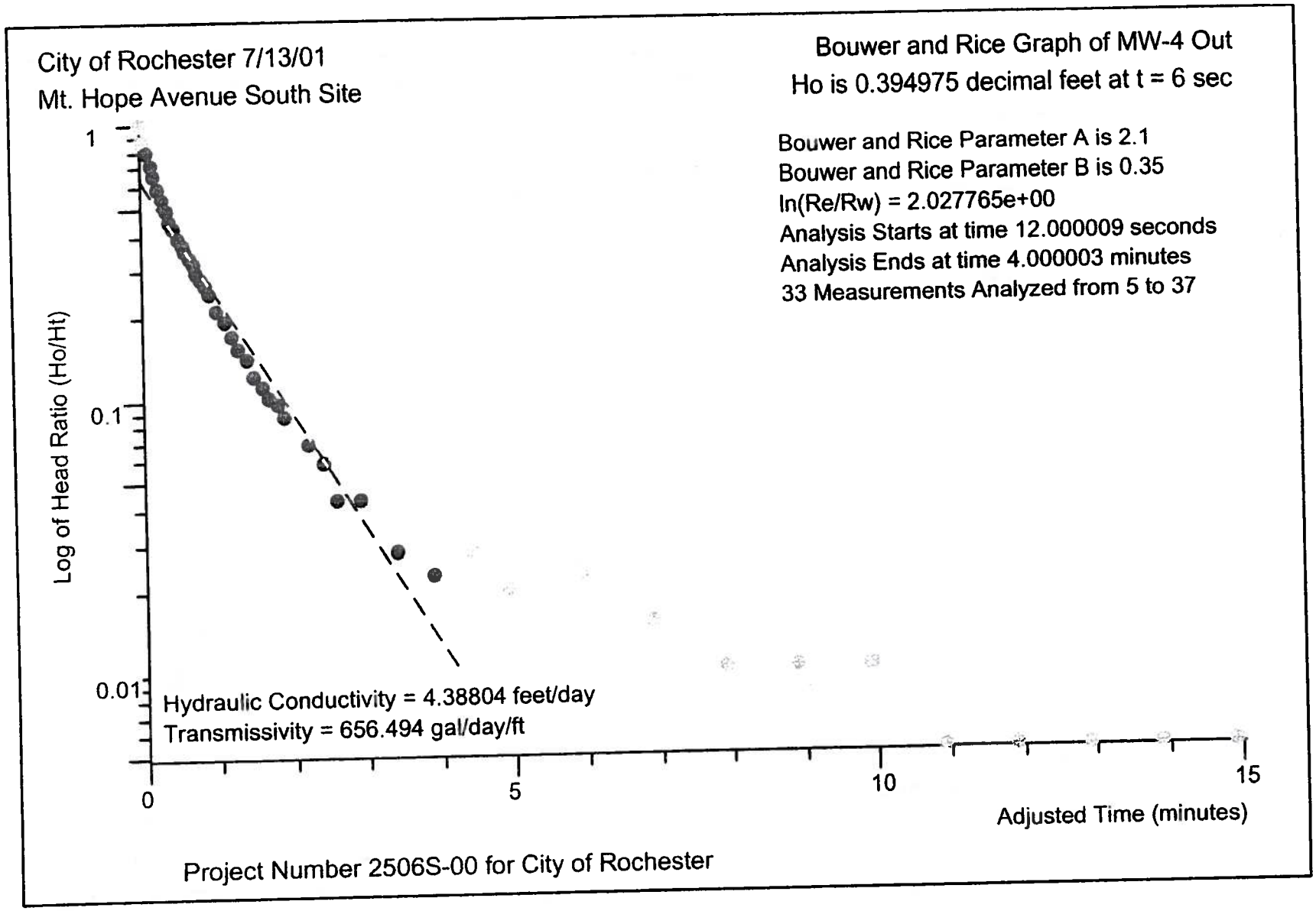

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-101 In
Ho is 0.340974 decimal feet at t = 9.00003 sec
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.120600e+00
Analysis Starts at time 17.999972 seconds
Analysis Ends at time 9.000029 minutes
39 Measurements Analyzed from 7 to 45
Hydraulic Conductivity = 0.204052 feet/day
Transmissivity = 30.5282 gal/day/ft
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

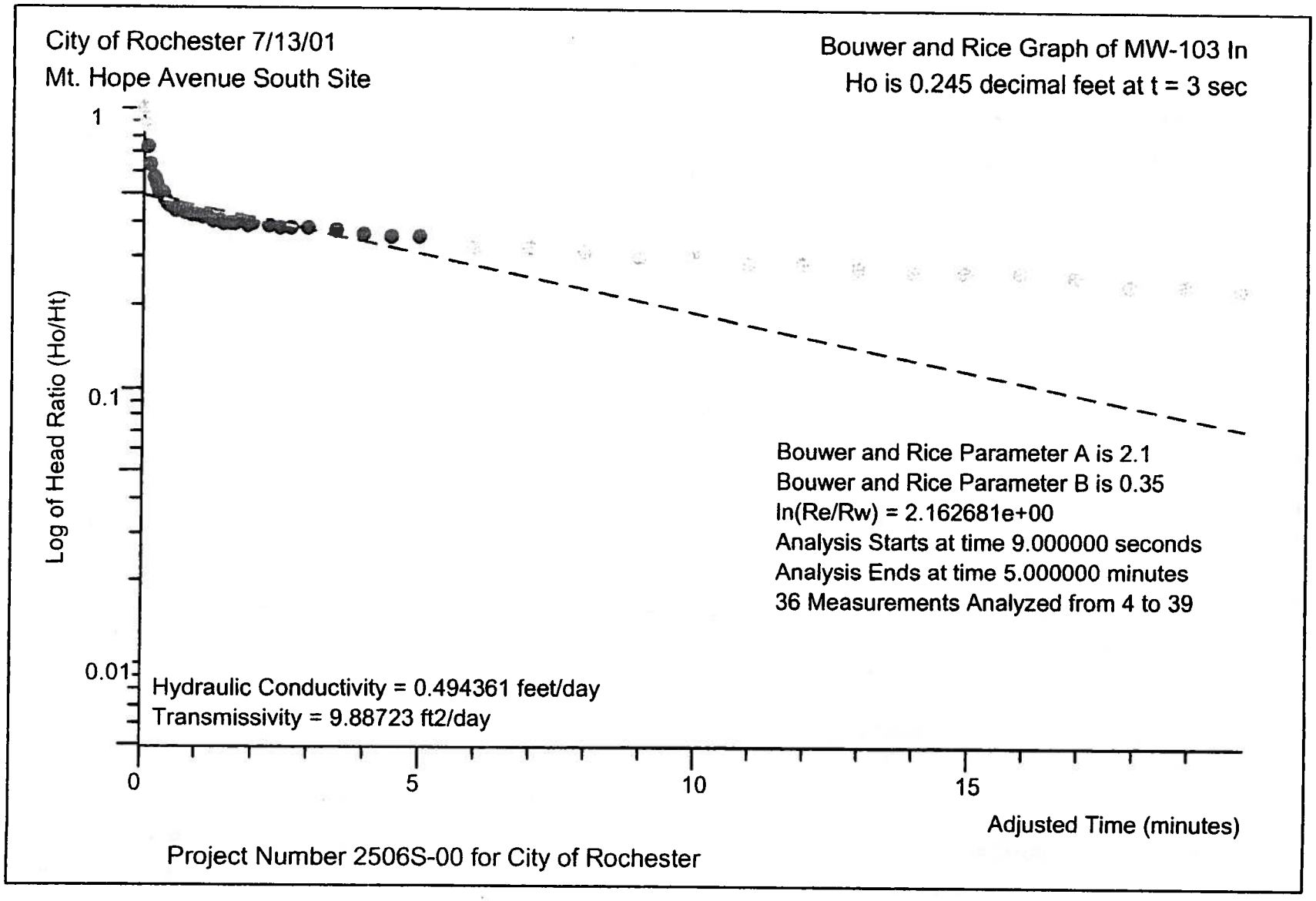

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-101 Out
Ho is 0.460011 decimal feet at t = 3 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.120600e+00
Analysis Starts at time 17.999972 second
Analysis Ends at time 2.999995 minutes
29 Measurements Analyzed from 7 to 35
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 0.795707 feet/day
Transmissivity = 119.046 gal/day/ft
0
1
2
3
4
5
6
7
8
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

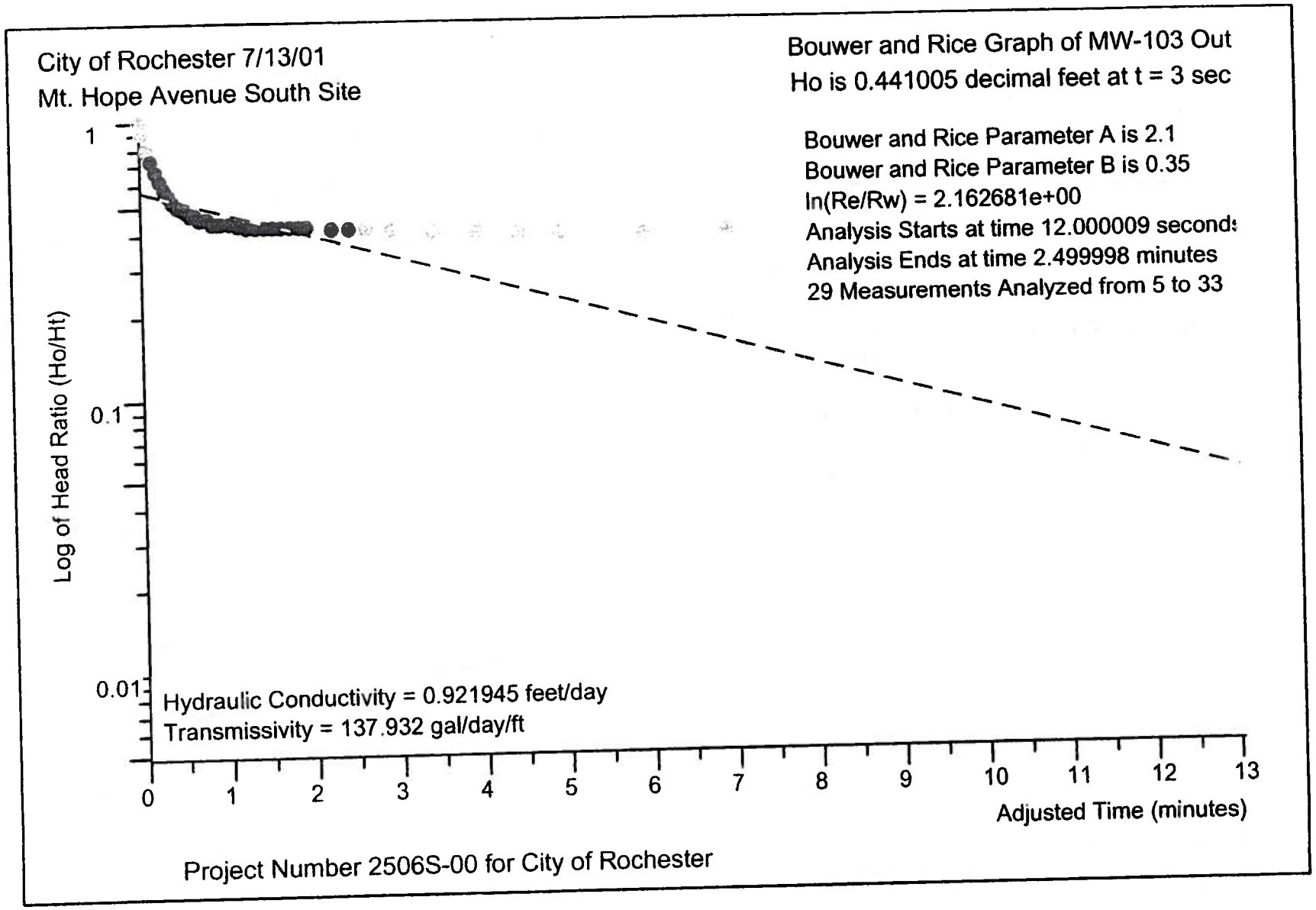

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-102 In
Ho is 0.411999 decimal feet at t = 9.00003 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.159895e+00
Analysis Starts at time 17.999972 seconds
Analysis Ends at time 3.500006 minutes
30 Measurements Analyzed from 7 to 36
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 0.436115 feet/day
Transmissivity = 65.2471 gal/day/ft
0
1
2
3
4
5
6
7
8
9
10
11
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

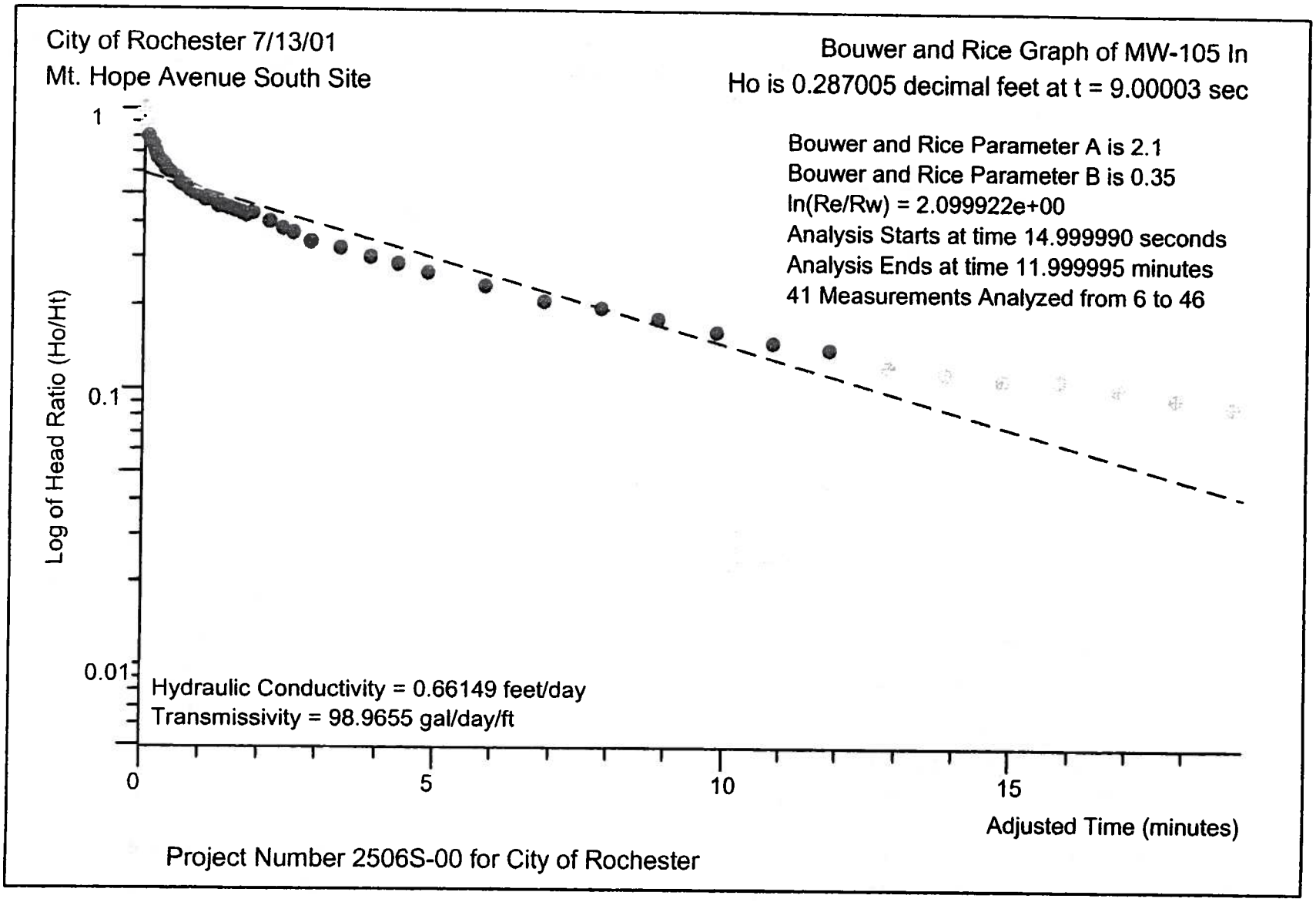

City of Rochester 7/13/01
Mt. Hope Avenue North Site
Bouwer and Rice Graph of MW-102 Out
Ho is 1.09 decimal feet at t = 6 sec
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.159895e+00
Analysis Starts at time 12.000000 seconds
Analysis Ends at time 3.000000 minutes
31 Measurements Analyzed from 5 to 35
Hydraulic Conductivity = 1.11368 feet/day
Transmissivity = 22.2735 ft2/day
0
5
10
15
20
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester

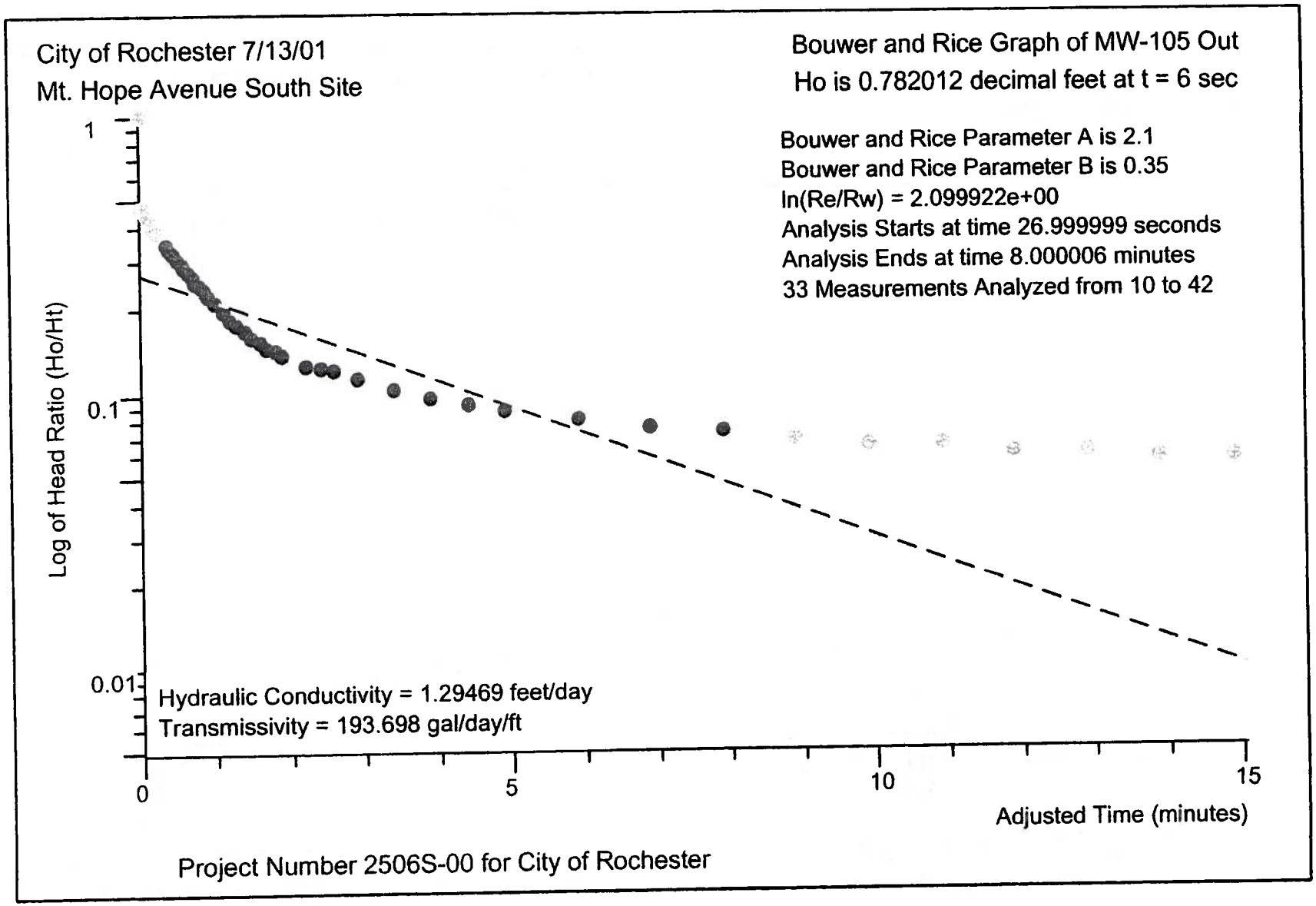

City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-4 In
Ho is 0.634998 decimal feet at t = 3 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.027765e+00
Analysis Starts at time 9.000029 seconds
Analysis Ends at time 6.000005 minutes
37 Measurements Analyzed from 4 to 40
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 3.22118 feet/day
Transmissivity = 481.921 gal/day/ft
0
5
10
15
20
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester


City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-4 Out
Ho is 0.394975 decimal feet at t = 6 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.027765e+00
Analysis Starts at time 12.000009 seconds
Analysis Ends at time 4.000003 minutes
33 Measurements Analyzed from 5 to 37
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 4.38804 feet/day
Transmissivity = 656.494 gal/day/ft
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester


City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-103 In
Ho is 0.245 decimal feet at t = 3 sec
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.162681e+00
Analysis Starts at time 9.000000 seconds
Analysis Ends at time 5.000000 minutes
36 Measurements Analyzed from 4 to 39
Hydraulic Conductivity = 0.494361 feet/day
Transmissivity = 9.88723 ft2/day
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester


City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-103 Out
Ho is 0.441005 decimal feet at t = 3 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.162681e+00
Analysis Starts at time 12.000009 seconds
Analysis Ends at time 2.499998 minutes
29 Measurements Analyzed from 5 to 33
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 0.921945 feet/day
Transmissivity = 137.932 gal/day/ft
0
1
2
3
4
5
6
7
8
9
10
11
12
13
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester


City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-105 In
Ho is 0.287005 decimal feet at t = 9.00003 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.099922e+00
Analysis Starts at time 14.999990 seconds
Analysis Ends at time 11.999995 minutes
41 Measurements Analyzed from 6 to 46
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 0.66149 feet/day
Transmissivity = 98.9655 gal/day/ft
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester


City of Rochester 7/13/01
Mt. Hope Avenue South Site
Bouwer and Rice Graph of MW-105 Out
Ho is 0.782012 decimal feet at t = 6 sec
Bouwer and Rice Parameter A is 2.1
Bouwer and Rice Parameter B is 0.35
ln(Re/Rw) = 2.099922e+00
Analysis Starts at time 26.999999 seconds
Analysis Ends at time 8.000006 minutes
33 Measurements Analyzed from 10 to 42
Log of Head Ratio (Ho/Ht)
1
0.1
0.01
Hydraulic Conductivity = 1.29469 feet/day
Transmissivity = 193.698 gal/day/ft
0
5
10
15
Adjusted Time (minutes)
Project Number 2506S-00 for City of Rochester